

e285

Installation Guide

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Product Warranty:

For product warranty information, go to <http://www.verifone.com/terms>.

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This guide is your primary source of information for setting up the e285.

Audience

This guide is useful for anyone installing an e285 device. Basic descriptions of the device features are also provided.

Organization

This guide is organized as follows:

[Chapter 1, Device Overview](#). Provides an overview of the e285.

[Chapter 2, Device Setup](#). Explains how to set up the e285 device. It tells you how to select a location, establish power connection, and install the SIM/SAM card.

[Chapter 3, Specifications](#). Discusses power requirements and dimensions of the e285.

[Chapter 4, Maintenance](#). Explains how to maintain your e285.

[Chapter 5, Verifone Service and Support](#). Provides information on how to contact 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 device installation.

Related Documentation

To learn more about the e285, refer to the following set of documents:




<i>e285 Certifications and Regulations Sheet</i>	VPN DOC087-X01-EN
<i>e285 Quick Installation Guide</i>	VPN DOC087-X02-EN
<i>e285 Reference Guide</i>	VPN DOC087-X04-EN
<i>e285 Security Policy</i>	VPN DOC087-X05-EN

Conventions and Acronyms

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

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

Table 1 Document Conventions

Convention	Meaning	Example
Blue	Text in blue indicates terms that are cross referenced.	See Conventions and Acronyms .
<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>
 NOTE	The pencil icon is used to highlight important information.	RS-232-type devices do not work with the PIN pad port.
 CAUTION	The caution symbol indicates possible hardware or software failure, or loss of data.	The device is not waterproof or dustproof, and is intended for indoor use only.
 WARNING	The lightning symbol is used as a warning when bodily injury might occur.	Due to risk of shock do not use the device near water.

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
ARM	Acorn RISC Machine
EMV	Europay MasterCard and VISA
LCD	Liquid Crystal Display
LED	Light Emitting Diode
NFC	Near Field Communication
MRA	Merchandise Return Authorization
MSAM	Micromodule-Size Security Access Module
PCI	Payment Card Industry
PED	PIN Entry Device
PIN	Personal Identification Number
SIM	Subscriber Identity Module
USB	Universal Serial Bus
VPN	Verifone Part Number

Device Overview

This chapter provides a brief description of the e285 device.

The e285 is as a standalone, wireless handheld payment device, making it easy to process a transaction anywhere. It provides mobile payment capabilities via GPRS connectivity. The e285 is also a powerful 3G/Bluetooth/Wi-Fi solution – featuring advanced communications for fewer dropped transactions so merchants can accept payments securely, extending their point of sale opportunities.

The e285's capacitive-touch with physical keypad design makes it easily pocketable while still accepting all payment methods - MSR, PSCR, Contactless and wallets. The easy to read color touch screen is capable of signature capture and is fully supported by Verifone's developer toolkits that provide everything needed to transform ideas into applications.



Figure 1 The e285 Unit

Key Features

- **133 MHz A9 processor** delivers **power** and **usability** in a **convenient** "hand-over" design.
- **Multi-application** operating environment.
- **Advanced memory architecture** to meet tomorrow's needs.
- **32-bit processing** and **multi-tasking** capabilities.
- Offers **unsurpassed performance** on **EMV** smart card transactions.
- **Security** architecture exceeds specifications for PCI-PED and sophisticated **file authentication**.
- **Multiple connectivity** and **contactless** options.
- Drop-resistant design minimizes breakage.

Features and Benefits

The e285 provides the right combination of features and functions including a triple-track magnetic-stripe card reader, smart card reader, integrated PIN pad, and contactless/NFC support.

Triple Radio Performance

- The dynamic combination of Bluetooth chip, Wi-Fi and powerful 3G radio delivers fast, wireless payment convenience, fewer dropped transactions and flexible point-of-sale options.

Modern Application Environment

- Reliable operating system and powerful tools to create richer customer experiences.
- Common Engage software architecture enables faster and more cost effective application development.

Accepts All Forms of Payment On-the-Go

- Accommodates all payment types - Magstrip, EMV, Contactless/NFC, and mobile wallets along with a 2.8-inch color touch screen capable of signature capture.

Exceptional Ease of Use

- The lightweight, compact, stylish, and ergonomic balance allows convenient device hand-off to the consumer for PIN entry or other input.
- Horizontal magnetic stripe card reader with an enlarged card entrance delivers optimal card swiping and reading without the need to visually guide the card.
- The e285 size is easily able to be dropped in most pockets.

