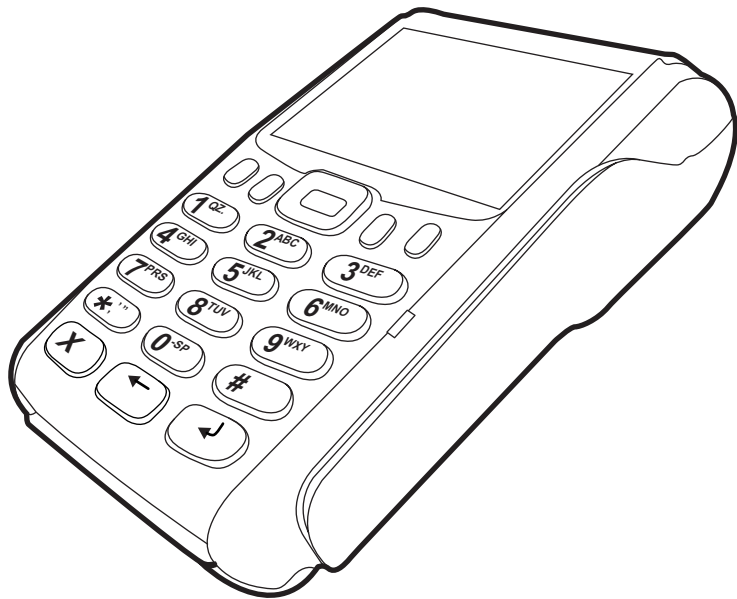


# VX 675

## *Installation Guide*



VX 675 Installation Guide  
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This guide is your primary source of information for setting up and installing the VX 675 terminal.

### Audience

This guide is useful for anyone installing and configuring a VX 675 terminal. Basic descriptions of the terminal features are also provided.

### Organization

This guide is organized as follows:

[Chapter 1, Terminal Overview](#). Provides an overview of the VX 675 terminal.

[Chapter 2, Terminal Setup](#). Explains how to set up and install the VX 675 terminal. Provides information on how to select a location, establish power and telephone line connections, and how to configure optional peripheral devices.

[Chapter 3, Specifications](#). Discusses power requirements and dimensions of the VX 675 terminal.

[Chapter 4, Maintenance](#). Explains how to maintain your VX 675 terminal.

[Chapter 5, VeriFone Service and Support](#). Provides information on contacting your local VeriFone representative or service provider, and information on how to order accessories or documentation from VeriFone.

[Chapter 6, Troubleshooting Guidelines](#). Provides troubleshooting guidelines, should you encounter a problem in terminal installation and configuration.

### Related Documentation

To learn more about the VX 675 terminal, refer to the following set of documents:

VX 675 Certifications and Regulations Sheet	VPN DOC265-001-EN-A	
VX 675 Quick Installation Guide	VPN DOC265-002-EN-A	
VX 675 Reference Guide	VPN DOC265-004-EN-A	
Verix eVo Volume I: Operating System Programming Manual	VPN DOC00301	
Verix eVo Volume II: Operating System and Communications Programmers Manual	VPN DOC00302	
Verix eVo Volume III: Operating System Programming Tools Reference Manual	VPN DOC00303	




## Conventions and Acronyms

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

### Document Conventions

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 referenced.	See <a href="#">Conventions and Acronyms</a> .
<i>Italics</i>	Italic typeface indicates book titles or emphasis.	You <i>must</i> install a roll of thermal-sensitive paper in the printer.
Courier	The courier type face is used while specifying onscreen text, such as text that you would enter at a command prompt, or to provide an URL.	<code>http://www.verifone.com</code>
	The pencil icon is used to highlight important information.	RS-232-type devices do not work with the PINpad port.
	The caution symbol indicates possible hardware or software failure, or loss of data.	The terminal is not waterproof or dustproof, and is intended for indoor use only.
	The lightning symbol is used as a warning when bodily injury might occur.	Due to risk of shock do not use the terminal near water.

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

**Table 2 Acronym Definitions**

Acronym	Definitions
AC	Alternating Current
CDMA	Code Division Multiple Access
EMV	Joint Europay, MasterCard and Visa Standard
GPRS	General Packet Radio Service
GSM	Global System for Mobile Communication
HDMI	High-Definition Multimedia Interface
ITP	Internal Thermal Printer
LCD	Liquid Crystal Display
LED	Light Emitting Diode
MRA	Merchandise Return Authorization
MSAM	Micromodule-Size Security Access Module
PED	PIN Entry Device
PIN	Personal Identification Number
POS	Point-of-Sale
QVGA	Quarter Video Graphics Array
RJ45	Registered Jack 45
RS-232	Recommended Standard 232
R-UIM	Removable User Identity Module
SAM	Security Access Module
SD	Secure Digital
SIM	Subscriber Identity Module
TFT	Thin Film Transistor
UART	Universal Asynchronous Transmitter/Receiver
USB	Universal Serial Bus
VPN	VeriFone Part Number

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## Terminal Overview

This chapter provides a brief description of the VX 675 terminal. This terminal features a large color screen display, fast processor, abundant memory, and PCI 2.0 and PCI 3.0 security.

The VX 675 terminal is a portable, battery-powered device designed to fit comfortably during handheld consumer-facing applications. It features a vibrantly colored 2.8" TFT QVGA display and a backlit spill-resistant keypad. It supports the GPRS communications technology.



**NOTE** VeriFone ships variants of the VX 675 terminal for different markets. Your terminal may have a different configuration. The following devices may or may not be present: a smart card reader, none or three MSAM cardholders, and a SIM/R-UIM cardholder.



**Figure 1 The VX 675 Terminal**

**Features at a Glance** The following are the features of VX 675:

- 400 MHz ARM11 RISC processor delivers power and usability in a convenient “hand-over” design.
- Multi-application operating environment.
- Securely supports and runs payment and value-added applications along with signature capture.
- Offers unsurpassed performance on EMV smart card transactions

- 
- Advanced memory architecture to meet tomorrow's needs with support for 192 MB.
  - Backward compatibility with VeriFone solutions help reduce development costs.
  - Drop-resistant design minimizes breakage.
  - 32-bit processing and multi-tasking capabilities.
  - Security architecture exceeds specifications for PCI-PED and sophisticated file authentication.
  - Max UI design provides large 2.8" color QVGA display, and large blue backlit keys for easier viewing.
  - Adds vibrant color screen to the smallest purpose-built wireless payment device.
  - Multiple connectivity options.
  - Spill-resistant design forces liquid down and off the front of the terminal.
- 

## **Features and Benefits**

VX 675 terminals provide the right combination of features and functions including a triple-track magnetic stripe card reader, smart card reader, integrated PIN pad, color screen display, and a quiet yet fast internal thermal printer (ITP).

