

# V400m Terminal & Base Installation Guide

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[www.verifone.com](http://www.verifone.com)

## V400m Terminal &amp; Base Installation Guide

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# Preface

This guide is the primary source of information for setting up the V400m and V400m Bases.

## Audience

This guide provides simple descriptions of the product features and information for installing and configuring V400m terminals and the V400m Charging and Full-Function Bases.

## Organization

This guide is organized as follows:

- Chapter 1: [Device Overview](#) - Provides an overview of the V400m Terminal & Base.
- Chapter 2: [Device Setup](#) - Provides instructions on configuring the V400m Terminal & Base.
- Chapter 3: [Specifications](#) - Provides the power requirements and dimensions of the V400m Terminal & Base
- Chapter 4: [Maintenance and Cleaning](#) - Explains how to maintain the device.
- Chapter 5: [Service and Support](#) - Furnishes information on contacting local Verifone representatives or service providers, as well as details on ordering accessories or documentation from Verifone.
- Chapter 6: [Troubleshooting Guidelines](#) - Provides guidance for addressing issues that may arise during device installation.
- Chapter 7: [Accessories and Cables](#) - Provides the range of accessories and cables with corresponding part numbers.

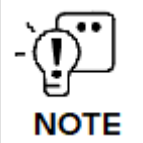


## Related Documentation

To learn more about the V400m Terminal & Base refer to the following documents associated with the Verifone Part Number (VPNs).

V400m Plus 3G Certifications and Regulations	VPN DOC475-001-EN
V400m Quick Installation Guide	VPN DOC475-002-EN
V400m Reference Guide	VPN DOC475-004-EN
V400m B-Charging Quick Installation Guide	VPN DOC475-006-EN
V400m B-FF Quick Installation Guide	VPN DOC475-007-EN
V400m Base C and FF Certifications & Regulations Sheet	VPN DOC475-011-EN
V400m Plus 4G Certifications and Regulations	VPN DOC475-031-EN

## Conventions

The following table describes the conventions and provides examples of their use.

Convention	Meaning	Example
Blue	Text in blue indicates terms that are cross-referenced.	See <a href="#">Conventions</a> .
	The bulb icon is used to highlight important information.	If exchanging cables use a Verifone-approved cable.
	The caution symbol indicates possible hardware or software failure or loss of data.	Avoid placing metallic objects at the front of the card reader.
	The lightning symbol is used as a warning when bodily injury might occur.	For safety, do not string cables or cords across a walkway.

## Acronyms

Acronym	Definition
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
HSPA	High Speed Packet Access
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
LTE	Long-Term Evolution



Acronym	Definition
PED	PIN Entry Device
PIN	Personal Identification Number
POS	Point-of-Sale
RS-232	Recommend Standard number 232
SAM	Secure Access Module
SD	Secure Digital
UL	Underwriters Laboratories
USB	Universal Serial Bus
VPN	Verifone Part Number

# 1. Device Overview

This chapter describes the features of the V400m and the V400m Bases.

The V400m is VeriFone’s next-generation integrated retail PINpad device. The touchscreen functionality and sophisticated design are perfect for high-end retail establishments.

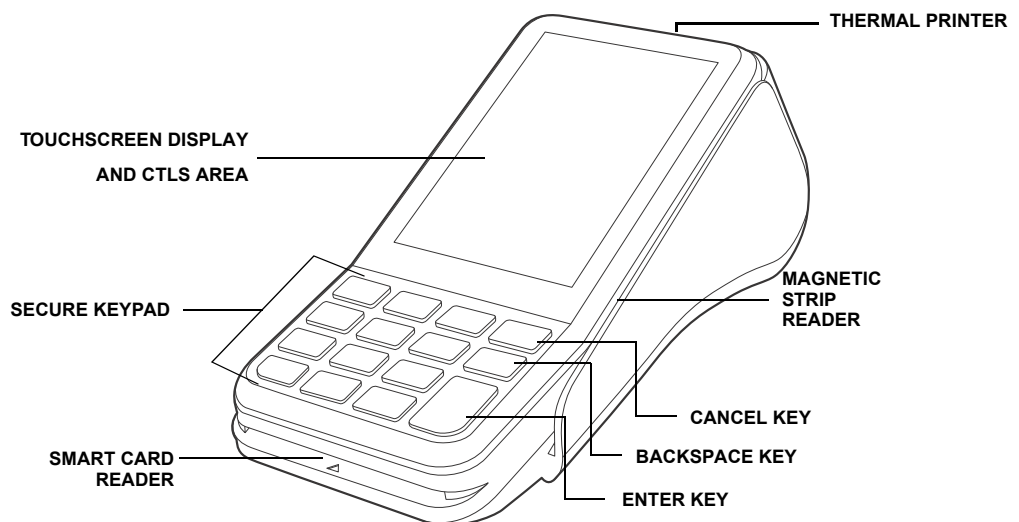
The V400m is a consumer-facing handheld device. The product’s design is equally appealing as a handheld PINpad and robust enough to look and function appropriately in a fixed mount setting.

The V400m can utilize over-the-air connectivity, facilitating mobile telephony technology for sending and receiving data, using existing operator-provided 3G or 4G infrastructure:

- V400m Plus 3G - provides third-generation High Speed Packet Access (HSPA) connectivity.
- V400m Plus 4G - provides fourth-generation Long Term Evolution (LTE) connectivity.

This guide provides an introduction and basic setup procedures for both 3G and 4G terminals, and will indicate where instructions vary for different models.

Figure: 1 V400m Front



## Front Functions

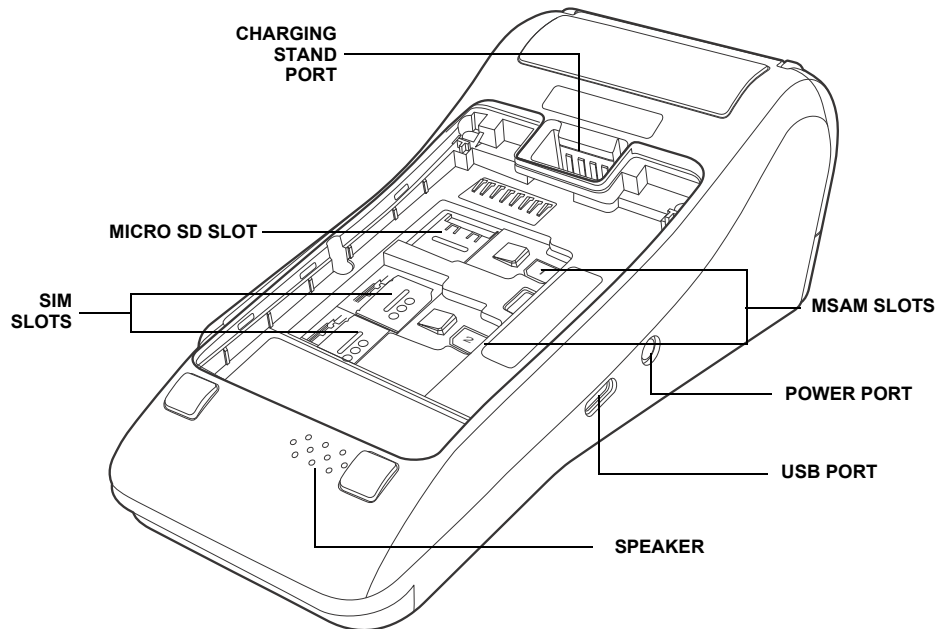
The V400m includes the following features:

- Capacitive touch LCD display and CTLS tap area
- Smart card reader
- Magnetic card reader
- Integrated thermal printer
- Secure keypad supporting 4x4 matrix containing 0-9, \*, #, Cancel, Backspace/ Clear, and Enter keys
  - Dual-function Backspace/Clear key
  - Customer-entry for Cancel and Enter keys

## Back Functions

After removing the rear cover and battery, the underside of the V400m Plus 3G shows the following:

Figure: 2 V400m Front



- A Micro SD slot
- Dual MSAM slots to support stored-value card programs or other merchant card requirements
- Dual SIM Card compartments

## V400m Bases

The V400m Base provides a stable mounted platform for the V400m terminal. The Base comes in two versions:

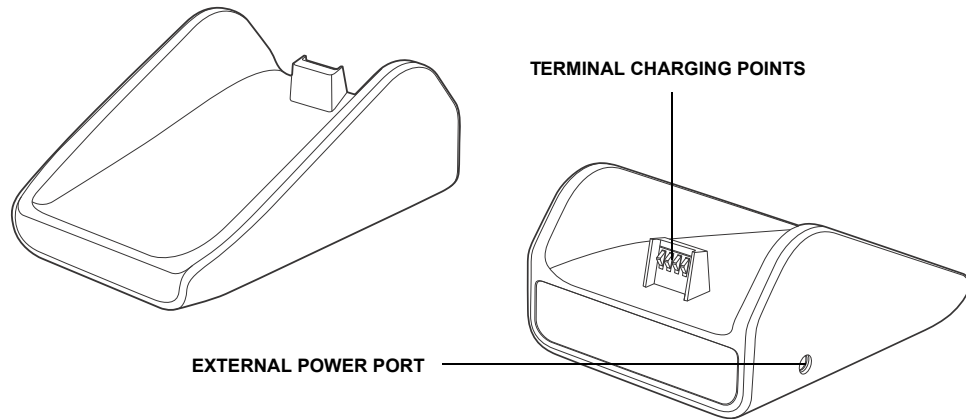
- [V400m Charging Base](#)
- [V400m Full-Function Base](#)

The Charging Base supports charging only with no communication functionality. The Full-Function (FF) 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 and supports a USB flash drive.

## V400m Charging Base

The Charging Base accommodates and supplies power to the V400m Plus 3G and V400m Plus 4G portable terminals.

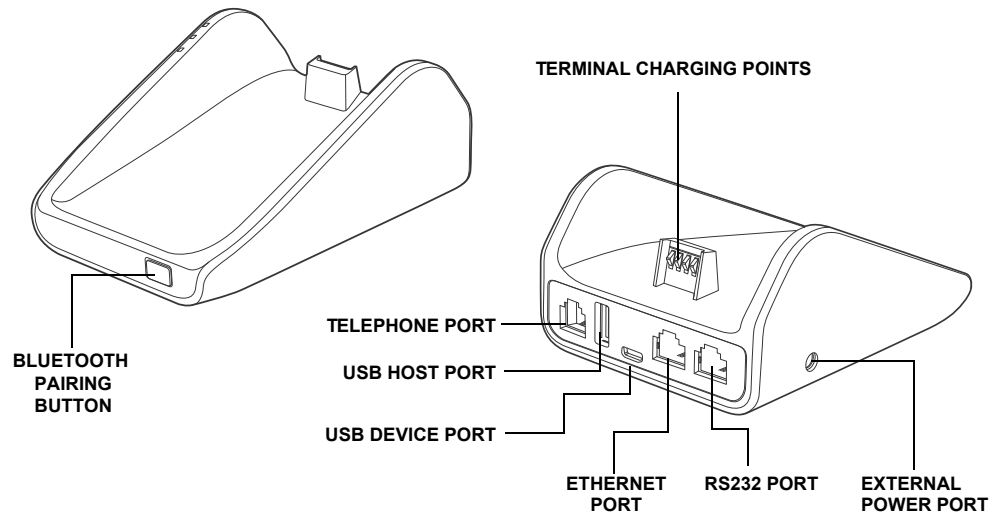
Figure: 3 V400m Charging Base, Front and Rear



## V400m Full-Function Base

The FF Base supports any failover communication via dial up and Ethernet-connections for V400m Plus 3G and V400m Plus 4G units. The failover will be supported in all network interfaces available in a terminal.

Figure: 4 V400m FF Base, Front and Rear



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

- 10/100M Ethernet
- 56K modem
- WiFi
- Wireless 3G (HSPA) and 4G (LTE)
- USB host
- USB device

## Features and Benefits

The V400m terminal and Bases provide the following functionality:

### 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.

- 3G capability (for V400m Plus 3G only).
- 4G functionality (for V400m Plus 4G only).
- WiFi and Bluetooth-capable.
- Intuitive keypad interface simplify the training and reduces support requests.
- 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-Function Bases expand functionality while providing a stable, battery-charging platform.

## Critical Security Protection

- Offers a choice of Master/Session or DUKPT key-management methods to protect PIN-based transactions.
- Offers secure, reliable PIN input for expanding the range of PIN-based transactions.
- PCI 5.x-compliant for secure solutions, meeting the PED standard.
- Meets ISO and ANSI standards for PIN encryption, key management and MAC.
- Key injection is simplified and secured with Verifone's SecureKit key loading software.

## 2. Device Setup

This chapter describes the setup procedure for the V400m Terminal & Base in the following sections:

- [Selecting Location](#)
- [PIN Protection Guidelines](#)
- [Unpacking Shipping Carton](#)
- [Installing MSAM, SIM and Micro SD Cards](#)
- [Loading Printer Paper](#)
- [Power Supply](#)
- [Cable Connections](#)
- [Smart Card Reader](#)
- [Magnetic Stripe Card Reader](#)
- [Contactless Transaction](#)
- [Optional Accessories](#)
- [Periodic Inspection](#)

### Selecting Location

Use the following guidelines to select the best location for the V400m Terminal & Base 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 V400m Terminal & Base



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

*Pour des raisons de sécurité, ne faites pas passer de câbles ou de cordons sur une passerelle.*

## 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.
- Do not use the V400m Terminal & Base outdoors.



The V400m Terminal & Base 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.