Performance and Durability

- Powerful 133 MHz A9 processing completes transactions quickly.
- High-capacity lithium-ion battery pack (3.8 V / 1800mAh with Maxell ICP425262AHR battery cell) that easily supports a full 12-hour business day on a single charge.
- The USB-C port allows for convenient product charging as well as connection to Android, iOS, and Windows devices.
- Rounded corners to minimize breakage and drop-resistant to 3 feet on concrete surfaces.
- 256MB Flash, 128MB DDR of memory

Security

- PCI PED 5.x approved for debit and other PIN-based transactions
- EMV Level 1 type approval.
- Tamper-resistant construction, SSL protocols



Device Setup

This chapter describes the device setup procedure. You will learn about:

- Usage Guidelines
- Unpacking the Shipping Carton
- Examining e285 Device Features
- Examining Connection Port
- Removing the Battery Cover
- Installing the SIM card
- Using the Battery
- Battery Behavior (No Power Pack)
- Connecting the Terminal Power Pack
- Charging the Battery
- Connecting to a Computer
- Conducting Wireless Transactions
- Using the Smart Card Reader
- Using the Magnetic Card Reader
- Using the CTLS Reader

Usage Guidelines

Use the following guidelines when using your e285.

Environmental Factors

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



The device 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.

Personal Security Considerations

The e285 is a handover device. Always exercise extreme caution when conducting transactions especially during PIN entry.

- Hand the e285 directly to the cardholder for PIN entry.
- Encourage the cardholder to hold the e285 close to avoid others from seeing the information entered.

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 device 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 e285 is a secure product and any tampering may cause the device to cease to function properly.

To unpack the shipping carton

- 1 Remove and inspect the following items:
 - e285 unit
 - USB-C to USB cable
- 2 Remove all plastic wrapping from the unit and other components.

- 3 Remove the clear protective film from the unit.



Do not use a unit that has been damaged or tampered with. The e285 comes equipped with tamper-evident labels. If a label or component appears damaged or if the device appears to have been opened, 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 device.



Charge the e285 device for eight hours before initial use.

Examining e285 Device Features

Before you continue the installation process, familiarize yourself with the features of the e285. (See [Figure 2](#))

Front Panel The front panel includes the following features:

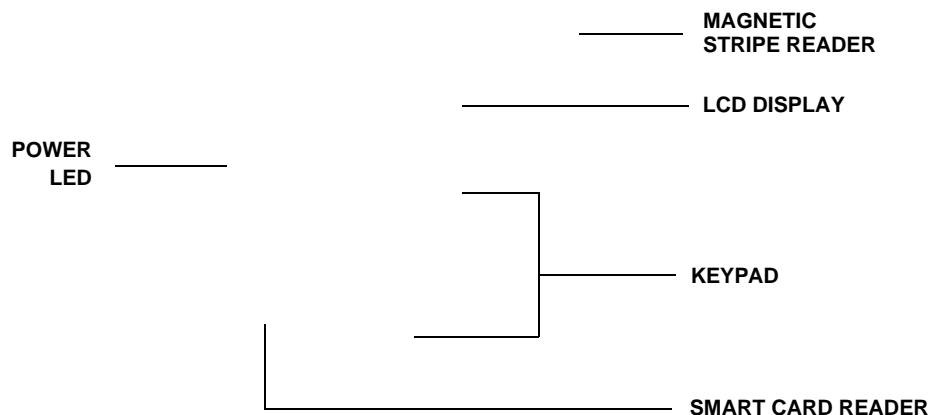


Figure 2 e285 Device Features (Front Panel)

- A colored capacitive-touch **LCD Display**
- Two types of keys:
 - a telephone style keypad** (keypads may vary in style).
 - Three color-coded function keys below the keypad (from left to right: **CANCEL, CLEAR, ENTER**).



Do NOT paste anything on the keypad surface to avoid malfunction.

- A **smart card reader** built into the bottom of the device to process smart card transactions. For directions on how to use a smart card, see [Using the Smart Card Reader](#).
- A **magnetic card reader**, built into the top part of the device for performing debit or credit card transactions. Swipe the card using the proper direction, with the magnetic stripe facing up, towards the keypad. For directions on how to use a magnetic card, see [Using the Magnetic Card Reader](#).
- A **Power LED** located on the left side that acts as charging indicators.
- A **CTLS functionality** for contactless payments. For directions on how to conduct contactless transactions, see [Using the CTLS Reader](#).
- A **SIM** compartment, built into the bottom of the device inside the back compartment.

Examining Connection Port

The e285 device has one primary USB-C port used for power and download.



Figure 3 The e285 Primary USB-C Port

Removing the Battery Cover

Remove the battery cover to access the battery as well as the SIM slot.

To remove the battery cover

- 1 Turn off the device.
- 2 Place the device upside down on a soft, clean surface to protect the screen from scratches.
- 3 Loosen the retaining screw. The retaining screw is captive, which means that it cannot be fully removed from the slot.