### **Exceptional Ease of Use**

- Lightweight, tapered design, compact, stylish and the ergonomic balance allows convenient terminal hand-off to the consumer for PIN entry or other input.
- Large 2.8" color TFT display for boundless application possibilities and easy readability under various lighting conditions.
- Large, blue backlit keys provide tactile response to simplify usage and minimize finger slips.
- 25 mm and 40 mm diameter paper roll support with a trouble-free, drop-in, "clam shell" loading and dual tear bar that allow receipts to be torn in any direction.
- Quiet and fast integrated thermal printer with a rear placement to maximize the user interface area.
- Vertical magnetic stripe card reader with an extended blade for optimal card reading.
- Optional hands-free holster is available that fits the server's or clerk's belt so that the POS device can be quickly removed and easily handed to the customer.

**Performance and Durability**

- Fast transactions due to powerful 400 MHz ARM11 processor.
- High-capacity 3.7 V 2250 mAH Li-ion battery.
- Standard base station for drop-and-go charging.
- Rounded corners and drop resistant to 3 feet on concrete floor to minimize breakage.
- 192 MB of memory with optional removable SD flash memory.


**Security**

- PCI PED 2.0 and PCI PED 3.0 approved for debit and other PIN-based transactions.
- EMV Level 1 and 2 Type Approval.
- Tamper-resistant construction, SSL protocols, and VeriShield file authentication.

**Communication Technology**

- VX 675 GPRS and 3G: Long-range wireless payment for retailers that have no physical location limitations.

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## Terminal Setup

This chapter describes the terminal setup procedures. You will learn about:

- Selecting Terminal Location.
- Unpacking the Shipping Carton.
- Examining Terminal Features.
- Examining Connection Ports.
- Installing the Paper Roll.
- Installing the SIM Card.
- Using the Smart Battery.
- Battery Behavior (No Power Cable).
- Charging the Smart Battery.
- Connecting the Terminal Power Pack.
- Using the Base Station.
- Mounting the Terminal Onto the Base Station.
- Conducting Wireless Transactions.
- Conducting Smart Card Transactions.
- Using the Magnetic Card Reader.
- Using the Magnetic Card Reader.

## Selecting Terminal Location

Use the following guidelines when selecting a location for your VX 675 terminal.

### Environmental Factors

- The VX 675 unit is a portable terminal. Select a flat support surface, such as a countertop or table, to keep the terminal safe in between uses.
- Do not use the terminal where there is high heat, dust, humidity, moisture, or caustic chemicals or oils.
- Keep the terminal away from direct sunlight and anything that radiates heat, such as a stove or motor.
- Do not use the terminal outdoors.

### CAUTION



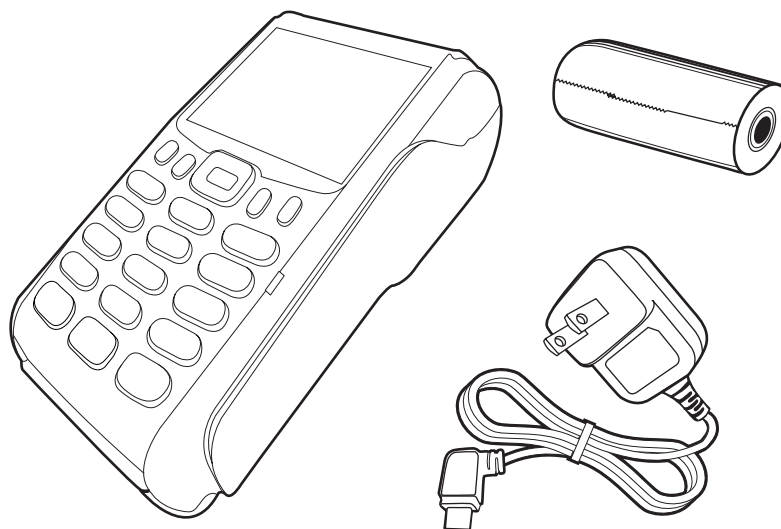
The terminal is not waterproof or dustproof, and is intended for indoor use only. Any damage to the unit from exposure to rain or dust may void any warranty.

### Electrical Considerations

- 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, electric motors, neon signs, high-frequency or magnetic security devices, or computer equipment).
- Do not use the terminal near water or in moist conditions.

## Unpacking the Shipping Carton

Open the shipping carton and carefully inspect its contents for possible tampering or shipping damage. The VX 675 device is a secure product and any tampering may cause the terminal to cease to function properly.



**Figure 2** VX 675 Shipping Carton Contents

**To unpack the Shipping Carton**

- 1** Remove and inspect the following items:
  - Terminal
  - Power pack
  - Paper roll
- 2** Remove all plastic wrapping from the terminal and other components.
- 3** Remove the clear protective film from the LCD screen.



**CAUTION** Do not use a terminal that has been damaged or tampered with. The VX 675 terminal comes equipped with tamper-evident labels. If a label or component appears damaged, please notify the shipping company and your VeriFone representative or service provider immediately.

- 4** Save the shipping carton and packing material for future repacking or moving the terminal.

## Examining Terminal Features

Before you continue the installation process, notice the features of the VX 675 terminal (see illustration below).



**Figure 3** VX 675 Terminal Features (Front Panel)

**Front Panel** The front panel includes the following features:

- A Large 3.5" color TFT screen display.
- Two types of keys:
  - a** A 12-key, **telephone-style keypad** (keypads may vary in style).
  - b** Three **color-coded function keys** below the keypad (from left to right: CANCEL, CLEAR, ENTER).
- A **magnetic card reader**, built into the right side. Swipe the card using the proper direction, with the magnetic stripe down and facing inward, toward the keypad.
- An **internal thermal printer** at the top front of the terminal.
- A **smart card reader**, built into the bottom of the terminal. For directions on how to use a smart card, see [Conducting Smart Card Transactions](#).



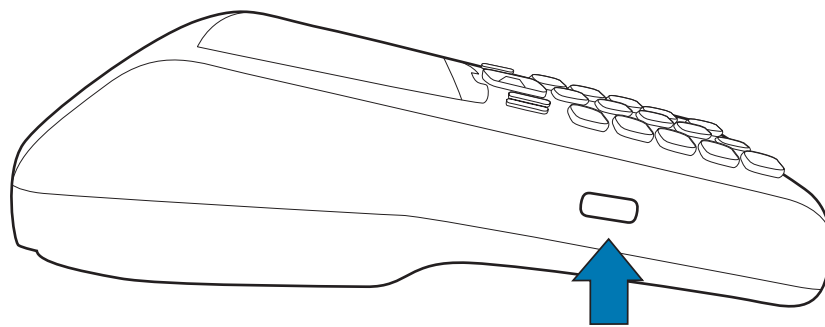
- A **SAM (security access module) compartment**, built into the bottom of the terminal inside the back compartment. The VX 675 terminal contains an MSAM cardholder to support stored-value card programs or other merchant card requirements.



**NOTE** VeriFone ships variants of the VX 675 terminal for different markets. Your terminal may have a different configuration. The following devices may or may not be present: a smart card reader, or an MSAM cardholder. However, the basic processes described in this guide remain the same, regardless of terminal configuration.