**CAUTION** *Le terminal et la base V400m ne sont ni étanches à l'eau ni à la poussière et sont destinés à utilisation en intérieur uniquement. Tout dommage causé à l'appareil par une exposition à la pluie ou à la poussière peut annuler toute garantie.*

## Electrical Considerations

- Avoid using this product during electrical storms.
- Do not use the V400m Terminal & Base unit near water or in moist conditions.
- Disconnect the device from its POS terminal before cleaning.



### WARNING

Due to the risk of electric shock or damage to the terminal, do not use this equipment near a water source, for example near a bathtub, washbowl, kitchen sink or laundry tub, in a wet basement or near a swimming pool. Likewise, avoid using this product during thunderstorms causing power cuts. Avoid placing the terminal near electrical devices or other units that could cause large voltage fluctuations or electrical interference, such as air conditioners, neon signs, high frequency safety devices or electrical equipment.

*En raison du risque de choc électrique ou d'endommagement du terminal, n'utilisez pas ce équipement à proximité d'une source d'eau, par exemple près d'une baignoire, d'un lavabo, d'une cuisine un évier ou une cuve à lessive, dans un sous-sol humide ou près d'une piscine. De même, évitez d'utiliser ce produit lors d'orages provoquant des coupures de courant. Éviter placer le terminal à proximité d'appareils électriques ou d'autres unités susceptibles de provoquer de grandes fluctuations de tension ou interférences électriques, telles que les climatiseurs, les enseignes au néon, dispositifs de sécurité haute fréquence ou équipements électriques.*

## 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.



### CAUTION

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

*L'utilisation d'un cadre ou d'un support métallique fermé peut affecter négativement la performance.*



## PIN Protection Guidelines

The V400m Plus 3G and V400m Plus 4G 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 prevent 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 a safe PIN-entry process

## Unpacking Shipping Carton

Carefully inspect the shipping carton and its contents for possible tampering or damage.

- 1 Remove the V400m Terminal & Base unit from the shipping carton. The standard package contains the PIN pad, power pack, battery, and printer paper roll. Refer [Accessories and Cables](#) to for more information about V400m Terminal & Base related accessories.



### CAUTION

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

*Cet appareil est un produit sécurisé et toute altération peut faire cesser son fonctionnement. fonctionner ou fonctionner de manière non sécurisée.*

- 2 Remove any protective plastic wrap and place the unit on a table or countertop.
- 3 Remove the clear protective film from the display.

- 4 Replace all the packing materials, close the lid, and save the carton for repacking or moving the V400m Terminal & Base unit in the future.



**WARNING**

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.

*N'utilisez pas un appareil qui a été altéré ou autrement endommagé. Cet appareil est équipé d'une étiquette inviolable. Si une étiquette ou un composant semble endommagé, informez-en immédiatement la compagnie maritime et votre représentant ou fournisseur de services Verifone.*

## Installing MSAM, SIM and Micro SD Cards

You may need to install or replace the multiple security access module (MSAM), Micro Secure Digital (SD) and Subscriber Identity Module (SIM) cards.



**CAUTION**

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

*Observez les précautions standard lors de la manipulation d'appareils sensibles aux décharges électrostatiques. Les décharges électrostatiques peuvent endommager l'équipement. Verifone recommande d'utiliser un bracelet antistatique mis à la terre.*

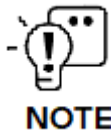
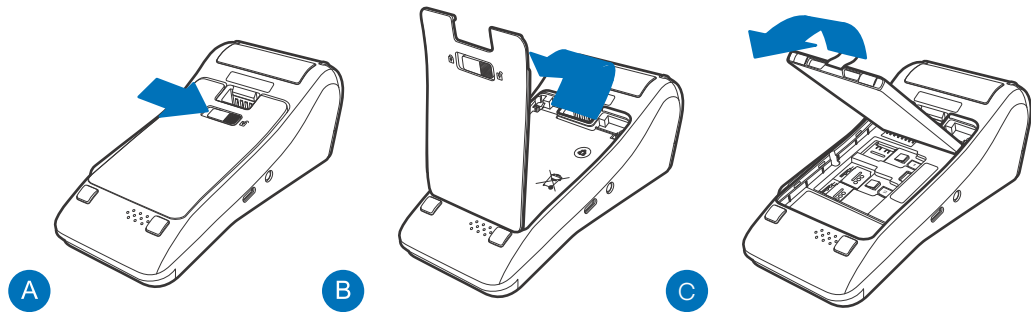
## Accessing Card Compartments

Use the following procedure in order to access the cardholder compartment.

- 1 Place the terminal face down on a soft and clean surface to protect the lens from scratches.
- 2 Slide the compartment lock to the right and lift the compartment cover.

- 3 Remove the battery and place in a secure location.

Figure: 5 Accessing Cardholders



Apart from using the pull tab to remove the battery from the compartment, you can also use the recessed areas on the lower portion of the battery to leverage the battery out.

**NOTE**

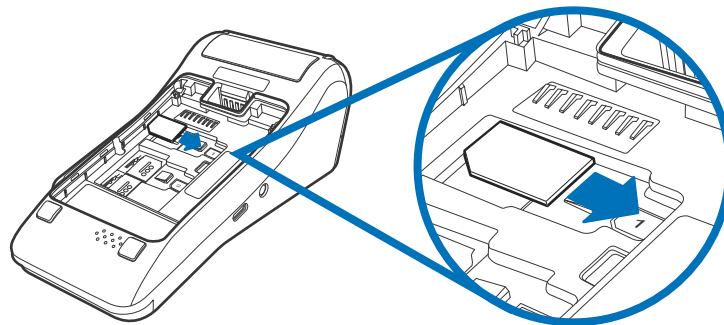
- 4 The MSAM, SD and SIM cardholders are now accessible.

### Replacing or Installing an MSAM Card

To replace or install an MSAM card:

- 1 Follow steps 1 to 3 of [Accessing Card Compartments](#) to get to the MSAM cardholder.

Figure: 6 Inserting MSAM Card





**NOTE**

The V400m Terminal & Base supports two MSAM cards in a side-by-side configuration.

- 2 Push in the old MSAM card, if any, to release it from the slot.
- 3 Carefully insert the new MSAM card into the slot facedown (with the gold contacts facing downward).
- 4 If you are finished replacing or inserting cards, replace the battery and terminal rear cover. Lock the cover by sliding the tab to the left.

### Replacing or Installing a SIM Card

To replace or install SIM cards:

- 1 Use steps 1 to 3 of [Accessing Card Compartments](#) to get to the SIM cardholder.

