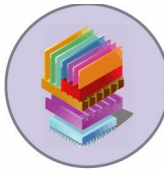


Omni 3600

Reference Manual



VERIX
OPERATING
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APPLICATION



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DEVELOPMENT
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Omni 3600 Reference Manual

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CHAPTER 1

Omni 3600 Terminal and Omni 3600 Base Installation

This chapter describes how to set up and install the Omni 3600 terminal and Omni 3600 base, including how to:

- protect the terminal from adverse [Environmental](#) conditions,
- install and maintain the [Smart Battery](#),
- establish communications connections through the [Omni 3600 Base Communications Ports](#), and
- connect optional peripheral devices through the Omni 3600 base (see [Peripheral Devices](#)).

NOTE



This installation procedure is also available for end users in the *Omni 3600 Installation Guide* (VeriFone part number 22060), which can be downloaded at: <http://www.verifone.com/support/index.html>

Select a Location

This section provides tips on using and protecting your Omni 3600 terminal, and location recommendations for the Omni 3600 base.

Omni 3600 Terminal

The Omni 3600 is a portable terminal for performing transactions remotely. Since it is a portable unit, location is not a factor however, follow the rules established in the [Environment](#) and [Convenience](#) sections.

Omni 3600 Base

A prime location for the Omni 3600 base is a counter or other flat surface that provides easy access to a power outlet and phone jack. Also, follow the rules established in the [Environment](#) and [Convenience](#) sections.

Environment



WARNING Do *not* leave this terminal in a non-climate-controlled vehicle. The Omni 3600 terminal is highly sensitive to temperature extremes. Subjecting the terminal to temperatures outside the stated [operating range](#) can void your warranty.



- Do not use the Omni 3600 terminal or Omni 3600 base where there is moisture or high humidity, chemicals or oils, or excessive heat or dust.
- Avoid locations near electrical appliances or other devices that emit excessive voltage fluctuations or electrical noise (for example, air conditioners, electric motors, neon signs, high-frequency or magnetic security devices, or computer equipment).

- Never place the terminal in direct sunlight.

CAUTION



Do *not* use the Omni 3600 terminal or Omni 3600 base outdoors. They are for indoor use only, and are not waterproof or dustproof. Damage to the unit from exposure to sun, rain, or dust may void your warranty.

- Keep the Omni 3600 terminal and Omni 3600 base away from anything that radiates heat, such as a stove or motor.

WARNING



Do *not* use the Omni 3600 terminal or Omni 3600 base near water, including a bathtub, wash bowl, kitchen sink or laundry tub, in a wet basement, or near a swimming pool. Avoid using these products during electrical storms.

Convenience

Omni 3600 Terminal

Keep the Omni 3600 terminal with you to perform transactions. When plugging the Omni 3600 terminal into the power pack, ensure that the unit is placed close enough to a power outlet so that the power cable readily reaches the unit. For safety, do *not* string the power cable in a walkway or place across a walkway on the floor.

Omni 3600 Base

Locate the Omni 3600 base so that you can readily dock the Omni 3600 terminal on the cradle for recharging and downloading. Again, for safety, ensure that the power cable readily reaches the Omni 3600 base unit, so as not to trip or interfere in any way in a busy location.

Omni 3600 Terminal

This section discusses the features of the Omni 3600 terminal, including

- providing power to the Omni 3600 terminal,
- charging the smart battery,
- installing paper,
- installing MSAM cards, and
- completing magnetic card and smart card transactions.

Unpack the Shipping Carton

Open the shipping carton and carefully inspect the contents for possible tampering or shipping damage ([Figure 1](#)).