## Examining Connection Ports

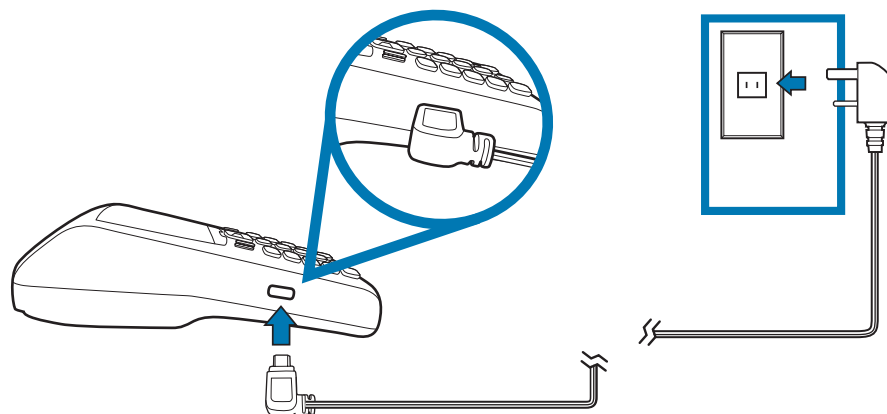
The VX 675 terminal has one primary micro-USB port.



**Figure 4** The VX 675 Primary Micro-USB Port

## Power Supply

Each VX 675 terminal comes with power supply (VPN CBL268-004-01-A) used to connect the terminal directly to a power outlet and to charge the battery.



**Figure 5** Power Supply Connection to a VX 675 Terminal

## Installing the Paper Roll

A fast, quiet thermal printer is built into the VX 675 terminal. Before you can process transactions that require a receipt or record, you *must* install a roll of thermal-sensitive paper in the printer.

The ITP uses a roll of single-ply, thermal-sensitive paper 57 millimeters (2.24 inches) wide and 25 or 40 millimeters in diameter. A pink *out-of-paper* indicator line appears on the edge of the paper approximately 18 inches before the end of the roll. After this line appears, there is enough paper remaining on the roll to conclude at least one transaction.

**CAUTION**

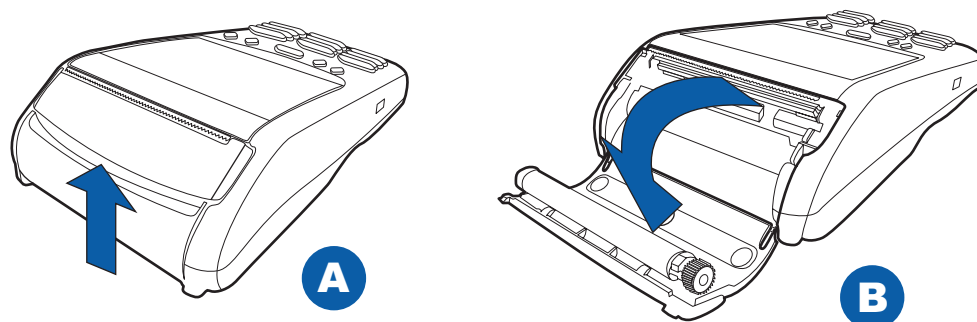


Poor-quality paper can jam the printer and create excessive paper dust. To order high-quality VeriFone paper, refer to [Accessories and Documentation](#).

Store thermal paper in a dry, dark area. Handle thermal paper carefully: impact, friction, temperature, humidity, and oils affect the color and storage characteristics of the paper.

Never load a roll of paper with folds, wrinkles, tears, or holes at the edges in the print area.

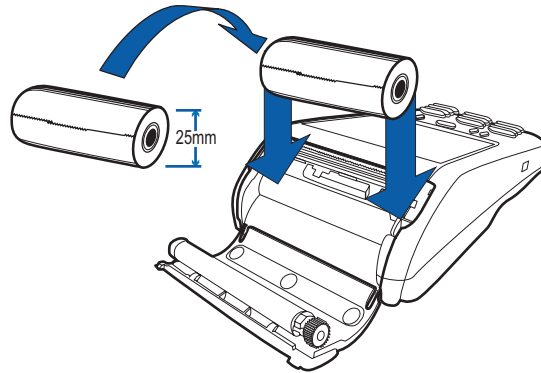
- To Install a Paper Roll**
- 1 Gently pull the latch located on the bottom of the terminal to unlock the paper roll cover.



**Figure 6**      **Unlocking the Printer Cover**

- 2 Lift the printer cover up and back.
- 3 Remove any partial roll of paper in the printer tray.
- 4 Loosen the glued leading edge of the new roll of paper or remove the protective strip, if applicable. Unwind the paper roll past any glue residue.
- 5 Hold the roll so the paper feeds from the *bottom* of the roll when the terminal is inverted (see illustration below).

- 6 Drop the paper roll into the printer tray.

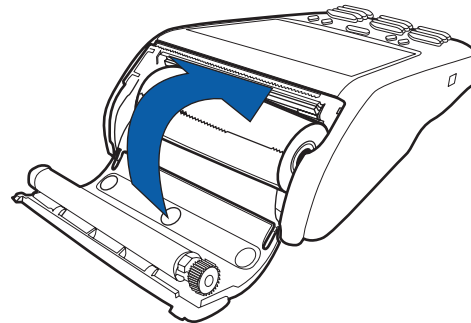


**Figure 7 Loading Paper Roll**

- 7 Pull paper up past the glue residue on the paper roll.
- 8 Close the paper roll cover by gently pressing directly on the cover until it clicks shut, allowing a small amount of paper past the glue residue to extend outside the printer door.



To prevent damaging the print roller, always gently press down on the paper roll cover to close it.



**Figure 8 Closing Paper Roll Cover**

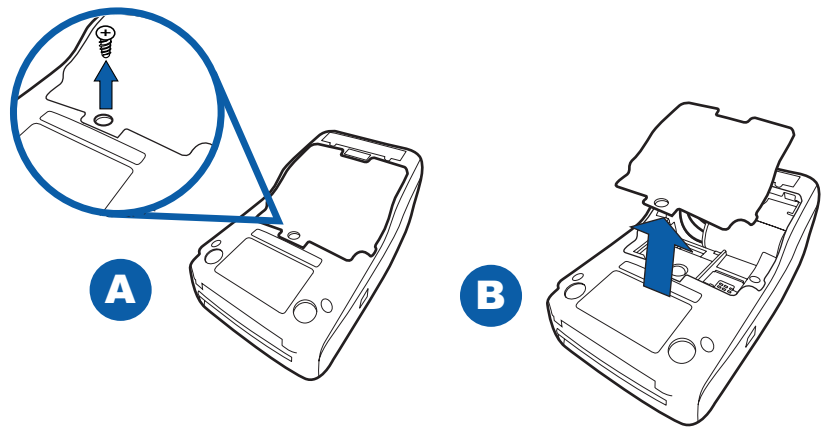
- 9 Tear the paper off against the serrated plastic strip in the printer.