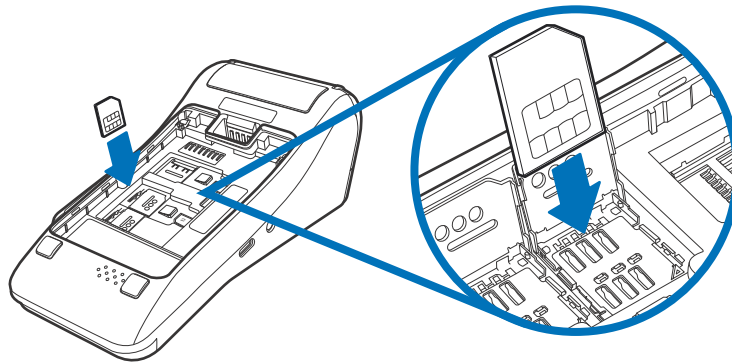


**NOTE**

The V400m supports two SIM cards in a side-by-side configuration.

- 2 Unlock the cardholder and swing upwards to allow the insertion or removal of cards.
- 3 Remove the old card, if any and install the SIM card by carefully sliding it into the slot (with the gold contacts facing outward) until fully inserted.

Figure: 7 Inserting SIM Card



- 4 Turn the cardholder back in place and slide the cover to lock the cardholder.

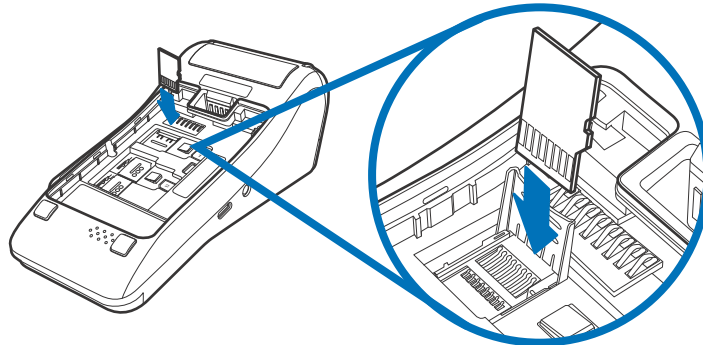
- 5 If you are finished replacing or inserting cards, replace the battery and terminal rear cover. Lock the cover by sliding the tab to the left.

## Replacing or Installing a Micro SD Card

To replace or install a Micro SD card:

- 1 Follow steps 1 to 3 of [Accessing Card Compartments](#) to get to the Micro SD cardholder.

Figure: 8 Inserting Micro SD Card



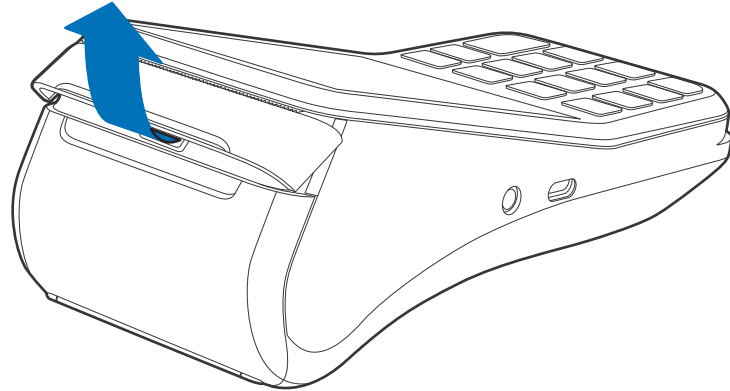
- 2 Unlock the cardholder and turn upwards to allow the insertion or removal of cards.
- 3 Remove the old card, if any and insert the Micro SD card carefully into the cardholder (with the gold contacts facing outward) and turn the cardholder back in place.
- 4 Slide the cover to lock the cardholder closed.
- 5 If you are finished replacing or inserting cards, replace the battery and terminal rear cover. Lock the cover by sliding the tab to the left.

## Loading Printer Paper

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

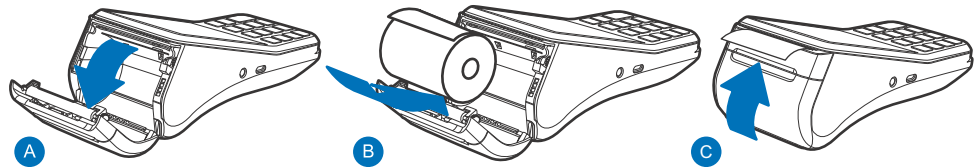
- 1 Unlock the paper compartment by pulling up the latch and swinging the door downwards.

Figure: 9 Opening Printer Paper Door



- 2 Load the paper roll as shown in Figure 10, with the edge of the paper on the top of the roll.

Figure: 10 Procedure for Loading Paper Roll



- 3 Pull a length of paper up over the serrated cutter and close the compartment 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 the battery level is below 10%.

**CAUTION** *Avant de traiter des transactions en mode batterie, assurez-vous que la durée de vie de la batterie est supérieure à 10 %. Ne risquez pas de perdre les données de transaction ou les capacités d'impression, connectez le terminal au bloc d'alimentation si le niveau de la batterie est inférieur à 10 %.*

**Power Supply** Not all configurations and device contexts require the use of a power supply –Verifone ships the 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.

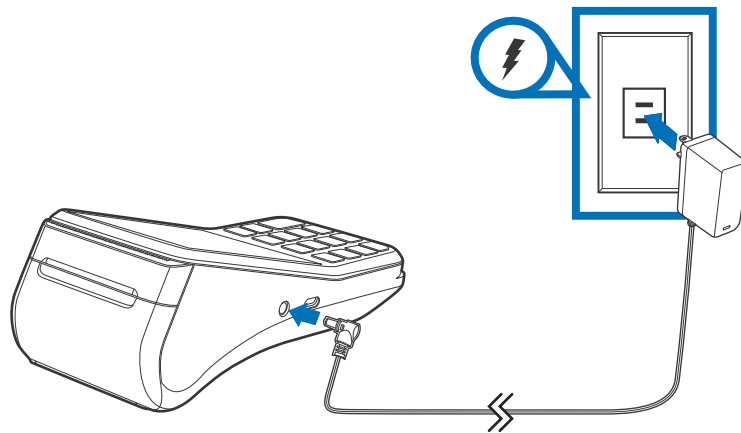


Using an incorrectly rated power supply can damage the unit or cause it not to work properly. Use only a power pack with VPN PWR475-010-01-A (see [Service and Support](#) for detailed power supply specifications).

**CAUTION** *L'utilisation d'une alimentation électrique mal évaluée peut endommager l'appareil ou l'empêcher de fonctionner. fonctionne correctement. Utilisez uniquement un bloc d'alimentation avec VPN PWR475-010-01-A (voir Service et prise en charge des spécifications détaillées de l'alimentation électrique).*

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: 11 Connecting the Power Pack



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.