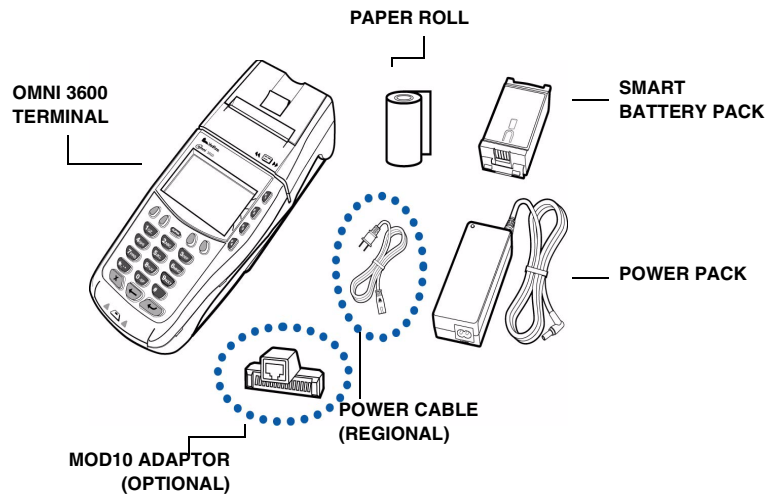


Figure 1 Omni 3600 Terminal Shipping Carton Components

- 1 Remove the following items:
 - Omni 3600 terminal
 - Power pack and power cable (if present)
 - Roll of thermal printer paper
 - Battery pack
 - MOD10 adaptor (optional)
- 2 Remove all plastic wrap from the Omni 3600 terminal and components.
- 3 Remove the clear protective film from the display lens.

WARNING



Do *not* use a Omni 3600 terminal or Omni 3600 base that has been damaged or tampered with.

Terminal Features Figure 2 illustrates the physical features of the Omni 3600 terminal.

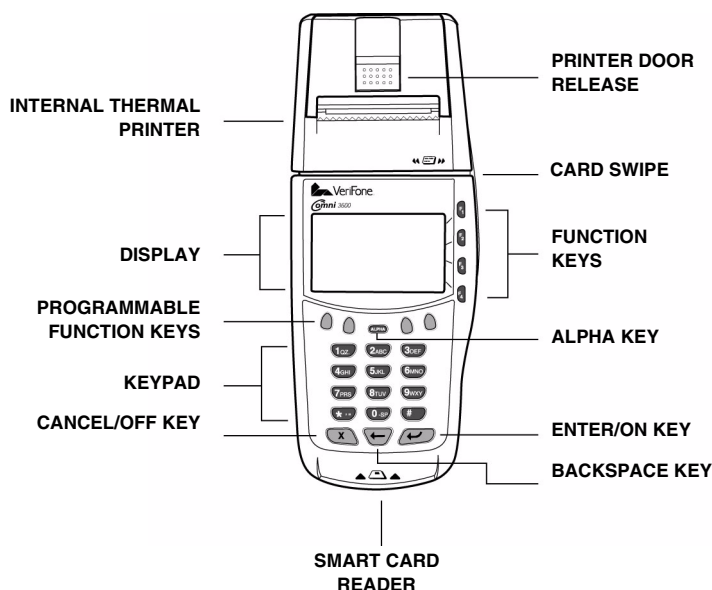


Figure 2 Omni 3600 Terminal Features

Notice the following features of the Omni 3600 terminal shown in Figure 2:

- The display
- Four types of keys:
 - A 12-key, telephone-style keypad
 - Eight function keys: four function keys, labeled F1 to F4, right display; four unlabeled, *programmable* function (PF) keys above the keypad
 - Three keys (icons at left) under the keypad (left-to-right: CANCEL/OFF, BACKSPACE, ENTER/ON)
 - An ALPHA key center above the keypad (see [ALPHA Key, page 33](#))
- The magnetic card swipe, above the display. The icon at left shows proper card orientation
- Smart card reader, in the front of the unit. The icon at left shows proper card orientation
- The internal thermal printer and door release
- The smart battery pack installed in back of unit ([Figure 4](#))
- A SAM (security access module) access door, underneath the battery ([Figure 9](#)). The Omni 3600 terminal contains three micromodule-sized SAM (MSAM) cardholders to support multiple stored-value card programs or other merchant cards



The Omni 3600 terminal is equipped with a tamper-evident label (on a screw hole on the case bottom).

Power Port

On the back of the Omni 3600 is one port—the *power* port. Use this port to connect the Omni 3600 to the power pack to recharge the battery through the unit

Connect Power Pack

To connect the Omni 3600 terminal to power:

- 1 Insert the round barrel connector (Figure 3) into the power port on the back of the terminal.
- 2 Insert the power cable into the power pack.
- 3 Plug the power pack into a wall outlet or surge protector.