Figure 4 Loosening the Screw to Remove Battery Cover

- 4 Using your fingernail, turn any of the recessed slots located on both sides of the e285 device, to pry the back cover open.

NOTE



You can also use a coin, flat tip screwdriver, the edge of a card, or any similar tool.

Installing the SIM card

The e285 device supports the installation of a GSM SIM (Subscriber Identity Module). Use the following procedures to install a SIM card.



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

To install or replace the card

- 1 Follow the steps in [Installing the SIM card](#).
- 2 Insert the SIM card with the gold contacts facing down.



Figure 5 Inserting the SIM Card

- 3 Place the battery cover back and tighten the screw.



Figure 6 Returning the Battery Cover

Using the Battery

The e285 device uses a single cell Li-ion battery. The internal logic of the 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 e285 device will only operate when the battery is installed.

Battery Features

The following are features of the battery:

- Single Li-ion cell.
- A safety circuit that:
 - Prevents cell damage from overcharge, over-discharge, or overheating.

- Activates when the battery is left in an unused device for extended periods.

NOTE



- The e285 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 device has no external power source or battery, the coin cell battery provides power to the security circuit.
- Disconnecting and removing the battery, as well as unplugging the device 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 e285 device off when not in use. Keep the Li-ion battery inserted in the device and power up the device 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 USB-C end of the power pack to the device and plugging the other end of the power pack into a wall outlet.

Battery Behavior (No Power Pack)

The device shifts to power pack mode and starts up automatically when the e285 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 device displays the startup screen.

NOTE



The 4-second power-up delay prevents device startup if the green key is accidentally held down. The time required to hold the green key down to power up the device is configurable.

The device lights up once the power is on.

NOTE



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

Manual Shutdown

Hold the red key down for about 4 seconds until the device displays the startup screen.

NOTE



The screen is blank when the device has no power.

Connecting the Terminal Power Pack

After installing the battery, connect the e285 device to the provided power pack for initial charging.

CAUTION



Using an incorrectly rated power supply may damage the device or cause it not to work as specified. Before troubleshooting, ensure that the power supply being used to power the device matches the requirements specified on the bottom of the device. (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 device outdoors. During a transaction, disconnecting the power by removing the battery or unplugging the device from a wall power while at very low battery charge may cause transaction data files not yet stored in the device memory to be lost.

Each e285 device comes with power supply (VPN PWR087-300-01-A) used to connect the device directly to a power outlet and to charge the battery. The e285 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 USB-C plug into the USB-C port of the e285, as shown in the figure below.



Figure 7 e285 Power Supply Connection

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



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

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

Charging the Battery

After unpacking your e285 device, connect the power pack to the unit for eight hours or until fully charged.

The 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.



The e285 device automatically shuts off when the battery reaches the *critically low* charge state. If this occurs, the battery must be recharged for a minimum of 1/2 hour before it can power the device. *It may take several recharge attempts to reset the safety circuit* when charging a battery that has been discharged below this critical state.

The following table shows the behavior of the LEDs during various system power states.

Deep Sleep	Battery Low	Battery Charging	Charging Timer Fault / Battery Fault	Normal Operation	System LED Behavior
Y					Turn off the LEDs
	Y				Red, 4 Hz rate, 50% duty cycle (Battery low condition: battery voltage < 3.65V)
		Y			Orange, 1 Hz rate, 50% duty cycle
			Y		Orange on continuously
				Y	Green on continuously

Battery Life Charging and discharging the e285 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).



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

Connecting to a Computer

Connect the e285 device to a PC or laptop to download applications.

- To Connect to a Computer**
- 1 Insert the USB-C plug into the USB-C port of the e285, as shown in the figure below.
 - 2 Connect the other end of the USB-C plug into the host computer's USB port.



Figure 8 Connecting to a Host Computer

Conducting Wireless Transactions

To conduct a wireless transaction:

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

Using the Smart Card Reader

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 the smart card with the contacts facing upward (see illustration below).
- 2 Insert the card into the reader slot in a smooth, continuous motion until it seats firmly.
- 3 Wait for the application to indicate a completed transaction before removing the card. Premature card removal invalidates the transaction.



Figure 9 Inserting a Smart Card

Using the Magnetic Card Reader

Use the magnetic stripe reader to perform credit and debit card transactions.

To Conduct a Debit or Credit card Transaction

- 1 Position the card with the magnetic stripe facing backwards.
- 2 To ensure a proper read of the magnetic swipe card, insert the magnetic card from the top of the device, as shown in the illustration below.



Figure 10 Using Magnetic Stripe Card

- 3 Swipe the card through the magnetic card reader.