**WARNING** *Ne branchez pas le bloc d'alimentation sur une prise extérieure et n'utilisez pas le terminal. en plein air. La déconnexion de l'alimentation pendant une transaction peut entraîner des données de transaction les fichiers non encore stockés en mémoire seront perdus.*



**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 c copyright screen. If no application is loaded, **DOWNLOAD NEEDED** appears on the display after the initial Verifone copyright screen.

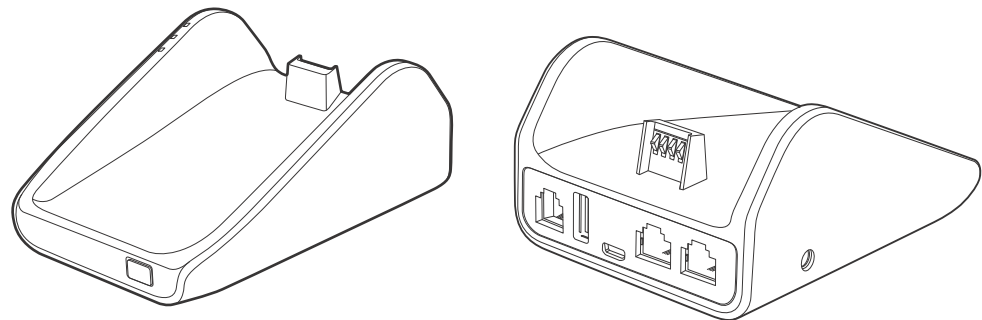
## Cable Connections

The V400m Full-Function Base can utilize several types of cable connections.

### Cable Connections Using the FF Base

To connect the terminal to other devices via Ethernet, RS-232, and USB, use the V400m FF Base. The FF Base provides a standard RJ-45 LAN socket, RS-232 port, and a mini-USB port. The V400m terminal must be docked on the base to utilize cable connectivity.

Figure: 12 FF Base, Front and Rear View



The FF Base features the following port configuration:

Cable	Configuration
Ethernet port	RJ-45 socket (for connecting PIN Pad to LAN infrastructure)
RS232 port	RS232 socket (for connecting PIN Pad to LAN infrastructure)
USB ports	Micro USB and type A USB



## 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: 13 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 sits firmly.
- 3 Remove the card when the display indicates the transaction is completed.



**CAUTION**

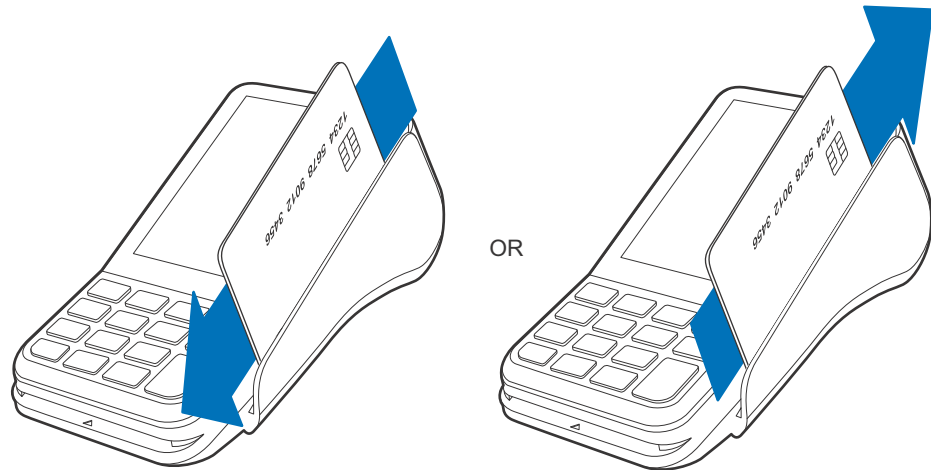
Leave the smart card in the card reader until the transaction is completed. Premature removal can void the transaction.

*Laissez la carte à puce dans le lecteur de carte jusqu'à ce que la transaction soit terminée. Une suppression prématurée peut annuler la transaction.*

## Magnetic Stripe Card Reader

The V400m has a magnetic card reader with a triple-track stripe reader. This gives the unit greater reliability over a wide range of swipe speeds and operating environments.

Figure: 14 Using the Magnetic Stripe Card Reader



## Conducting a Credit/Debit Card Transaction

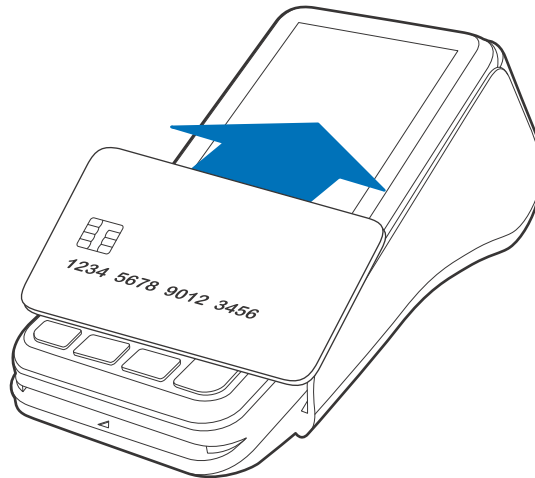
To conduct a credit or debit card transaction:

- 1 Position a magnetic card with the stripe facing the keypad.
- 2 Swipe it through the magnetic card reader downwards or upwards. The reader can read the card from either direction.

## Contactless Transaction

The V400m supports contactless transactions through an integrated contactless module. The terminal only becomes active for contactless smart card transactions when initialized by an application.

Figure: 15 Contactless Transaction



### Performing Contactless Transaction

To perform a contactless smart card transaction:

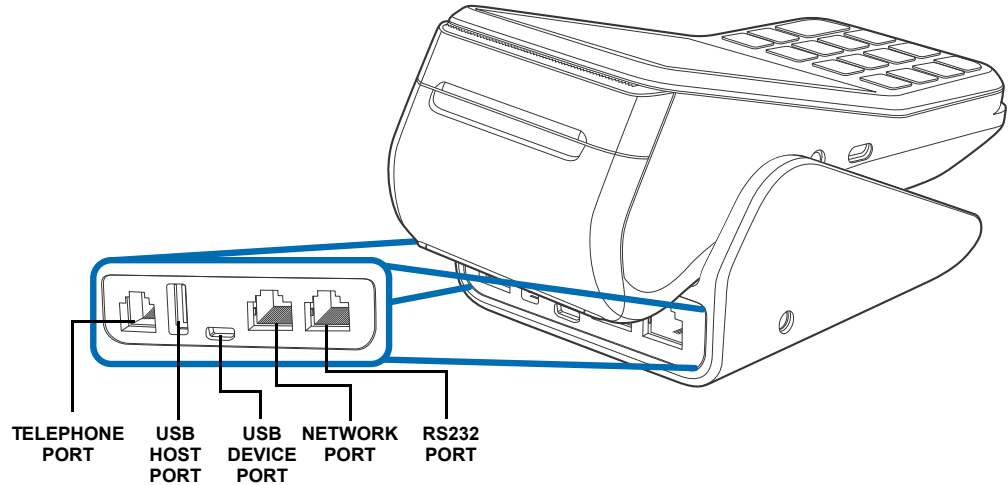
- 1 Gently tap the card onto or hold the card (within 4 cm) against the surface of the display.
- 2 An activated LED visual on the display accompanied by a short beeping sound indicates a successful transaction.