## Installing the SIM Card

The VX 675 terminal for GPRS modems supports the installation of a GSM SIM (Subscriber Identity Module). Use the following procedure to install a SIM card.

### To install or replace the card

- 1 Turn off the terminal.
- 2 Place the terminal upside down on a soft, clean surface to protect the lens from scratches.
- 3 Unscrew and remove the back compartment cover.
- 4 Lift the battery pack.



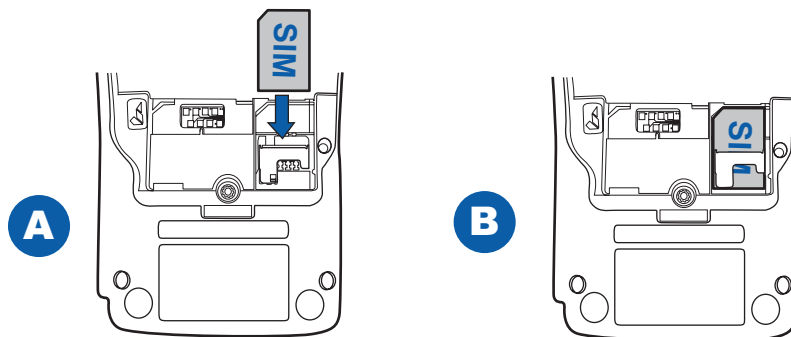
**Figure 9** Removing the Back Compartment Cover

- 5 Insert the SIM card into the cardholder.

**NOTE**



There is only one SIM slot. Before inserting the SIM card, position it as shown in the illustration below, with the card's gold contacts facing the compartment. The cardholder connector base has a set of contacts and a notch to ensure the SIM/R-UIM card is positioned correctly. The SIM card has a notch on one corner to ensure that it fits into the connector base in only one way.



**Figure 10** Inserting the SIM Card

- 6 Return the battery pack to its original position.
- 7 Close and screw the back compartment cover.

## Using the Smart Battery

The VX 675 terminal uses a Li-ion *smart* battery (see [Accessories and Documentation](#) for ordering information). The internal logic of the smart battery prevents both overcharging and undercharging (a fault condition in which the battery level goes well below the minimum acceptable charge and the battery becomes unusable).

### NOTE



The VX 675 terminal will operate on battery power or on power pack power. The smart battery charger in the terminal will be active whenever the power pack is connected.

## Smart Battery Features

The following are features of the smart battery:

- Two Li-ion cells
- A fuel gauge module that:
  - Monitors state of charge (voltage and percentage of capacity).
  - Communicates with the terminal (charge parameters and status).
  - Determines full charge capacity (on charge cycle and uninterrupted discharge cycle).
  - Automatically shuts down when the charge is critically low.
- A safety circuit that:
  - Prevents cell damage from overcharge, over-discharge, or overheating.
  - Activates when the battery is left in an unused terminal for extended periods.

### NOTE



- VX 675 battery pack is not customer changeable and therefore should not be disconnected and removed.
- Li-ion batteries are not affected by shallow charging. Furthermore, when the terminal has no external power source or smart battery, the coin cell battery provides power to the security circuit.
- Disconnecting and removing the battery, as well as unplugging the terminal power pack, reduce the life of the coin cell battery, which does not recharge and must be replaced if drained.
- Conserve battery power by turning the VX 675 terminal off when not in use. Keep the Li-ion battery inserted in the terminal and power up the terminal periodically to check the battery charge. Do not let the battery charge fall below 10% for extended periods of time as this may permanently diminish the battery capacity. Recharge the battery by attaching the power cable to the terminal and plugging the power pack into a wall outlet.

## Battery Behavior (No Power Cable)

The terminal shifts to cabled power mode and starts up automatically when the VX 675 is connected to a non-battery power source, regardless of the battery charge state.

### Manual Startup

Hold the green key down for about 4 seconds until the terminal displays the startup screen.

**NOTE**



The 4-second power-up delay prevents terminal startup if the green key is accidentally held down. The time required to hold the green key down to power up the terminal is configurable (for more information, see the *VX 675 Reference Guide – VPN DOC265-004-EN-A*).

The terminal lights up and the green LED indicator activates once the power is on.

**NOTE**



The VeriFone copyright screen starts and displays a unique copyright screen once the terminal loads an application. However, **DOWNLOAD NEEDED** appears on screen after the initial VeriFone copyright screen if there is no available application in the terminal.

### Manual Shutdown

Hold the red key down for about 4 seconds until the terminal displays the shutdown verification screen. Keep holding the red key until the VX 675 terminal shuts down.

**NOTE**



- The 4-second shutdown delay that prevents terminal shutdown if the red key is accidentally held down. The time required to hold the red key down to shut down the terminal is configurable (for more information, see the *VX 675 Reference Guide – VPN DOC265-004-EN-A*).
- The screen is blank and the green LED indicator is off when the terminal has no power.

## Connecting the Terminal Power Pack

After installing the smart battery, connect the VX 675 terminal to the provided power source for initial charging.

**CAUTION**



Using an incorrectly rated power supply may damage the terminal or cause it not to work as specified. Before troubleshooting, ensure that the power supply being used to power the terminal matches the requirements specified on the bottom of the terminal. (See [Specifications](#) for detailed power supply specifications.) Obtain the appropriately rated power supply before continuing with troubleshooting.

**WARNING**



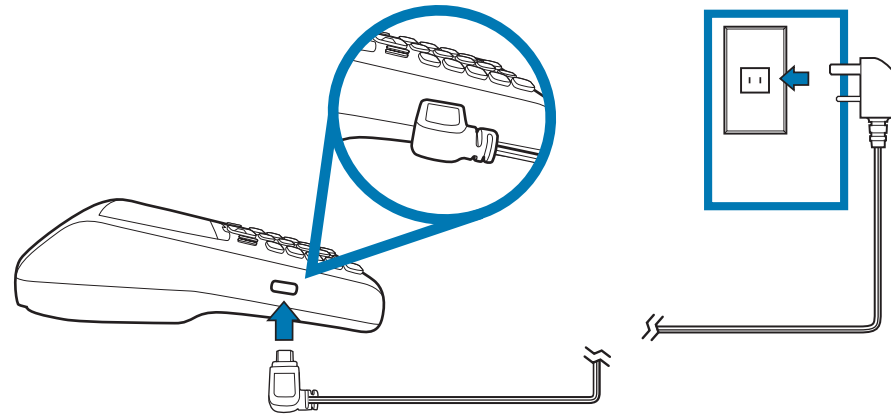
Do not plug the power pack into an outdoor outlet or operate the terminal outdoors.

During a transaction, disconnecting the power by removing the battery or unplugging the terminal from a wall power while at very low battery charge may cause transaction data files not yet stored in the terminal memory to be lost.

The VX 675 unit comes with a universal input power pack capable of operating from voltages of 100 V to 240 V AC.

**To Connect the Terminal Power Supply**

- 1 Insert the micro-USB plug into the micro-USB port of the VX 675, as shown in the figure below.



