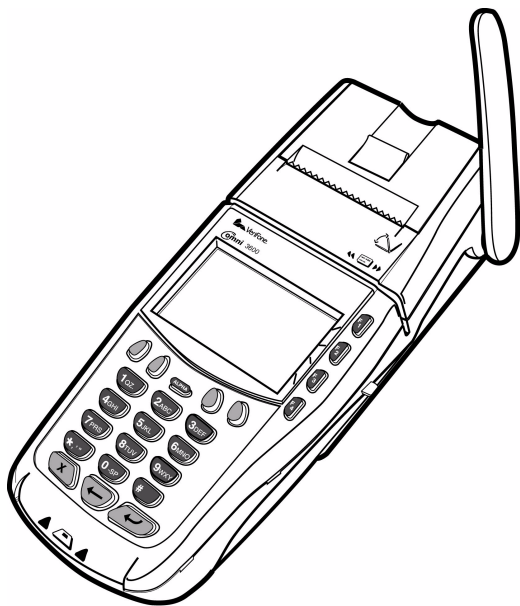




Omni 3600

Installation Guide



VeriFone Part Number 22060 Revision A

Lithium Battery Caution

The Random Access Memory (RAM) contents in Omni 3600 terminals are protected by a lithium battery. Do not, *under any circumstances*, attempt to replace this battery. Failure to comply may void the product warranty.

Document Title: Omni 3600 Installation Guide
VeriFone Part Number 22060, Revision A

Copyright © 2001 VeriFone, Inc.

All rights reserved.

No part of this publication may be copied, distributed, stored in a retrieval system, translated into any human or computer language, or transmitted, in any form or by any means, without the prior written consent of VeriFone.

VeriFone and Omni are registered trademarks of VeriFone, Inc.

Any other brand names and trademarks appearing in this guide are the property of their respective holders.

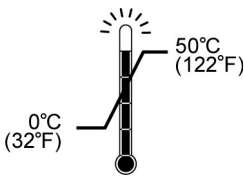
Comments or suggestions on how to improve this document can be sent to Tell_us_more@verifone.com.



KEEP DRY



**USE NO
CHEMICALS**



**OBSERVE OPERATING
TEMPERATURE RANGE**



**DO NOT LEAVE IN A
HOT VEHICLE**

Contents

Introduction

Select a Location	7
Omni 3600 Terminal	7
Omni 3600 Base	7
Environment	8
Convenience	9

Omni 3600 Terminal

Unpack the Shipping Carton	10
Terminal Features	12
Power Port	14
Connect Power Pack	14
Smart Battery	15
Smart Battery Installation	17
Smart Battery Charging	17
Turn On/Off the Omni 3600 Terminal	19
Paper Installation	19
Antenna (Mobitex and GSM Models only)	22
Installation	23
Orientation	24
Replace the Antenna	25
Install/Replace MSAM Cards	25
Wireless Transactions	30
Smart Card Reader Transactions	31
Magnetic Card Reader Transactions	32

Omni 3600 Base

Unpack the Shipping Carton	33
Omni 3600 Base Features	34
Power Connection	38
Omni 3600 Terminal Docking	39
Spare Smart Battery Pack	39

Omni 3600 Base Communications Ports	40
Telephone Line Ports.	42
Telephone Line Connections.....	42
ISDN Connections.....	43
Peripheral Devices	44
External Printers Supported	45

Maintenance

Base Contacts.....	46
Smart Card Reader.....	46

Troubleshooting

Smart Card	47
Troubleshooting Guidelines	47
Terminal Does Not Start	48
Terminal Does Not Turn Off.....	48
Terminal Display Does Not Show Correct or Readable Information	48
Smart Battery Will Not Charge	49
Telephone Line Connection Does Not Work Properly.....	49
Printer Does Not Work	50
Serial Port Does Not Work	50
Terminal Does Not Process Transactions	51
Step 1: Check the magnetic card reader.....	51
Step 2: Check the smart card reader	51
Step 3: Check the signal strength on-screen (SoftPay)	52
Step 4: Check the telephone line	52
Keypad Does Not Respond.....	52

VeriFone Service and Support

Return a Terminal, Base, or Smart Battery	53
---	----

Specifications

Power Requirements.....	56
Environmental	56
Omni 3600 Terminal Dimensions	57
Weight	57

