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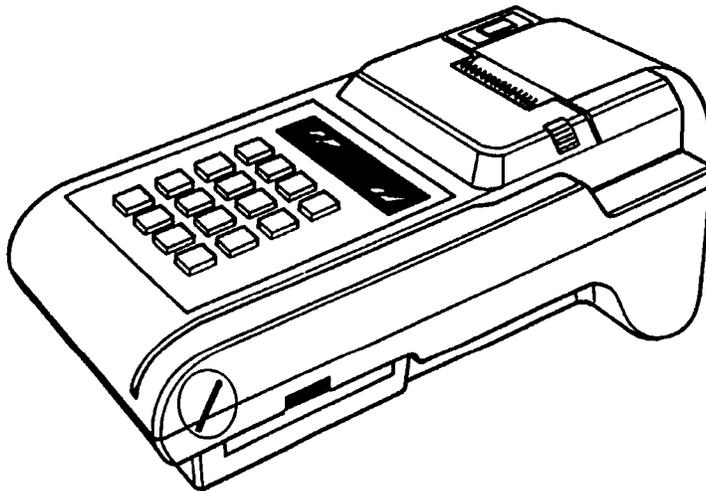
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TRANZ 420

FDC ETC PLUS Retail Debit Reference Manual

Application Version FEPR421
VeriFone Part Number 25249, Revision B
Manual Revision 1.0



TRANZ 420 FDC ETC Plus Retail Debit Reference Manual

VeriFone Part Number: 25249, Revision B
Manual Revision 1.0

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1. Introduction

Congratulations on your choice of the VeriFone TRANZ 420 transaction terminal. The TRANZ 420 terminal has many outstanding features that enable you and your merchants to perform your jobs faster and easier.

Please take the time to read this manual carefully so you become familiar with the equipment and procedures you will need to know to perform functions and transactions on your terminal.

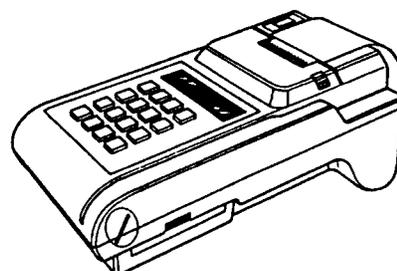


Figure 1-1. The TRANZ 420 Terminal

Unique Features

Unique features of the TRANZ 420 are its compact design allowing hand-held operation, and an integral roll printer. The FDC TRANZ 420 terminal operates on an external power supply (required for PINpad device operations) or on a battery. This TRANZ 420 application is similar to the FDC TRANZ 330 Retail Debit application.

Software Version

The FDC application software package loads only in TRANZ 420 terminals having EPROM version ME2EU370 or higher. To determine the software version your terminal contains, unplug the power cord, then plug it in again. The terminal's display shows you the current software version installed. This reference manual is for application version FEPR421.

Integral Printer

The FDC TRANZ 420 terminal supports an integral roll printer for printing receipts and reports. This application allows you to program a unique merchant header of up to 6 lines for your receipts. Appendix A provides printer details as well as sample receipts and reports.

PINpad Device

The TRANZ 420 terminal supports the PINpad™ 101 device for debit transactions that require customer entry of Personal Identification Numbers (PINs) to verify transaction amounts and totals. The PINpad 101 device attaches easily to the terminal's side panel. See Appendix B, *PINpad 101 Device*, for installation instructions and operating procedures.

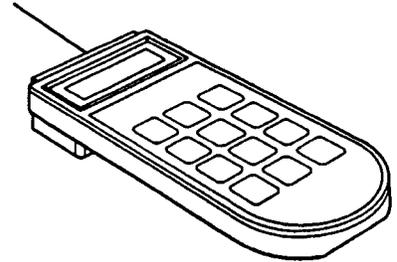


Figure 1-2. PINpad 101 Device

2. Features and Transactions Summary

New Features

New features provided in this debit application are included in the following list.

- ★ Key [7], when pressed, displays the POWER SOURCE Y/N prompt. A "Y" response must be entered to run debit transactions.
- ★ Reports and receipts have been modified to be compatible with the TRANZ 420 24-character integral roll printer.
- ★ The TRANZ 420 terminal supports the PINpad 101 device for debit transactions.
- ★ This application version is designed for a Track 2 terminal.

Existing Features

- This application provides the option of performing credit or debit transactions.
- The terminal is compact and can operate from a hand-held position.
- Both terminal and printer are housed in the same unit.
- The Setup function for terminal options includes 4 prompt selections: Invoice number, Operator ID, Phone Order and Automatic Report printing.
- Current settings are displayed at each setup prompt.
- While reviewing a transaction, the Item Review function allows you to void, edit and print each transaction.
- You can print terminal totals by card type and detail reports by item number.
- All captured transactions are numbered for buffer review.
- The idle prompt includes the total number of transaction records you can store in the current batch.
- The prompt for entry of the card account number indicates the item number for that transaction.
- You can customize up to 6 merchant header lines for receipts and reports, as well as 4 flexible customer agreement lines and 2 flexible message lines.