**Figure 11 VX 675 Power Supply Connection**

- 2 Insert the AC power cable into the power pack.
- 3 Plug the AC power cable into a wall outlet or powered surge protector.



To protect against possible damage caused by lightning strikes and electrical surges, consider installing a power surge protector.

The light indicators on the VX 675 appear when the terminal receives power.

Once it loads the application, the terminal starts the initial VeriFone copyright screen and displays a unique copyright screen. If there is no available application in the terminal, **DOWNLOAD NEEDED** appears on screen after the initial VeriFone copyright screen.

**Charging the Smart Battery**

After unpacking your VX 675 terminal, install the battery and connect the power pack to the unit for 6 hours or until fully charged.



The terminal charges the VX 675 smart battery when the terminal is in the base station. For more information, see [Mounting the Terminal Onto the Base Station](#).

The smart battery has a safety circuit to protect the Li-ion cells from overcharging and over-discharging. If the battery is over-discharged, the safety circuit shuts down the battery. The battery must then be recharged to restore operation.

**NOTE**



The VX 675 terminal automatically shuts off when the smart battery reaches the *critically low* charge state. If this occurs, the smart battery must be recharged for a minimum of 1/2 hour before it can power the terminal. *It may take several recharge attempts to reset the safety circuit* when charging a smart battery that has been discharged below this critical state.

**Battery Life**

Charging and discharging the VX 675 smart battery hundreds of times will wear out the battery. Significantly reduced operating times indicate the need for battery replacement (see [Accessories and Documentation](#) for ordering information).

**WARNING**



Do not dispose of batteries in a fire. Li-ion batteries must be recycled or disposed of properly. Do not dispose of Li-ion batteries in municipal waste sites.



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## Using the Base Station

The primary purpose of the base station is to charge the terminal battery and provide a docking station for the terminal after being used. The Base Station can be positioned on a countertop or mounted to the wall.

### Standard Base Station

The standard Base Station can charge the VX 675 terminal. However, it does not have any external ports and has a single LED to indicate power status.

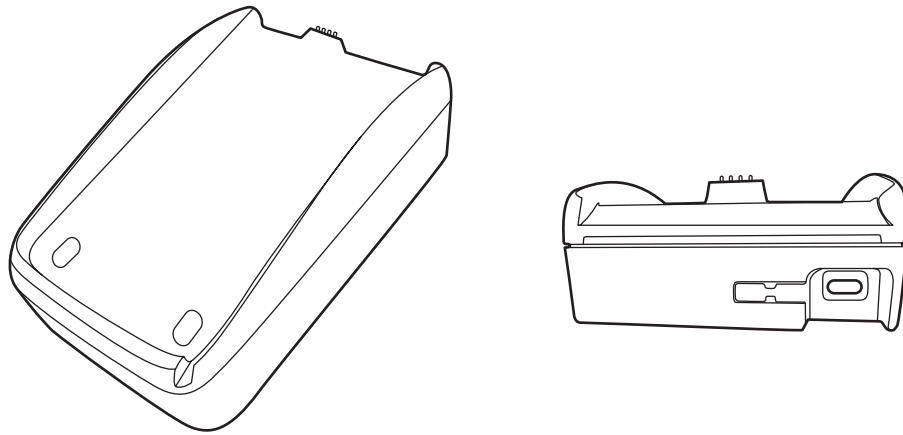


Figure 12 The VX 675 Standard Base Station

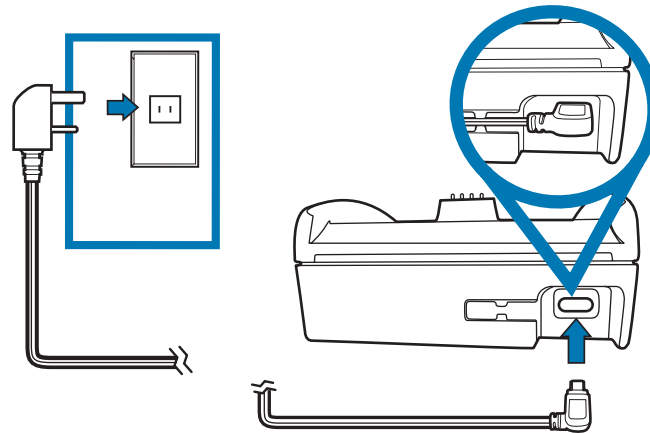
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## Powering Up the Base Station

Use the procedure in this section to connect the VX 675 Base Stations to a power source.

### To power up the base station

- 1 Insert the micro-USB plug into the micro-USB port of the base station, as shown in the figure below.



**Figure 13** Connecting the Base Station to a Power Source

- 2 Insert the AC power cable into the power pack.
- 3 Plug the AC power cable into a wall outlet or power surge protector.
- 4 Confirm that the Base Station is powered up as indicated by the solid green LED.

## Mounting the Terminal Onto the Base Station

The VX 675 terminal can be placed on the Base Station when not in use for continuous charging of its battery.

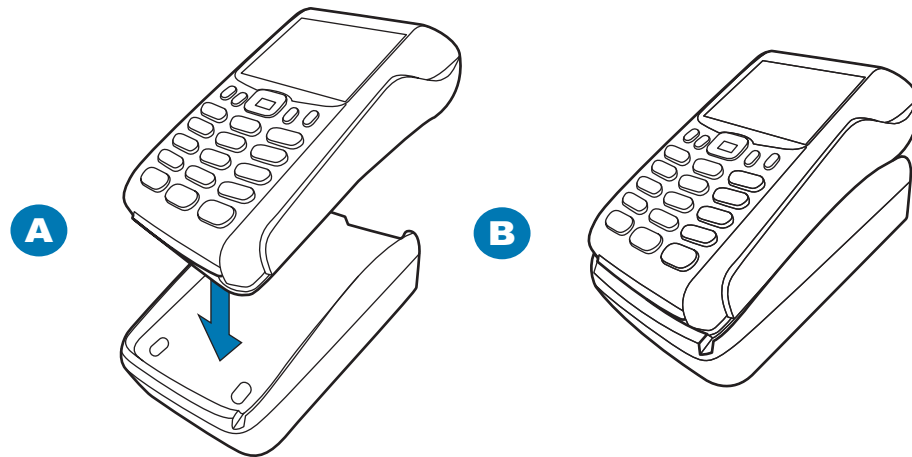


Figure 14 Placing the VX 675 terminal onto the Base Station

**NOTE**



To protect against possible damage caused by lightning strikes and electrical surges, consider installing a power surge protector.

**WARNING**



Do not plug the power pack into an outdoor outlet or operate the terminal outdoors.

Disconnecting the power during a transaction may cause transaction data files not yet stored in terminal memory to be lost.

## Conducting Wireless Transactions

To conduct a wireless transaction:

- Ensure the terminal is in an optimal position for transmitting.
- Follow the on-screen instructions provided with your application.

## Conducting Smart Card Transactions

The smart card transaction procedure may vary from one application to another. Verify the procedure with your application provider before performing a smart card transaction.