Accessories and Documentation

How to Order	58
Download Cables	58
Cables for Optional Peripherals	58
Omni 3600 Base	58
Telephone Line Cord	59
Antenna	59
Smart Battery	59
Power Pack	59
Thermal Printer Paper	59
VeriFone Cleaning Kit	59
Documentation	60

List of Figures

Figure 1	Omni 3600 Terminal Shipping Carton Components	10
Figure 2	Omni 3600 Terminal Features	12
Figure 3	Connect Omni 3600 Terminal Power Pack	15
Figure 4	Install the Smart Battery	17
Figure 5	Smart Battery Charge Indicator LEDs and Test Button	19
Figure 6	Open the Printer Cover	20
Figure 7	Load Paper	21
Figure 8	Close the Printer Cover	22
Figure 9	Antenna Installation	23
Figure 10	Correct Antenna Position for Uplink	24
Figure 11	Open the MSAM Access Door	26
Figure 12	MSAM Card Installation	26
Figure 13	MSAM Cardholder Lock Plate Detail	27
Figure 14	Insert MSAM Card into Cardholder	27
Figure 15	Remove SIM Door Screw	29
Figure 16	Slide Off SIM Card Access Door and Remove Dust Cover	29
Figure 17	Insert SIM Card into Cardholder	30
Figure 18	Using the Primary Smart Card Reader	31
Figure 19	Using the Magnetic Card Reader	32
Figure 20	Omni 3600 Base Shipping Carton Contents	33
Figure 21	Omni 3600 Base Features: Top	34

Figure 22	Omni 3600 Base Features: Back (ISDN and Telco models)	35
Figure 23	Power Pack Connection (Docked Terminal)	38
Figure 24	Spare Smart Battery Docking	40
Figure 25	Omni 3600 Base Connection Ports	41
Figure 26	Direct Connection	42
Figure 27	Pass-through Connection	43
Figure 28	Example Peripheral Connections	45
Figure 29	Terminal Information Label Locations	55

Introduction

This guide describes how to set up and install an Omni 3600 terminal and Omni 3600 base. It also includes information on 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 [Peripheral Devices](#).

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 an 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 the antenna,
- 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](#)).

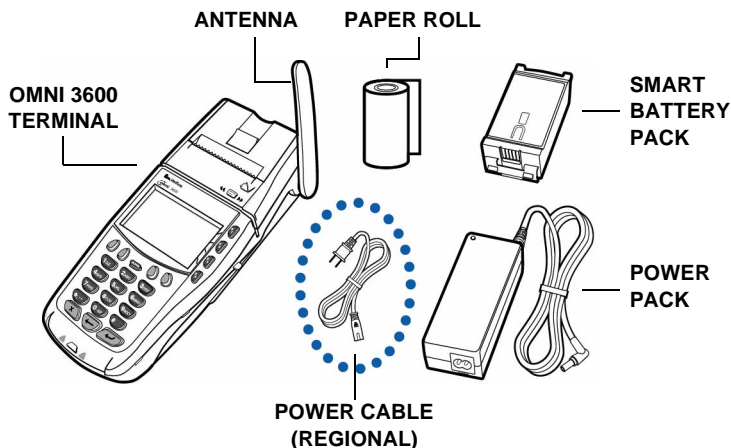


Figure 1 Omni 3600 Terminal Shipping Carton Components

- 1 Remove the following items:
 - Omni 3600 terminal
 - Power pack and power cable (Mobitex and off-line models only)
 - Roll of thermal printer paper
 - Battery pack
 - Antenna (if unattached; wireless models only)
- 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 damaged or tampered with Omni 3600 terminal or Omni 3600 base.