NOTE



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

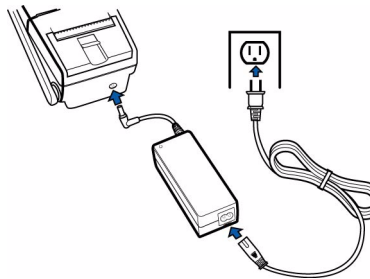


Figure 3 Connect Omni 3600 Terminal Power Pack

WARNING



Do not plug the power pack into an outdoor outlet.

Smart Battery

The Omni 3600 wireless terminal uses an 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).

CAUTION



Note that a new Li-ion battery's full performance is achieved only after two or three complete charge and discharge cycles.

On initial use, allow the Omni 3600 smart battery to charge 4 hours, then *fully discharge* during normal operation, to ensure reliable battery operation.



The following are features of the smart battery:

- Two Li-ion cells
- A fuel gauge module
 - monitors state of charge (voltage and current),
 - communicates with the terminal (charge parameters and alarms to indicate full discharge),
 - determines full charge capacity (on charge cycle and uninterrupted discharge cycle), and
 - automatically shuts down when cell voltage is extremely low.
- A safety circuit
 - prevents cell damage from overcharge/over-discharge,
 - activates when the battery is left in an unused terminal for extended periods, and
 - resets when battery voltage reaches a preset threshold during the charge cycle.

NOTE

Conserve battery power by turning the Omni 3600 terminal off when not in use. If the terminal is not to be used for several days, remove the battery from the terminal as it continues to discharge even when the terminal is turned off.

Refer to [Spare Smart Battery Pack](#) for smart battery instructions for the Omni 3600 terminal on the Omni 3600 base.

NOTE

The smart battery pack *must* be installed and holding a minimum of a 1% charge to operate the Omni 3600 terminal.

Smart Battery Installation

The smart battery installs in a slot on the back of the terminal, as shown in [Figure 4](#). The locking tab clicks when the battery is in place. The slot is *keyed*, so that there is only one way to insert the battery.

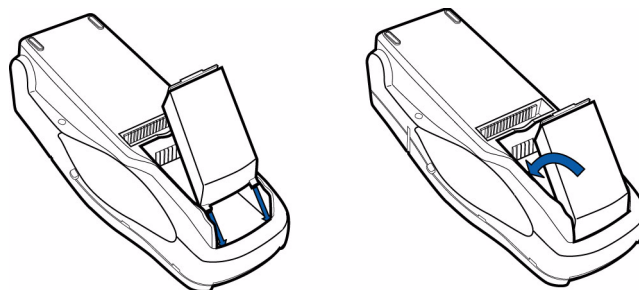


Figure 4 **Install the Smart Battery**

Smart Battery Removal

To remove the smart battery, press the locking tab at the top of the battery and pull the smart battery from its slot.

Smart Battery Charging

On initial use, the smart battery must be fully charged and *fully discharged* through normal operation. After unpacking your Omni 3600 terminal, install the battery and connect the power pack to the unit for 4 hours. Disconnect the power pack and allow your Omni 3600 terminal to remain on until the smart battery completely discharges. Reconnect the power pack to the unit and allow the smart battery to recharge a maximum of 4 hours.

It is also recommended that the smart battery receive a periodic full discharge. To ensure a full discharge, use the unit until the battery is fully drained.

To determine the charge state of the battery, push the “test button” icon (shown in Figure 5) on the bottom of the battery. The bar LED status indicators on the battery each indicate 25% of the charge state. When the battery charge state reaches 10%, the E LED (Figure 5) blinks, indicating a low-charge state. The battery charge state displays at the bottom of the first copyright screen when the terminal is turned on.

NOTE



Conserve battery power by turning the Omni 3600 terminal off when not in use. If the terminal is not to be used for several days, remove the battery from the terminal as it continues to discharge even when the terminal is turned off.

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 and none of the indicator LEDs (see Figure 5) on the battery pack blink. The battery must then be recharged to restore operation.

NOTE



The Omni 3600 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 make take several recharge attempts to reset the safety circuit** when charging a smart battery that has reached a critically low charge state.