### To Conduct a Smart Card Transaction

- 1 Position a smart card with the contacts facing upward (see illustration below).
- 2 Insert the smart card into the smart card reader slot in a smooth, continuous motion until it seats firmly.
- 3 Remove the card only when the application indicates the transaction is complete.

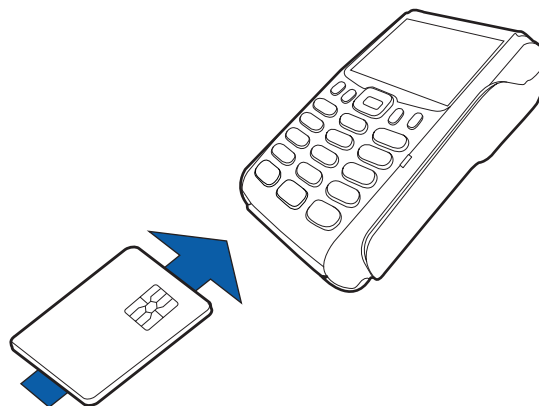


Figure 15 Inserting a Smart Card



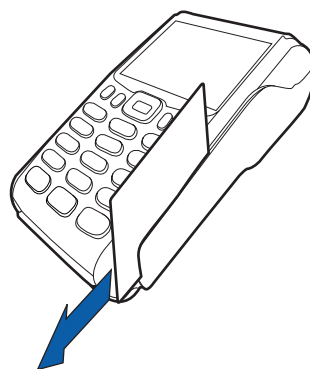
Do not remove the smart card in the card reader until the transaction is complete. Premature card removal will invalidate the transaction.

## Using the Magnetic Card Reader

The VX 675 terminal supports credit/debit card transactions.

### **To Conduct a Credit or Debit Card Transaction**

- 1 Position a magnetic card with the stripe in the card reader and facing inward, toward the keypad.
- 2 To ensure a proper read of the magnetic swipe card, the user should insert the magnetic card from the top of the unit, as shown in the following illustration.
- 3 Swipe the card through the magnetic card reader.



**Figure 16** Using the Magnetic Card Reader

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## Specifications

This chapter discusses power requirements, dimensions, and other specifications of the VX 675 terminal.

**Power** 5V DC 1.0 A

**DC Power Pack** UL, ITE listed, LPS power supply:

- a Input rated: 100-240V AC, 50/60 Hz
- b Output rated: 5V DC 1.0 A

Barrel connector polarity:



**Operating Environment**

- Temperature: 0°C to 50°C (32°F to 122°F)
- Relative humidity: 5% to 90%; non-condensing

**External Dimensions**

- Length: 148 mm (5.8 in)
- Width: 78 mm (3.1 in)
- Depth: 42 mm (1.6 in)

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## Maintenance

The VX 675 terminal and Base Stations have no user-serviceable parts.

### Cleaning the Terminal

To clean the terminal and Base Station, 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.

**CAUTION**



Never use thinner, trichloroethylene, or ketone-based solvents – they may cause deterioration of plastic or rubber parts.

Do not spray cleaners or other solutions directly onto the keypad or terminal display.

### Terminal Contacts

Gently swab the contacts with alcohol or contact cleaner to remove the dirt. It is important that the exposed contacts of the VX 675 battery stay clean and unbent.

**CAUTION**



Avoid touching the contacts of the VX 675 battery and the recessed area on the terminal. Finger oils tarnish contacts, causing bad connections. When operating on battery power and experiencing a high occurrence of bad or incomplete data transfers, clean the contacts.

### Smart Card Reader

Do not attempt to clean the smart card reader. Doing so may void any warranty. For smart card reader service, contact your VeriFone distributor or service provider.

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## VeriFone Service and Support

For VX 675 terminal problems, contact your local VeriFone representative or service provider.

For VX 675 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 Terminal or Smart Battery for Service

Before returning a VX 675 terminal, smart battery, or Base Station to VeriFone, you must obtain an MRA number. The following procedure describes how to return one or more VX 675 terminals, smart batteries, or Base Stations 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 terminals or batteries.

---

#### To Return a Terminal for Service

- 1 Get the following information from the printed labels on the bottom of *each* VX 675 terminal, smart battery, or sled module to be returned:
  - Product ID, including the model and part number. For example, “VX 675” and “M268-XXX-XX-XXX-2.”
  - Serial number (S/N nnn-xxx-xxx)
- 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 [http://www.verifone.com/aboutus/contact/contact\\_form.cfm](http://www.verifone.com/aboutus/contact/contact_form.cfm).
  - 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 VX 675 terminal 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).
  - VeriFone serial number assigned to the VX 675 terminal, smart battery, or base station you are returning for service or repair (terminal serial numbers are located on 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 VeriFone label on the bottom of the VX 675 terminal).

## Accessories and Documentation

VeriFone produces the following accessories and documentation for the VX 675 terminal. When ordering, please refer to the part number in the left column.

- VeriFone online store at [www.store.verifone.com](http://www.store.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

### Power Pack

Contact your local VeriFone distributor to determine which power pack or power cable fits your needs.

VPN PWR268-001-01-B DC Power Pack (Universal)

### Printer Paper

VPN PPR 000-000-00-A 25 mm (0.98 in) diameter, 57 mm (2.24 in) wide

VPN PPR 000-000-00-A 40 mm (1.57 in) diameter, 57 mm (2.24 in) wide

### VeriFone Cleaning Kit

VPN 02746-01 Cleaning Kit

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## Documentation

VX 675 Certifications and Regulations Sheet	VPN DOC265-001-EN-A
VX 675 Quick Installation Guide	VPN DOC265-002-EN-A
VX 675 Reference Guide	VPN DOC265-004-EN-A
Verix eVo Volume I: Operating System Programming Manual	VPN DOC00301
Verix eVo Volume II: Operating System and Communications Programmers Manual	VPN DOC00302
Verix eVo Volume III: Operating System Programming Tools Reference Manual	VPN DOC00303

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## Troubleshooting Guidelines

The troubleshooting guidelines provided in the following section are included to help you install and configure your VX 675 terminal successfully. Typical examples of malfunction you may encounter while operating your VX 675 terminal and steps you can take to resolve them are listed in this chapter.

If the problem persists even after performing the outlined guidelines or if the problem is not described below, contact your local VeriFone representative for assistance.



**NOTE** The VX 675 terminal comes equipped with tamper-evident labels. The VX 675 unit contains no user serviceable parts. Do not, under any circumstance, attempt to disassemble the terminal. 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.



**CAUTION** Use only a VeriFone-supplied power pack. Using an incorrectly rated power supply may damage the terminal or cause it not to work as specified. Before troubleshooting, ensure that the power supply being used to power the terminal matches the requirements specified on the bottom of the terminal. (See [Specifications](#), for detailed power supply specifications.) Obtain the appropriately rated power supply before continuing with troubleshooting.