Terminal Features

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

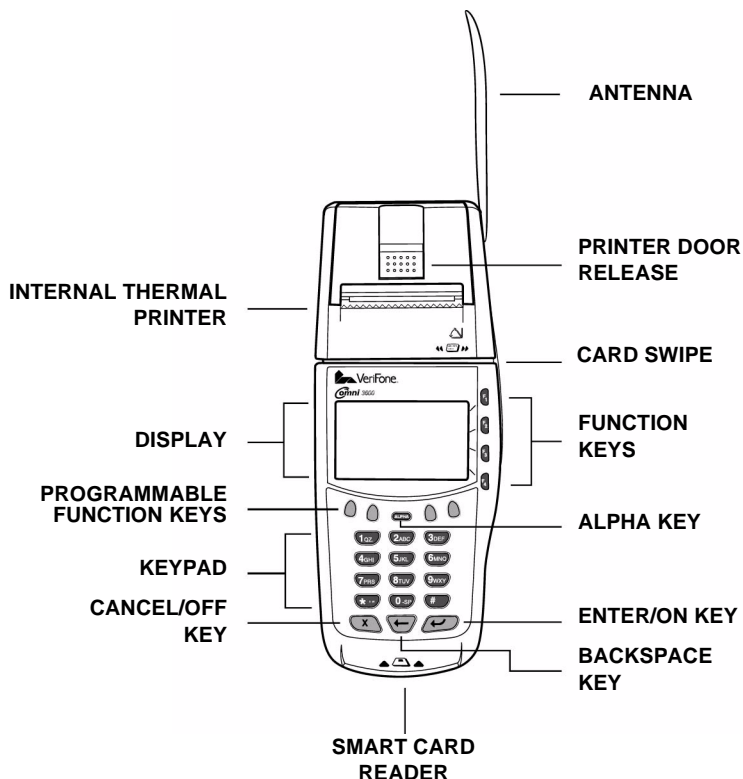





Figure 2 Omni 3600 Terminal Features

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 of the display; four unlabeled, *programmable* function (PF) keys above the keypad
 - Three keys (icons at right) under the keypad (left-to-right: CANCEL/OFF, BACKSPACE, ENTER/ON)
 
 - An ALPHA key center above the keypad
- The magnetic card swipe, above the display. The icon at right shows the proper swipe direction
 
- Smart card reader, in the front of the unit
- The antenna. The icon at right shows the proper angle to establish good wireless communications
 
- 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 11](#)). 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).

NOTE



If the tamper-evident label or any component appears damaged, immediately notify the shipping company and your VeriFone distributor or service provider.

Power Port

On the back of the Omni 3600 is one port—the *power* port—identified by the lightning bolt icon shown at right. 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 (icon at right) 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.

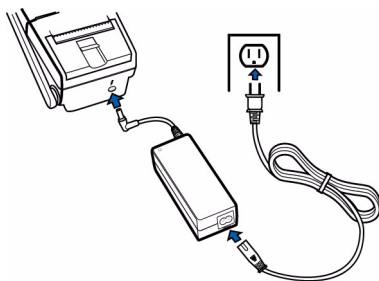


Figure 3 Connect Omni 3600 Terminal Power Pack

WARNING



Do not plug the power pack into an outdoor outlet.

Smart Battery

The Omni 3600 wireless terminal uses an Li-ion *smart* battery (P/N 22044-01). 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 smart battery pack *must* be installed to operate the Omni 3600 terminal.

The following are features of the smart battery:

- Two Li-ion cells
- The 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.
- The safety circuit
 - prevents cell damage from overcharge/over-discharge,
 - determines when to activate when the battery is left in an unused terminal for extended periods, and

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.

- resets when battery voltage reaches a preset threshold during the charge cycle.

NOTE



It may take several attempts to reset the safety circuit when charging a smart battery that has reached a critically low charge state.

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

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 proper way to insert the battery.

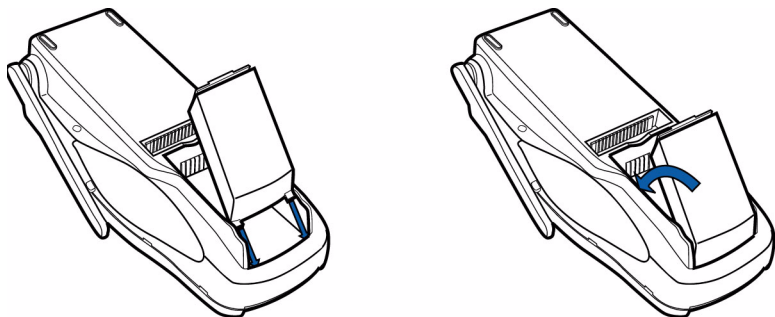


Figure 4 Install the Smart Battery

Smart Battery Charging

You must charge smart battery *prior* to initial use. After unpacking your Omni 3600 terminal, install the battery and connect the power pack to the unit. It is recommended that the battery receive a periodic full discharge.

NOTE



Allow the Omni 3600 terminal to remain connected to the power pack for a minimum of 2 hours, maximum of 4 hours to ensure the battery receives a full charge.