### Optional Accessories

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

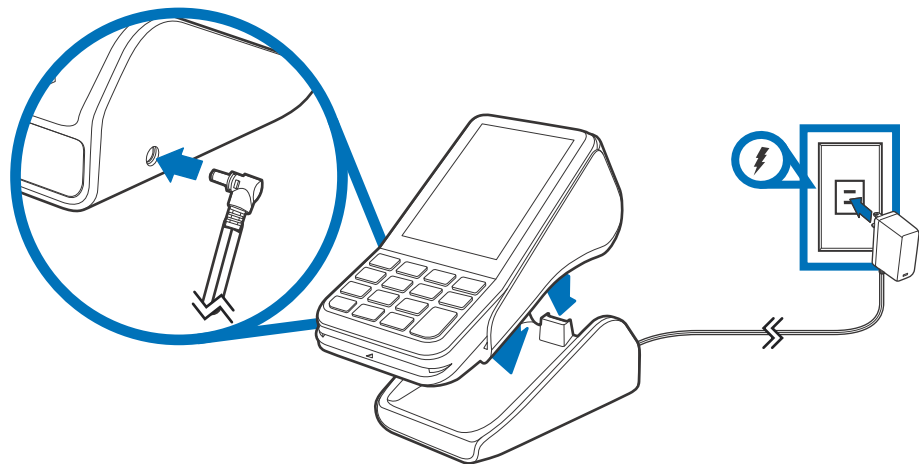
**FF Base** The FF Base (VPN M475-S02-08) provides Bluetooth (BT) v4.2 as well as all BT v4.1 features. It also supplies power, Dial up, Ethernet, USB Host and USB Device, plus powered RS232 connection.

Figure: 16 V400m FF Base Connections



**Charging Base** The Charging Base (VPN M475-S02-00) provides a stable dock plus power charging for the V400m Plus 3G terminal.

Figure: 17 V400m Charging Base Power Connection



**Periodic Inspection** Periodically inspect the terminal and base for possible tampering. Signs of tampering may include:

- Wires protruding from the devices.
- Foreign objects inserted into the smart card or mag stripe slot.

- Signs of damage to the tamper-evident label.
- Warning message on the device display.

**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. For more information on contacting Verifone, refer to [Service and Support](#).

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# 3. Specifications

This chapter discusses power requirements, dimensions and other specifications of the V400m Terminal & Base.

**V400m Terminal** Refer to the following specifications for the V400m terminal:

## Unit Power Requirement

- Operating power: 5V DC, 2.2A

## Temperature

- Operating temperature: 0°C to 40°C (32°F to 104°F)
- Storage temperature: -20°C to 60°C (-4°F to 140°F)

## Humidity

- Relative humidity: 5% to 93% RH non-condensing



**NOTE**

If the device is intended for use in environments where the temperature exceeds the specified operating range, integrators must take measures to control ambient conditions, ensuring that the product remains within the designated temperature range.

## External Dimensions

	V400m	V400m Global 4G
Length:	161 mm (6.34 in)	164 mm (6.46 in)
Width:	72.75 mm (2.86 in)	72.75 mm (2.86 in)
Depth:	56.85 mm (2.23 in)	56.85 mm (2.23 in)

## Weight

	V400m	V400m Global 4G
• Unit weight:	370 g (13.05 oz)	372 g (13.12 oz)

## Processor

- 32-bit ARM Cortex-A9 RISC Microprocessor
- 600 MHz clock speed

- |                      |  |
|----------------------|--|
| Memory               | <ul style="list-style-type: none"> <li>• 8 GB (LPDDR2: 4 GB, NAND Flash: 4GB)</li> </ul>   |
| SD Memory            | <ul style="list-style-type: none"> <li>• 4bit SDIO interface</li> <li>• Up to 192 Mbit/sec (24 Mbyte/sec) in High-Speed SD mode 4bit data transfer</li> <li>• Speed Class: SDHC Class 2, 4, 6 and 10</li> </ul>  |
| Security             | <ul style="list-style-type: none"> <li>• PCI 5.x Compliant</li> </ul>  |
| Display              | <ul style="list-style-type: none"> <li>• 3.5" transmissive amorphous TFT LCD TFT 320 (RGB) x 480 (HVGA)</li> <li>• Independent 20X x 13Y sensing for real time touch point reporting</li> <li>• Supports signature capture by finger or stylus (5 mm)</li> <li>• I2C interface for touch controller command set</li> </ul> |
| SAM Card Reader      | <ul style="list-style-type: none"> <li>• Primary SC reader and 2-SAMs</li> <li>• Compatible with ISO7816-3, ISO7816-10 and EMV4.3 standards</li> </ul>   |
| CTLS Reader          | <ul style="list-style-type: none"> <li>• CTLS card operating in the RFID 13.56 MHz frequency band</li> <li>• EMVCo, VISA, MasterCard and PBOC (qPBOC) approved</li> </ul>  |
| Magnetic Card Reader | <ul style="list-style-type: none"> <li>• Triple track (tracks 1, 2, 3), high coercivity, bi-directional</li> <li>• Swipe speed at 10 IPS to 40 IPS</li> <li>• Supports Hi/Low coercivity cards</li> </ul>  |
| Primary Smart Card   | <ul style="list-style-type: none"> <li>• ISO 7816-3, 1.8V, 3V, 5V</li> <li>• Synchronous and Asynchronous cards</li> <li>• EMV Approved</li> </ul>   |
| Speaker              | <ul style="list-style-type: none"> <li>• Mono speaker and with an external CODEC (TI TLV320AIC3110)</li> </ul>   |

## Communication

- Bluetooth
  - BT class 1, 100 m range (line of sight)
  - Supports BT v4.2
- WiFi
  - Supports 2.4 GHz / 5 GHz frequency channels
- 3G Radio
  - 3GPP Release 6,7
  - HSPA DL 7.2 Mbps, UL 5.7 Mbps
- 4G Radio
  - 3GPP Release 9
  - LTE DL 10.2 Mbps, UL 5.2 Mbps

## Battery Pack

- Rating: 11.2 Wh (3.85V DC, 2890 mAh)
- Meets IEEE1725 requirements

## Power Pack

- Dual input charger to support charge through power pack or base station
- Supplied by an external universal-input 11 W power supply, compliant with Energy Star VI
- 5V, 2.2A Output
- 100-240V, 0.5A, 50-60 Hz Input

## Integrated Printer

- Printing voltage: 8 Volts
- Print Column Width: Option for printing 24/32/42 characters per line
- Supports 57 mm W x 40 mm D paper roll

## Security

- 3DES encryption, Master/Session and DUKPT key management
- VeriShield file authentication
- PCI PED 5.x approved



V400m Bases Refer to the following specifications for the V400m Bases.

