VeriFone®
A division of Hewlett-Packard

Everest *Plus*

Installation Guide

Lithium Battery Caution

The Random Access Memory (RAM) in the Everest *Plus* terminal is protected by a lithium battery. Do not, *under any circumstances*, attempt to replace this battery. Failure to comply may invalidate the product warranty.

Everest Installation Guide
VeriFone Part Number: 19712, Revision A

Comments? Please email all comments on this document to Tell_Us_More@VeriFone.com.

Table of Contents

Introduction

The Everest *Plus* terminal is an economical, easy-to-use, programmable device for entering Personal Identification Numbers (PINs) necessary for the security of a transaction. Application programs are written using the standard C programming language. These programs can then be downloaded directly from an electronic cash register (ECR), another Everest *Plus* terminal, or a development PC, using the Everest *Plus* terminal System Mode. This mode can also be used for such functions as diagnostics, changing the password, and Master Key insertion.

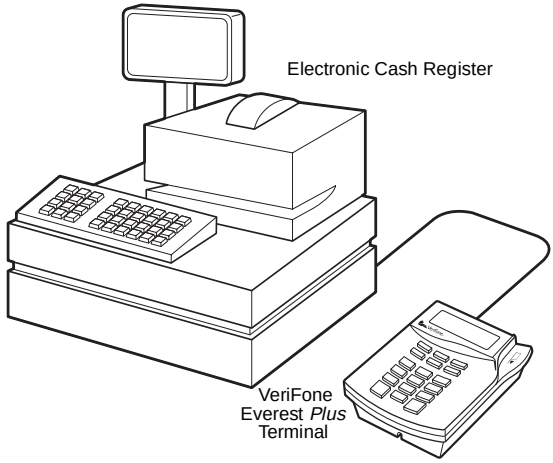

Figure 1 Sample Configuration

With three screen-addressable keys and three soft-function keys, the versatile Everest *Plus* terminal can be customized to your needs. The two-line display easily accommodates prompts and messages, and the bi-directional card reader is capable of reading Tracks 1, 2, and (optionally) 3.

The powerful processor makes it ideal for supporting Frequent Shopper applications and accepting multiple payment types, such as credit, debit, and electronic benefit transfers (EBTs). PIN security features safeguard the PIN and prevent the PIN from being retrieved once the transaction is completed.

The Everest *Plus* terminal is easy to install and can be used at any retail counter, multi-lane environment, or office. The concave surface aids security when a customer is entering a PIN, and the small footprint frees up counter space.

The terminal can simultaneously connect to three devices: an ECR and up to two optional peripheral devices that have a 6-pin or 8-pin mini-DIN port — such as a check reader and/or a printer.

Installation

Selecting a Location

Select a location for your Everest *Plus* terminal that is convenient for the customer and offers adequate ventilation and protection. In general, avoid areas with:

- Excessive heat
- Oil or moisture
- Excessive dust
- Excessive electrical noise (caused by air conditioners, motors, fans, or power tools)
- Direct sunlight
- Artificial light that could reflect glare off the display panel

Caution: Do not use the Everest *Plus* terminal or its power pack outdoors.

Wall-Mounting a Terminal

You can mount a Everest *Plus* terminal on a wall using the three slotted mounting holes on the bottom of the terminal.

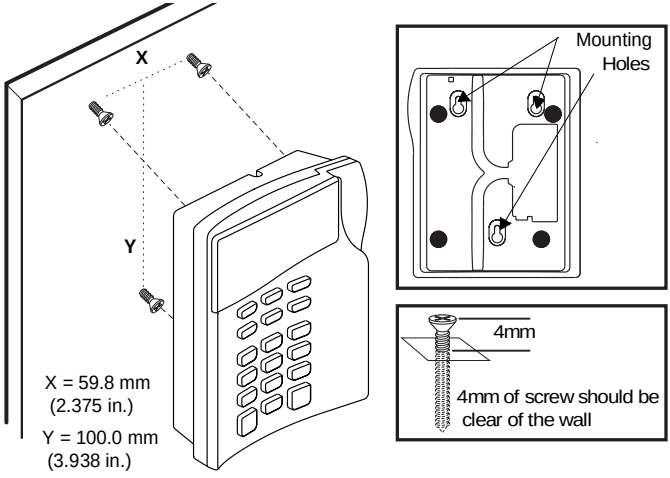

Figure 2 Wall-mounting a Terminal

VeriFone recommends using wood screws at least 16 mm long with a head diameter no larger than 7 mm. If mounting to drywall, use masonry inserts that match the required screws.

Unpacking the Shipping Carton

Carefully inspect the shipping carton and its contents for shipping damage.