Using the CTLS Reader

The e285 supports contactless credit or debit card transactions. To perform a contactless transaction, gently tap the card or hold the card against the surface of the contactless antenna, located above the keypad and LCD.



Figure 11 Using the CTLS Reader



Specifications

This chapter discusses power requirements, dimensions, and other specifications of the e285 device.

Power

Charging via USB-C to computer system or Verifone-certified power adapter:
5 V DC, 1 A

Temperature

- **Operating Temperature:** 0° to 50°C (32° to 122°F)
- **Operating Humidity:** 5% to 95%; RH non-condensing

External Dimensions

- **Length:** xxx mm
- **Width:** xxx mm
- **Height:** xxx mm

Maintenance

The e285 device has no user-maintainable parts.

Cleaning the Device

To clean the device, 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.



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 device 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 e285 battery stay clean and unbent.



Avoid touching the contacts of the e285 battery. 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.

Verifone Service and Support

For e285 problems, contact your local Verifone representative or service provider.

For e285 product service and repair information:

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

Returning a Device for Service

Before returning a e285, you must obtain an MRA number. The following procedure describes how to return one or more devices for repair or replacement (U.S. customers only).



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

To return a device for service

- 1 Get the following information from the printed labels at the back of *each* e285 to be returned:
 - Product ID, including the model and part number. For example, “e285” and “M087-XXX-XXX-XXX.”
 - 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.

- Address the Subject box with to “Verifone MRA Dept.”
- Reference the model and part number in the Note box.



One MRA number must be issued for each e285 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 e285 you are returning for service or repair (device serial numbers are located at the back 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 at the back of the e285).

Accessories and Documentation

Verifone produces the following accessories and documentation for the e285. When ordering, please take note of the part number.

- Verifone online store at 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

Accessories

Verifone Certified Power Adapter	PWR087-300-01-A
Verifone Cleaning Kit	02746-01

Documentation

<i>e285 Certifications and Regulations Sheet</i>	VPN DOC087-501-EN
<i>e285 Quick Installation Guide</i>	VPN DOC087-502-EN

Troubleshooting Guidelines

The troubleshooting guidelines provided in the following section are included to help you install and configure your e285 successfully. Typical examples of malfunction you may encounter while operating your e285 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 e285 comes equipped with tamper-evident labels. The e285 unit contains no user serviceable parts. Do not, under any circumstance, attempt to disassemble the device. 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 device or cause it not to work as specified. Before troubleshooting, ensure that the power supply being used to power the device matches the requirements specified at the bottom of the device. (See [Specifications](#), for detailed power supply specifications.) Obtain the appropriately rated power supply before continuing with troubleshooting.

Device Does Not Start

- Ensure that the battery charge state is not below the critically low level.
- Replace or recharge the battery.
- Check if the battery is properly inserted.
- Ensure that you pressed the green ENTER/ON key for approximately four seconds, until the unit lights up.

Device Display Does Not Show Correct/Readable Info

- Replace or recharge the battery.
- Connect the e285 into a known-good power supply (if available) to see if this clears the problem.
- If the problem persists, contact your local Verifone representative for assistance.

Battery Does Not Charge

The e285 battery must initially receive a full charge to ensure proper operation.

NOTE



- Allow the e285 device to remain connected to the power pack for eight hours to ensure the battery receives a full charge.
- Li-ion batteries are not affected by shallow charging. Furthermore, when the device has no external power source or battery the coin cell battery provides power to the security circuit.
- Uninstalling the battery and unplugging the device 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 e285 device off when not in use. Keep the Li-ion battery inserted in the device and power up the device 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 USB end of the power pack to the device and plugging the other end of the power pack into a wall outlet.
- The e285 device automatically shuts off when the battery reaches the *critically low* charge state. If this occurs, the battery must recharge a minimum of 1/2 hour before it can power the device. *It may take several recharge attempts to reset the safety circuit* when charging a battery that has been discharged below this critical state.

Blank Display

When the e285 device 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 device power connection.
- Remove and reapply power to the device.
- If the problem persists, contact your local Verifone service provider.

Keypad Does Not Respond

If the keypad does not respond properly:

- Check the device 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 device 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 e285 card reader, the black magnetic stripe on the card should face down and outward, away from the keypad (see [Figure 10](#)).
- 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 Signal Strength](#).

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.
- Ensure the SIM card is properly inserted (see [Installing the SIM card](#)).
- Contact your Verifone distributor or service provider.
- If the manual transaction does not work, proceed to [Check the Signal Strength](#).

Check the Signal Strength

- On-screen signal-strength indicator displays at least one bar to indicate connectivity to radio network.
- Ensure that the radio has been activated by your service provider.



Verifone, Inc.
1-800-Verifone
www.verifone.com

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