- Charging Base
  - Provides terminal charging on a mounted stand
- Full-Feature Base
  - Apart from charging, the FF Base provides:
    - 10/100M Ethernet
    - 56K modem
    - LE Secure feature of BT v4.2 + All BT v4.1 feature
    - USB host
    - USB device

### Unit Power Requirement

- Operating power: 5V DC, 2.2A

### Temperature

- Operating temperature: 0°C to 40°C (32°F to 104°F)
- Storage temperature: -20°C to 60°C (-4°F to 140°F)

### Humidity

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

### Communication

- 10/100M Ethernet
- 56K modem
- LE Secure feature of BT v4.2 + All BT v4.1 feature
- USB host
- USB device

### Security

- PCI 5.x Compliant

# 4. Maintenance and Cleaning

**General Care** Your device exemplifies superior design and craftsmanship. The following recommendations are provided to help safeguard your warranty coverage:

- Avoid storing the device in hot areas, as elevated temperatures can diminish the lifespan of electronic components, harm batteries, and cause deformation or melting of certain plastics.
- Refrain from storing the device in cold areas, as the return to normal temperatures may lead to moisture formation inside the device, potentially damaging electronic circuit boards.
- Exercise caution to prevent dropping, knocking, or shaking the device, as rough handling can result in the breakage of internal circuit boards and delicate mechanics.

These recommendations are equally applicable to both your device and any accompanying attachments or accessories. If your device is experiencing operational issues, kindly visit the nearest Verifone authorized service provider for maintenance or replacement.

**Cleaning & Sanitizing Guidelines** Verifone devices should only be gently cleaned to remove dirt, residue, or debris using a lightly water-damped, clean microfiber cloth. One or two drops of pH-neutral, non-scrubbing soap may be used. Do not use solvents, harsh detergents, or abrasive cleaners.

Using improper cleaning methods or products may result in functional and/or cosmetic issues that are not covered under warranty.

**Important Guidelines:**

- 1 Avoid Direct Application:** Never spray, coat, or pour any liquid, sanitizer, or disinfectant directly onto the device.
- 2 Caution Against Harsh Chemicals:** Avoid using bleach, hydrogen peroxide, thinner, trichloroethylene, or ketone-based solvents, as they can degrade plastic and rubber components.
- 3 Electrostatic Discharge (ESD) Prevention:** Exercise caution to prevent ESD by refraining from vigorously rubbing with a dry towel or similar actions, as they can cause ESD and trigger a tamper alert.



## Cleaning Instructions

- 1 Turn off your device.
- 2 Disconnect it from the power source.
- 3 Clean it following the instructions and guidelines as mentioned above. Once completely dry, reconnect to power up.

# 5. Service and Support

The V400m Terminal & Base does not contain user-serviceable parts. Unless expressly directed, refrain from attempting any service, adjustments, or repairs on the unit under any circumstance.

For product service and repair information:

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

## Returning a Device for Service

You must obtain a Merchandise Return Authorization (MRA) number before returning the terminal to Verifone. The following procedure describes how to return one or more terminals for repair or replacement (U.S. customers only).



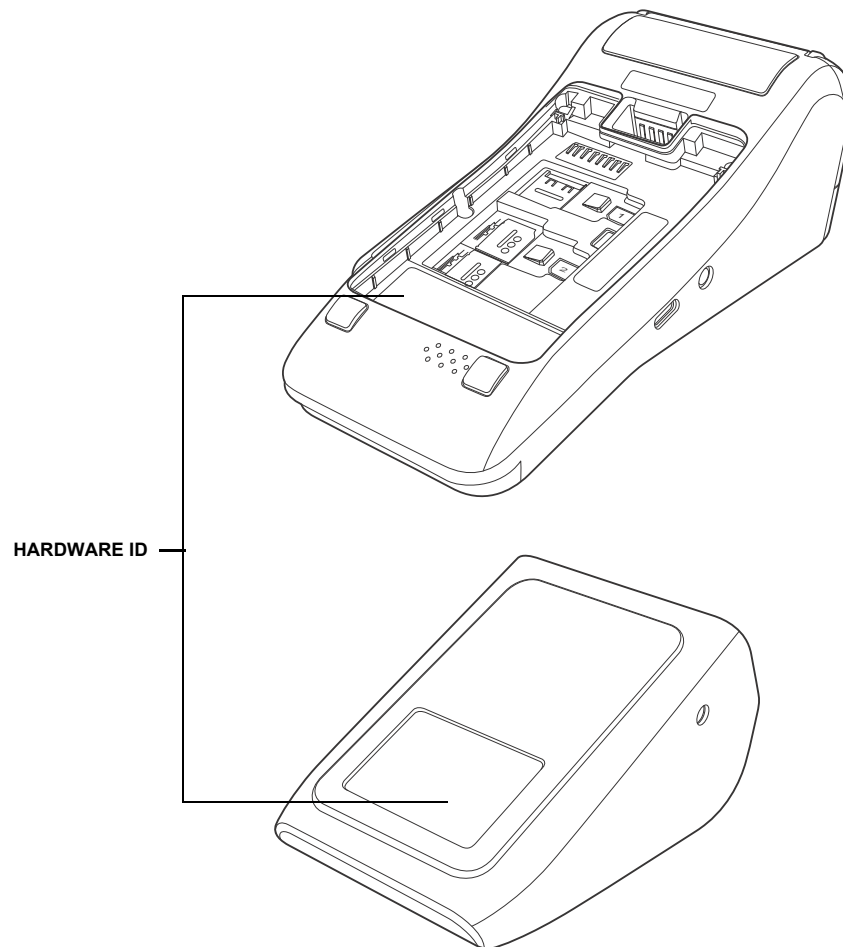
**CAUTION**

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

*Il est conseillé aux clients en dehors des États-Unis de contacter leur Verifone local représentant pour obtenir de l'aide concernant l'entretien, le retour ou le remplacement des appareils Et accessoires.*

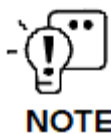
- 1 Get the following information from the printed labels on the back of each V400m Terminal & Base to be returned:
  - Product ID, including the model and part number. For example, “V400m Terminal & Base” and “M180-08x-xxx-xxx-x”.
  - Serial number (S/N nnn-xxx-xxx)

Figure: 18 Finding the Product ID and Serial Number



- 2 Obtain the MRA number(s) by completing one of the following:
  - 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. to 8 P.M., Eastern Time.
  - Give the MRA representative the information you gathered in [Step 1](#).
  - Complete the Inquiry Contact Form at <https://www.verifone.com/en/us/contact-us>.
  - Address the Subject box to “Verifone MRA Dept.”