Note: If the Everest *Plus* terminal is damaged, file a claim immediately with the shipping company or carrier and notify your local VeriFone distributor or service provider.

Warning: Do not use a damaged Everest *Plus* terminal.

Follow these steps to unpack the carton:

1. Remove the Everest *Plus* terminal from the carton.
2. Remove any protective plastic wrapping from the device and place the device on a table or counter top.
3. Remove the plastic strip from the display panel. This strip protects the display panel during shipment.
4. Remove the metal cable restraining strap and screw (packaged in a plastic pouch located in the bottom of the shipping carton).
5. These items will be used when installing the Multi-Port Cable on the terminal. Save the carton and packing material for re-packing or moving the device in the future.
6. Cables are packaged separately. At this time, remove the cable(s) from its packaging and place it beside the Everest *Plus* terminal.
7. If you will be using the optional Everest *Plus* power pack, remove it from its packaging and place it beside the Everest *Plus* terminal.

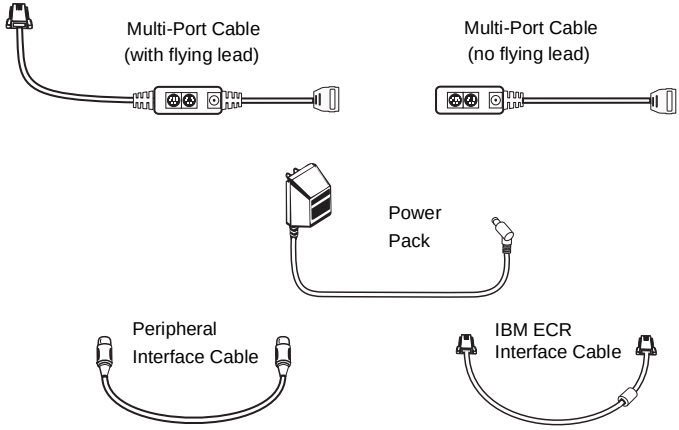

Figure 3 Cables and Power Pack

Connecting an Everest *Plus* to an ECR and Optional Peripherals

Use a Multi-Port Cable to connect the Everest *Plus* terminal to the tailgate port of an ECR and a Power Pack. The procedure for connecting the Multi-Port Cable to an ECR varies slightly, depending on which Multi-Port Cable option you use (see "Accessories," on page 17, for a list of supported cable options). Some Multi-Port Cables have a built-in ECR "flying" lead (one end of the cable embedded in the connector block; the other end terminated with a modular SDL plug); other Multi-Port Cable options have SDL ports to which you must connect a separate ECR interface cable.

Refer to the next section for when and how to connect the power pack.

Warning: Disconnect the power from any peripheral device before connecting the Everest *Plus* terminal to the device. Ensure that you connect the devices in the given order, i.e., connect the Everest *Plus* terminal first.

1. Connect the end of the Multi-Port Cable with the 41-pin connector into the bottom of the Everest *Plus* terminal.
2. Install the cable restraining strap as shown in Figure 4.

   Insert the tab opposite the screw hole into the slot in the terminal case, and then secure the strap over the cable with the provided screw.

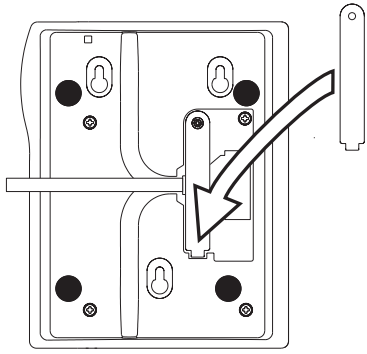

Figure 4 Installing the Cable Retaining Strap

3. Connect either end of the ECR Interface Cable into the SDL port on the end of the Multi-Port Cable.

4. Connect the other end of the ECR Interface Cable into the appropriate high-speed bus tailgate port on the ECR. The port to use depends on the configuration of your ECR system. The Everest *Plus* terminal usually connects to IBM slot 2A23, 2A25, 2B23, or 2B25. These slots are on the back of the ECR and correspond to addresses 0x68, 0x64, 0x69, and 0x65, respectively.
5. If you have an optional peripheral device with a 6-pin or 8-pin mini-DIN port, such as a printer or check reader, connect its interface cable to the appropriate mini-DIN port on the Multi-Port Cable. While there are two side-by-side ports on one side of the cable — a 6-pin mini-DIN port and an 8-pin mini-DIN port — only one port can be used at a time.
6. Connect the peripheral device to the interface cable, and then connect the device's power supply.