### Terminal Does Not Start

- Ensure that the smart battery charge state is not below the critically low level.
- Recharge or replace the smart battery.
- Ensure that you pressed the green ENTER/ON key for approximately 4 seconds, until the unit lights up.

### Terminal Display Does Not Show Correct/Readable Info

- Recharge or replace the battery.
- Connect the VX 675 terminal into a known-good power supply (if you have one) to see if this clears the problem.
- If the problem persists, contact your local VeriFone representative for assistance.

## Smart Battery Does Not Charge

The VX 675 smart battery must initially receive a full charge to ensure proper operation.

### NOTE



- Allow the VX 675 terminal to remain connected to the power pack for 6 hours to ensure the battery receives a full charge.
- Li-ion batteries are not affected by shallow charging. Furthermore, when the terminal has no external power source or battery the coin cell battery provides power to the security circuit.
- Uninstalling the battery and unplugging the terminal power pack reduce the life of the coin cell battery, which does not recharge and must be replaced if drained.
- Conserve battery power by turning the VX 675 terminal off when not in use. If the terminal will not be used for an extended period of time, keep the Li-ion battery inserted in the terminal, and power up the terminal periodically to check the battery charge. Do not let the battery charge fall below 10% for extended periods of time as this may permanently diminish the battery capacity. Recharge the battery by attaching the power cable to the terminal and plugging the power pack into a wall outlet.
- The VX 675 terminal automatically shuts off when the smart battery reaches the *critically low* charge state. If this occurs, the smart battery must recharge a minimum of 1/2 hour before it can power the terminal. *It may take several recharge attempts to reset the safety circuit* when charging a smart battery that has been discharged below this critical state.

## Spare Battery in Base Station Does Not Charge

When the spare battery is installed in the base for charging, the Base LED will flash amber if the battery is charging, or stay solid green if the battery is fully charged. If the battery is not charged and the LED does not flash amber, check the contacts on the battery and in the terminal base to make sure they are clean. Also, try charging a known good battery to see if the problem is with the base or with the battery. If the problem persists, contact your local VeriFone representative.

## Blank Display

When the VX 675 terminal display screen does not show correct or clearly readable information:

- The battery pack may not be connected properly. Remove and reinstall the battery pack.
- Check terminal power connection.
- Remove and reapply power to the terminal.
- If the problem persists, contact your local VeriFone service provider.



## Terminal Does Not Dial Out

If the terminal does not dial out:

- Check the telephone line connections.
- Check that the telephone line is working by plugging it into a working telephone and listening for a dial tone.
- Replace the telephone cable that connects the terminal with a cable you know is working correctly.
- If the problem persists, contact your local VeriFone service provider.

## Printer Does Not Print

If the printer does not work properly:

- Make sure the battery is properly installed in the terminal. The printer will not print if there is no battery in the terminal.
- Check battery status or terminal power connection. The printer will not print if there is an insufficient charge remaining in the battery to complete the print operation.
- Check if the printer is out of paper (slow red blinking light) and that the roll is properly installed. Open the paper roll cover and install a new roll of printer paper or ensure that the roll is feeding correctly. A solid red indicator light indicates a printer error.
- Verify that the printer door is properly latched.
- If the problem persists, contact your VeriFone distributor or service provider.

## Printer Paper Jam

If paper jams inside the printer:

- Press the button at the bottom of the terminal to unlatch the paper roll cover, then open the cover.
- Remove the damaged paper from the paper roll and clear the feed mechanism.
- Install a roll of printer paper, as described in [Installing the Paper Roll](#).
- If the problem persists, it may be due to poor paper quality. Install a new roll of higher-quality paper.

### WARNING



Poor-quality paper may jam the printer. To order high-quality VeriFone paper, refer to [Accessories and Documentation](#).

## Keypad Does Not Respond

If the keypad does not respond properly:

- Check the terminal display. If it displays the wrong character or nothing at all when you press a key, follow the steps outlined in [Transactions Fail to Process](#).
- If pressing a function key does not perform the expected action, refer to the user documentation for that application to ensure you are entering data correctly.
- If the problem persists, contact your local VeriFone representative.

## Transactions Fail to Process

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

### Check the 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. With the VX 675 card reader, the black magnetic stripe on the card should face down and inward, toward the keypad and must be inserted from the top of the terminal (see [Figure 16](#)).
- 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.
- Contact your VeriFone distributor or service provider.
- If the manual transaction does not work, proceed to [Check the Telephone Line](#).

### Check the 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 and that the card is not removed prematurely.
- Contact your VeriFone distributor or service provider.
- If the manual transaction does not process, proceed to [Check the Telephone Line](#).

### Check the Telephone Line

- Disconnect the telephone line from the VX 675 terminal and connect it to a working telephone to check for a dial tone. If there is no dial tone, replace the telephone cable.
- If the problem appears to be with the telephone line, check with the party you are trying to call to see if their system is operational. If they are not experiencing difficulties with their line, contact the telephone company and have your line checked.
- If the telephone line works, contact your local VeriFone representative for assistance.

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## **FCC Regulations:**

● This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

● This device has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

## ▶ RF Exposure Information (SAR)

This device meets the government's requirements for exposure to radio waves.

This device is designed and manufactured not to exceed the emission limits for exposure to radio frequency (RF) energy set by the Federal Communications Commission of the U.S. Government.

The exposure standard for wireless device employs a unit of measurement known as the Specific Absorption Rate, or SAR. The SAR limit set by the FCC is 1.6W/kg. \*Tests for SAR are conducted using standard operating positions accepted by the FCC with the device transmitting at its highest certified power level in all tested frequency bands. Although the SAR is determined at the highest certified power level, the actual SAR level of the device while operating can be well below the maximum value. This is because the device is designed to operate at multiple power levels so as to use only the power required to reach the network. In general, the closer you are to a wireless base station antenna, the lower the power output.

The highest SAR value for the device as reported to the FCC when tested for use at the body is **0.694** W/kg and when worn on the body, as described in this user guide, is **0.694** W/kg (Body-worn measurements differ among device models, depending upon available accessories and FCC requirements.)

While there may be differences between the SAR levels of various devices and at various positions, they all meet the government requirement.

The FCC has granted an Equipment Authorization for this model device with all reported SAR levels evaluated as in compliance with the FCC RF exposure guidelines. SAR information on this model device is on file with the FCC and can be found under the Display Grant section of [www.fcc.gov/oet/ea/fccid](http://www.fcc.gov/oet/ea/fccid) after searching on FCC ID: **B32VX675GPRSC TLS**.

For body worn operation, this device has been tested and meets the FCC RF exposure guidelines for use with an accessory that contains no metal and the positions the handset a minimum of **1.5 cm** from the body. Use of other accessories may not ensure compliance with FCC RF exposure guidelines. If you do not use a body-worn accessory and are not holding the device at the ear, position the handset a minimum of **1.5 cm** from your body when the phone is switched on.