- Reference the model and part number in the Note box.



Each V400m Terminal & Base returned to Verifone requires a distinct MRA number to be issued. Even if you are returning multiple terminals of the same model, ensure that a separate MRA number is issued for each unit.

- 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:
  - Detail the issue(s) with the V400m Terminal & Base.
  - Furnish the shipping address for the return of the repaired or replacement unit.
  - Maintain a record of the following elements:
    - Assigned MRA number(s).
    - Verifone serial number linked to the V400m Terminal & Base being sent for service or repair (located on the back of the unit).
    - Shipping documentation, including air bill numbers utilized for shipment tracking.
    - Model(s) returned (model numbers can be found on the Verifone label on the back of the V400m Terminal & Base device).

## 6. Troubleshooting Guidelines

This chapter compiles common instances of malfunctions that may arise during the operation of your device, along with the corresponding steps to address them. The troubleshooting guidelines outlined in the subsequent sections are incorporated to facilitate the effective installation and configuration of the device. Should you encounter challenges in operating your unit, please refer to these troubleshooting examples. If the issue persists despite following the provided guidelines or if the problem is not covered, kindly reach out to your local Verifone representative for further assistance.



**NOTE**

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The device is equipped with tamper-evident labels and does not contain any user-serviceable parts. It is crucial not to attempt to disassemble the unit under any circumstances. Only perform adjustments or repairs explicitly outlined in this guide. For any other services, please contact your local Verifone service provider. Utilizing services from unauthorized parties may potentially void any existing warranty.

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**CAUTION**

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All units require the use of a power supply. Only use a Verifone-supplied power pack. Using an incorrectly rated power supply may damage the unit or cause it to malfunction. Ensure that the power supply used to power the unit matches the specified requirements on the back of the unit (refer to [Specifications](#) for detailed power supply specifications) before troubleshooting. If not, obtain the appropriately rated power supply before continuing with troubleshooting.

*Toutes les unités nécessitent l'utilisation d'une alimentation. Utilisez uniquement un bloc d'alimentation fourni par Verifone. L'utilisation d'une alimentation mal calibrée peut endommager l'appareil ou l'empêcher de fonctionner correctement. Assurez-vous que l'alimentation électrique utilisée pour alimenter l'unité correspond aux exigences spécifiées à l'arrière de l'unité (voir Spécifications pour les spécifications détaillées de l'alimentation électrique) avant le dépannage. Dans le cas contraire, procurez-vous une alimentation électrique appropriée avant de poursuivre le dépannage.*

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## Device Does not Start/Does not Display Correct Readable Information

If the device does not start:

- Ensure that the device is plugged in to a dedicated power source.
- Verify all the cable connections including the proper insertion of the power cable connector.
- If the problem persists, reach out to your local Verifone representative for assistance.

## Blank Display

When the device display is blank:

- If the device display appears dark, tap the screen using the stylus. If the unit is in screen-saver mode, touch the screen to activate.
- If the display does shows incorrect or unreadable information, inspect all cable connections. In case the problem persists, reach out to your local Verifone representative for assistance.

## Keypad Does Not Respond

If the keypad does not respond properly:

- Examine the device display. If it displays the wrong character or nothing at all when you press a key, follow the steps outlined in [Device Does not Start/Does not Display Correct Readable Information](#).
- Refer to the user documentation for that application if using a function key does not produce the anticipated outcome, to ensure accurate data entry.
- If the issue persists reach out to your local Verifone representative.

## Transactions Fail to Process

Multiple factors could be causing the unit to fail in processing transactions. Utilize the following steps to troubleshoot and identify the root of the failures.

### Checking Magnetic Card Reader

**To check the magnetic card reader:**

- 1 Perform a transaction using one or more distinct magnetic stripe cards to rule out the possibility of a faulty card.
- 2 Ensure that you are swiping cards correctly (see [Magnetic Stripe Card Reader](#)).
- 3 Process a transaction manually using the keypad instead of the card reader. If the manual transaction is successful and the issue persists with the card reader, it may indicate a problem with the card reader itself.
- 4 If the problem persists, reach out to your local Verifone representative.



## Checking Smart Card Reader

### To check the smart card reader:

- 1 Execute a transaction using various smart cards to eliminate the possibility of a faulty card.
- 2 Verify that the card is inserted correctly (see [Smart Card Reader](#)).
- 3 Ensure the SAM cards are appropriately inserted into the designated slots and are securely in place (refer to [Installing MSAM, SIM and Micro SD Cards](#)).
- 4 If the issue persists, get in touch with your local Verifone representative.

## Checking CTLS Reader

### To check the CTLS reader:

Make sure there are no obstructions between the contactless logo and the card, ensuring a clear path between the contactless reader and the actual card for a seamless transaction.

# 7. Accessories and Cables

Verifone provides a range of accessories and documentation for the V400m Terminal & Base. When placing orders, it is essential to reference the specific part numbers. Here are the available channels for ordering: Verifone online store:

- Verifone - [Contact us](#)
- USA - Verifone Customer Development Center, 1-800-837-4366  
Monday - Friday, 7 A.M. - 8 P.M., Eastern time
- International - Contact your Verifone representative

## Cables

Part Number	Part Description
CBL282-036-XX-A	RS-232 cable (RJ45). Powered from Countertop (+12V)
CBL282-006-01-B	Cable, VX 820 Ethernet/RS232, Dongle 1.0 M
CBL435-005-02-A	Ethernet and Mini-USB Dongle
CBL435-044-01-A	Cable, USB/Ethernet/RS232, Dongle 1.0 M

## Base

Part Number	Part Description
M475-S02-00	V400m B Charging Bas
M475-S02-08	V400m B Full-Function (FF) Base

## Power Supply

Part Number	Part Description
PWR475-010-01-A	DC power pack (US)
BPK475-001-01-A	Battery Pack (11.2 Wh, 3.85V DC, 2890 mAh)

## Cleaning Kit

02746-01	Verifone Cleaning Kit
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Verifone  
2744N University Drive  
Coral Springs,  
FL 33065, USA



[www.verifone.com](http://www.verifone.com)



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