If the Omni 3600 terminal is already running an application (for example, SoftPay), a battery status indicator may appear on the display.

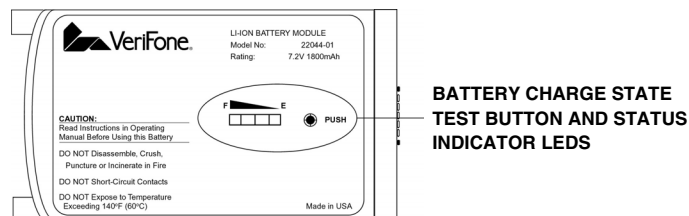


Figure 5 Smart Battery Charge Indicator LEDs and Test Button

NOTE

It is recommended that you keep a spare, charged smart battery available.

Smart Battery Life

To ensure that you get the longest possible performance from the smart battery, it must be allowed to fully discharge periodically. The smart battery can be charged and discharged hundreds of times, but will eventually wear out. When operating times are noticeably shorter than usual, it is time to buy a new battery (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.

**Turn On/Off the Omni 3600 Terminal**

When the smart battery completes its initial charge, turn on the Omni 3600 terminal by pressing the green ENTER/ON key (icon at left) for approximately 3 sec. The display screen lights and displays the initial VeriFone copyright screen. If an application is loaded in the terminal, it starts after the initial VeriFone copyright screen and displays a unique (copyright) screen. If no application is loaded in the terminal, **DOWNLOAD NEEDED** appears on screen after the initial VeriFone copyright screen.



Turn off the Omni 3600 terminal by pressing the red CANCEL/OFF key (icon at left) continuously until the cancel tone is heard (approximately 4 sec.). First a series of beeps is heard, then the cancel tone. The unit then shuts off.

Paper Installation

The internal thermal printer uses a roll of single-ply, thermal-sensitive paper 58 millimeters (2.25 inches) wide and 25 meters (82 feet) long. 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.

WARNING

Poor-quality paper may jam the printer. Order high-quality paper from VeriFone; refer to the ordering process listed in [Accessories and Documentation](#).

CAUTION

Store thermal paper in a dry, dark, cool place. Handle thermal paper carefully; impact, friction, high temperatures, humidity, light, and oils affect the color and storage characteristics.

To install the paper roll in the internal thermal printer:

- 1 Lift paper roll cover tab to unlock the printer door ([Figure 6](#)).

- 2 Rotate the printer door up and back. Note that the door is hinged; it is not necessary to remove it from the unit.

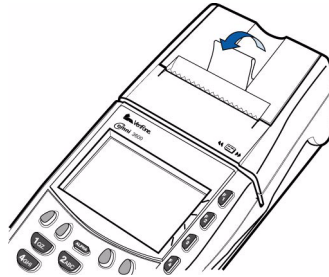


Figure 6 Open the Printer Cover

- 3 Loosen the glued leading edge of the paper from the roll.
- 4 Hold the paper roll so paper feeds from the *bottom* (Figure 7) and pull approximately two inches of paper free of the roll.
- 5 Drop the paper roll into the printer tray, allowing the free paper to extend outside the printer door (Figure 7).

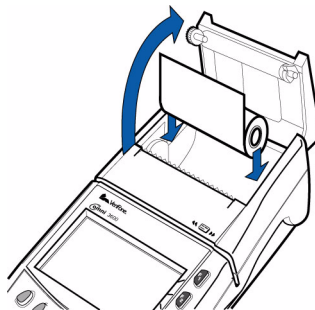


Figure 7 Load Paper

- 6 Close the cover by gently pressing directly on the paper roll cover tab until it clicks shut. Allow a small amount of paper to extend outside the cover, as shown in Figure 8.

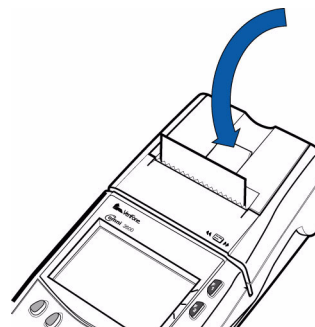


Figure 8 Close the Printer Cover