# CE Declaration of Conformity

For the following equipment:

**Point of Sales Terminal**

(Product Name)

**VX675**

(Model Designation)

is herewith confirmed to comply with the requirements set out in the Council (European parliament) Directive on the Approximation of the Laws of the Member States relating to Electromagnetic Compatibility of Radio and Telecom device (1999/5/EC). For the evaluation regarding this Directive, the following standards were applied:

EN302 291-1V1.1.1/-2V1.1.1

EN 301 511 V 9.0.2

EN 301 489-1 V1.8.1/-7 V1.3.1

EN 55022:2010 Class B; EN55024:2010

EN 62311:2008

EN 60950 -1:2006+A11:2009+A1:2010+A12:2011

The following importer/manufacturer is responsible for this declaration:

(Company Name, Importer)

(Company Address, Importer)

Person responsible for this declaration:

(Name, Surname, Importer)

(Position/Title)

(Legal Signature)

(Place)

(Date)

**VeriFone Inc.**

(Company Name, Manufacturer)

**1400 West Standford Ranch Road Suit  
200 Rocklin CA 95765 U.S.A.**

(Company Address, Manufacturer)

Person responsible for this declaration:

Allen Kao

(Name, Surname, Manufacturer)

**Compliance Engineer**

(Position/Title)

(Legal Signature)



Taiwan

(Place)





Feb.23, 2012

(Date)

# CE 1177

 Český [Czech]	[ <i>Jméno výrobce</i> ] tímto prohlašuje, že tento [ <i>typ zařízení</i> ] je ve shodě se základními požadavky a dalšími příslušnými ustanoveními směrnice 1999/5/ES.
 Dansk [Danish]	Undertegnede [ <i>fabrikantens navn</i> ] erklærer herved, at følgende udstyr [ <i>udstyrets typebetegnelse</i> ] overholder de væsentlige krav og øvrige relevante krav i direktiv 1999/5/EF.
 Deutsch [German]	Hiermit erklärt [ <i>Name des Herstellers</i> ], dass sich das Gerät [ <i>Gerätetyp</i> ] in Übereinstimmung mit den grundlegenden Anforderungen und den übrigen einschlägigen Bestimmungen der Richtlinie 1999/5/EG befindet.
 Eesti [Estonian]	Käesolevaga kinnitab [ <i>tootja nimi = name of manufacturer</i> ] seadme [ <i>seadme tüüp = type of equipment</i> ] vastavust direktiivi 1999/5/EÜ põhinõuetele ja nimetatud direktiivist tulenevatele teistele asjakohastele sätetele.
 English	Hereby, [ <i>name of manufacturer</i> ], declares that this [ <i>type of equipment</i> ] is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.
 Español [Spanish]	Por medio de la presente [ <i>nombre del fabricante</i> ] declara que el [ <i>clase de equipo</i> ] cumple con los requisitos esenciales y cualesquiera otras disposiciones aplicables o exigibles de la Directiva 1999/5/CE.
 Ελληνική [Greek]	ΜΕ ΤΗΝ ΠΑΡΟΥΣΑ [ <i>name of manufacturer</i> ] ΔΗΛΩΝΕΙ ΟΤΙ [ <i>type of equipment</i> ] ΣΥΜΜΟΡΦΩΝΕΤΑΙ ΠΡΟΣ ΤΙΣ ΟΥΣΙΩΔΕΙΣ ΑΠΑΙΤΗΣΕΙΣ ΚΑΙ ΤΙΣ ΛΟΙΠΕΣ ΣΧΕΤΙΚΕΣ ΔΙΑΤΑΞΕΙΣ ΤΗΣ ΟΔΗΓΙΑΣ 1999/5/ΕΚ.
 Français [French]	Par la présente [ <i>nom du fabricant</i> ] déclare que l'appareil [ <i>type d'appareil</i> ] est conforme aux exigences essentielles et aux autres dispositions pertinentes de la directive 1999/5/CE.
 Italiano [Italian]	Con la presente [ <i>nome del costruttore</i> ] dichiara che questo [ <i>tipo di apparecchio</i> ] è conforme ai requisiti essenziali ed alle altre disposizioni pertinenti stabilite dalla direttiva 1999/5/CE.
Latviski [Latvian]	Ar šo [ <i>name of manufacturer / izgatavotāja nosaukums</i> ] deklarē, ka [ <i>type of equipment / iekārtas tips</i> ] atbilst Direktīvas 1999/5/EK būtiskajām prasībām un citiem ar to saistītajiem noteikumiem.
Lietuvių [Lithuanian]	Šiuo [ <i>manufacturer name</i> ] deklaruoja, kad šis [ <i>equipment type</i> ] atitinka esminius reikalavimus ir kitas 1999/5/EB Direktyvos nuostatas.
 Nederlands [Dutch]	Hierbij verklaart [ <i>naam van de fabrikant</i> ] dat het toestel [ <i>type van toestel</i> ] in overeenstemming is met de essentiële eisen en de andere relevante bepalingen van richtlijn 1999/5/EG.
 Malti [Maltese]	Hawnhekk, [ <i>isem tal-manifattur</i> ], jiddikjara li dan [ <i>il-mudel tal-prodott</i> ] jikkonforma mal-ħtiġijiet essenzjali u ma provvedimenti oħrajn rilevanti li hemm fid-Dirrettiva 1999/5/EC.
 Magyar [Hungarian]	Alulírott, [ <i>gyártó neve</i> ] nyilatkozom, hogy a [ <i>... típus</i> ] megfelel a vonatkozó alapvető követelményeknek és az 1999/5/EC irányelv egyéb előírásainak.
 Polski [Polish]	Niniejszym [ <i>nazwa producenta</i> ] oświadczam, że [ <i>nazwa wyrobu</i> ] jest zgodny z zasadniczymi wymogami oraz pozostałymi stosownymi postanowieniami Dyrektywy 1999/5/EC.



<p> Português [Portuguese ]</p>	<p>[Nome do fabricante] declara que este [tipo de equipamento] está conforme com os requisitos essenciais e outras disposições da Directiva 1999/5/CE.</p>
<p> Slovensko [Slovenian]</p>	<p>[Ime proizvajalca] izjavlja, da je ta [tip opreme] v skladu z bistvenimi zahtevami in ostalimi relevantnimi določili direktive 1999/5/ES.</p>
<p>Slovensky [Slovak]</p>	<p>[Meno výrobcu] týmto vyhlasuje, že [typ zariadenia] spĺňa základné požiadavky a všetky príslušné ustanovenia Smernice 1999/5/ES.</p>
<p> Suomi [Finnish]</p>	<p>[Valmistaja = manufacturer] vakuuttaa täten että [type of equipment = laitteen tyyppimerkintä] tyyppinen laite on direktiivin 1999/5/EY oleellisten vaatimusten ja sitä koskevien direktiivin muiden ehtojen mukainen.</p>
<p> Svenska [Swedish]</p>	<p>Härmed intygar [företag] att denna [utrustningstyp] står i överensstämmelse med de väsentliga egenskapskrav och övriga relevanta bestämmelser som framgår av direktiv 1999/5/EG.</p>



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# VX 675

## *Installation Guide*