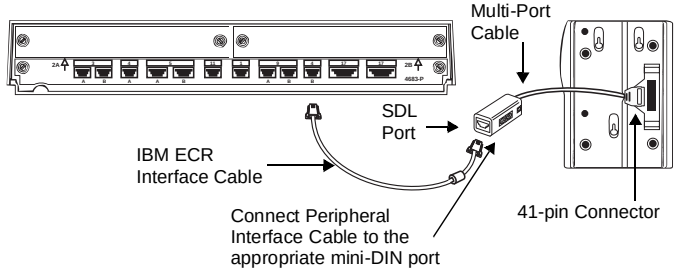

Figure 5 Multi-Port Cable Connection

When and How to Connect the Power Pack

When connected to the tailgate port of an ECR, the Everest *Plus* terminal draws power from the ECR. There are instances when the terminal will not be connected to the tailgate port of an ECR and will need its own power:

- Downloading an application from a PC or other Everest *Plus* terminal
- Loading Master Keys from a PC
- Operating as a stand-beside unit in a LAN environment
- Connecting to an ECR through a serial interface

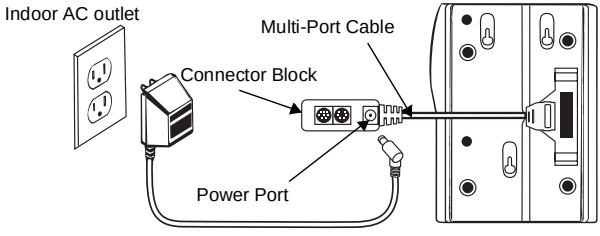

Figure 6 Power Pack Connection

The Multi-Port Cable is required for connecting the Everest *Plus* power pack.

1. Connect the end of the Multi-Port Cable with the 41-pin connector into the bottom of the terminal. See Figure 6.
2. Install the cable restraining strap as shown before, in Figure 4.

   Insert the tab opposite the screw hole into the slot in the terminal case, and then secure the strap over the cable with the provided screw.
3. Connect the barrel connector on the power pack cord into the power port on the Multi-Port Cable connector block.

4. Connect the power pack into an indoor AC outlet.
5. Connect any optional peripheral device now, as discussed in steps 4 and 5 under “Connecting an Everest Plus to an ECR and Optional Peripherals,” on page 9.

Caution: Do not use the Everest *Plus* terminal or its power pack outdoors.

Routing Cable in the Cable Channels

The cable routing channels located on the underside of the Everest *Plus* terminal allow you to neatly route the cable to either end of the terminal.

1. Turn the terminal upside down and locate the cable channels.
2. Insert the cable into the desired cable channel. Be sure that the cable is straight and nested securely in the channel.
3. Turn the terminal right side up, and place it back in its original position.

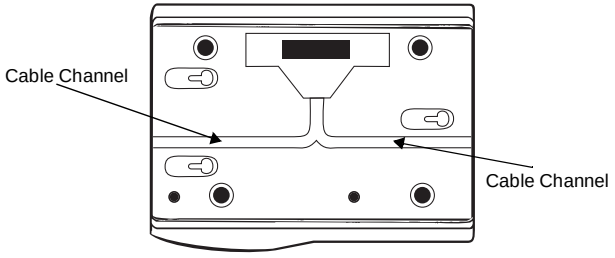

Figure 7 Cable Channels

Using the Card Reader

To use the Everest *Plus* terminal card reader, place the card in the top of the card reader slot with the magnetic stripe facing downward, as shown in Figure 8. Slide the card toward you in a smooth, continuous motion.

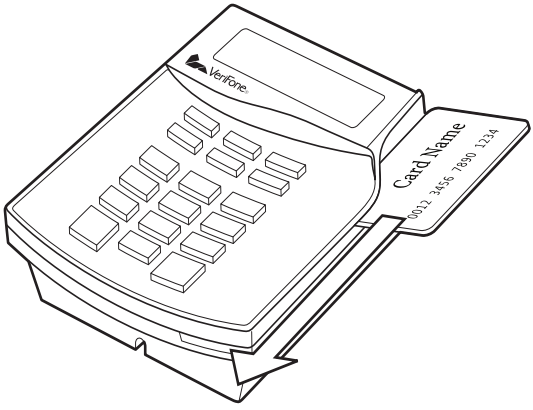

Figure 8 Using the Card Reader

Specifications

Power

Everest *Plus* Terminal

Input: 12 V DC, 350 mA

Power Pack

When connected to the tailgate port of an ECR, the terminal draws power directly from the ECR. If not connected to an ECR or other similar controller, the terminal requires its own power source.

"When and How to Connect the Power Pack," on page 12, discusses instances when terminals must use a power source. A Multi-Port Cable is required for connecting the power source to the terminal.

110 V Power Pack, 04250-01

- Input: 110 V ~ (110 V AC); 60 Hz; 0,6 A (0.6 A)
- Output: 12 V DC; 1,0 A (1.0 A)

230 V Power Pack, 05386-01

- Input: 230 V ~ (230 V AC); 50 Hz; 0,14 A (0.14 A)
- Output: 12 V DC; 1,0 A (1.0 A)

Universal Power Pack, 30358-03

- Input: 90 - 264 V ~ (90 - 264 V AC); 47 - 64 Hz; 0,5 A (0.5 A)
- Output: 12 V DC; 0,2 - 1,0 A (0.2 - 1.0 A)

Barrel Connector Polarity:

Environmental

- Operating temperature: 0° to 40° C (32° to 104° F)
- Storage temperature: – 18° to + 66° C (0° to 150° F)
- Relative humidity: 15% to 90%; no condensation

Dimensions and Weight

- Height: 162.0 mm (6.378 in.)
- Width: 132.9 mm (5.232 in.)
- Depth: 53.7 mm (2.114 in.)
- Weight: approximately 539 grams (19 oz.)

Product Certification

FCC Compliance

Manufacturer: VeriFone, a division of Hewlett-Packard Company
Model: Everest *Plus*

FCC Part 15

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to equipment in a residential area in which case the user will be required to correct the interference at his own expense.

If this equipment causes interference, try to correct the problem by:

- *Reorienting the receiving antenna.*
- *Relocating the terminal with respect to the receiver with which it interferes.*
- *Plugging the terminal into a different AC outlet, and putting the terminal and receiver on different branch circuits.*

Accessories

How to Order

Ordering VeriFone accessories and consumable supplies is easier than ever. The VeriFone Online Store, on the Internet at *www.store.verifone.com*, provides easy access and secure ordering for products and accessories, as well as up-to-the-minute information about VeriFone countertop systems.

In the United States, you can telephone-order accessories from the VeriFone Customer Development Center, at 1-800-233-0522, Monday through Friday from 7 A.M. to 5 P.M., Mountain Standard Time. If you are not located in the United States, please contact your VeriFone representative.

You can order the Everest *Plus* accessories and documentation listed below. When ordering, please refer to the listed part number.

Cables

Multi-Port Cables

Table 1 summarizes the range of Multi-Port Cables used to connect the Everest *Plus* terminal to an ECR and a power supply, as well as numerous peripheral options. Contact your local VeriFone distributor if these Multi-Port Cables don’t appear to fit your needs.

Table 1 Mini-DIN Style Multi-Port Cables

Description	Part Number
Two serial ports on block (one 6/8-pin and one 8-pin mini-DIN); flying lead from end of block for connecting to an IBM ECR.	17881-01
One 6/8-pin mini-DIN serial port and one 5-pin LAN port on block; flying lead from end of block for connecting to an IBM ECR.	17882-01
Two serial ports (one 6/8-pin and one 8-pin mini-DIN); 6-pin RJ11 flying lead from end of block for connecting to a LAN.	17883-01
Three serial ports (one 6/8-pin and two 8-pin mini-DIN); no flying lead.	17884-01
Two serial ports on block (one 6/8-pin and one 8-pin mini-DIN); DB9F serial port flying lead from end of block for connecting to a PC or cash drawer.	17885-01
One 6/8-pin mini-DIN serial port and two ECR tailgate passthrough receptacles on block; flying lead from end of block for connecting to an IBM ECR.	13984-01

Interface and Peripheral Cables

In addition to the Multi-Port cables, the following cables can be used to connect the Everest *Plus* terminal, an ECR, and numerous peripheral options. Contact your local VeriFone distributor for solutions to more specific cabling needs.

03610-xx	ECR Interface Cable. Connects Everest *Plus* terminal to the tailgate port of an IBM ECR with the Multi-Port Cable.
03015-xx	Peripheral Interface Cable. Connects Everest *Plus* terminal to an optional peripheral device with the Y-Cable/ or Multi-Port Cable. Each end of the cable has a male, 8-pin mini-DIN connector.
12985-xx	Peripheral Interface Cable. This cable is the same as PN 03015, except one end has a male, 6-pin mini-DIN connector.

Power Packs

Contact your local VeriFone distributor to determine which power pack fits your needs. See “Power Pack,” on page 15, for power pack specifications.

04250-01	110 V ~ (110 V AC) power pack
05386-01	230 V ~ (230 V AC) power pack
30358-03	100-250 V ~ (100-250 V AC) Universal power pack

Documentation

19765, Rev. A	*Everest Plus Programmer’s Manual*
19766, Rev. A	*Everest Plus Reference Manual*

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