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- The abbreviated record display, as well as the full buffer review, includes code letters indicating transaction type: S = Sale, R = Return, VS = Void Sale, VR = Void Return, etc.
- Card ranging includes the option for the Retail Terms prompt.
- The application performs expiration date checking for expired cards.
- A setup option allows you to customize the idle prompt.

Terminal Transactions Summary

Key No.	Key Name	Explanation
1	SALE	Obtains purchase authorization
2	RETURN	Authorizes a return/credit
3	AUTH ONLY	Authorizes a transaction without ticket capture
4	VOID	VOIDs any host-captured transaction
5	TKT ONLY	Processes ETC transactions
6	INQUIRY	Checks previous business day's deposits
7	POWER	Power Source selection
9	CLOSE	Closes the terminal batch

Local or Terminal Functions Summary

Key Sequence	Explanation
BLUE KEY + 1	Item Review of captured tickets
BLUE KEY + 2	Terminal Totals
BLUE KEY + 4 + (code)	Setup functions: Code 1 = Host Information (for telephone numbers, terminal IDs) Code 2 = Card Range Information Code 3 = Set Security Flags Code 4 = Update Manager Password Code 5 = Application Options Code 7 = Printer Type Code 8 = Change Idle Prompt Code 9 = Clear Batch Code 0 = Card Type
BLUE KEY + 5	Print (item, totals and reprint)
BLUE KEY + 6	Display current time

3. TRANZ 420 Terminal

The TRANZ 420 terminal is a portable authorization and electronic transaction terminal that performs Point-Of-Sale (POS) credit and debit authorizations. It features the convenience of an integral roll printer for printing transaction receipts and reports.

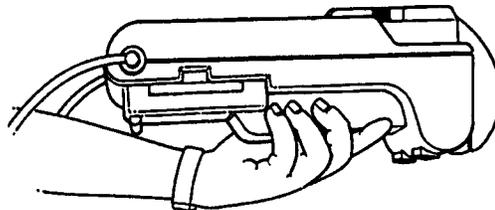


Figure 3-1. TRANZ 420 Terminal

Unpacking

Carefully inspect the shipping carton and its contents for shipping damage. If the TRANZ 420 is damaged, file a claim immediately with the shipping company or carrier and notify VeriFone. Do not use a damaged terminal.

1. Remove all of the items from the carton. You should have:
 - TRANZ 420 terminal
 - Power pack
 - Telephone line cord
 - Roll of carbon paper (for ribbonless operation), or printer ribbon cassette and paper roll
 - TRANZ 420 Installation Guide
2. Remove any protective plastic wrapping from the terminal and place all the components on a table or counter top.
3. Remove the plastic strip from the display panel. This strip protects the plastic panel during shipment.
4. Save the carton and packing material for repacking or moving the terminal in the future.

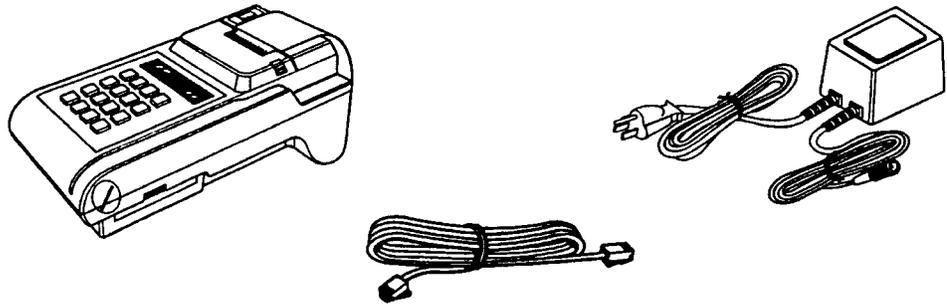


Figure 3-2. TRANZ 420 Components

Note: If your TRANZ 420 terminal operates ribbonless, disregard the following steps.

Loading/Unloading a Ribbon Cassette in the Printer

If a ribbon cassette is not already loaded in the printer, or if a new cassette is required, perform the following steps:

1. Press in on the two finger grooves on either side of the print mechanism cover, lift up and remove the cover (see Figure 3-3).
2. Press in on the two finger grooves on either side of the paper roll cover and pull back to remove.
3. Push down on the right side of the ribbon cassette (labeled PUSH) and remove the cassette (see Figure 3-4, Step 1).
4. Insert the new ribbon cassette (Figure 3-4, Step 2) and gently push the cassette down without locking the rotation of the ribbon feed roller.
5. Turn the cassette "knob" (marked by an arrow; Figure 3-4, Step 3) clockwise to stretch the ribbon .



Figure 3-3. Removing the Printer Cover

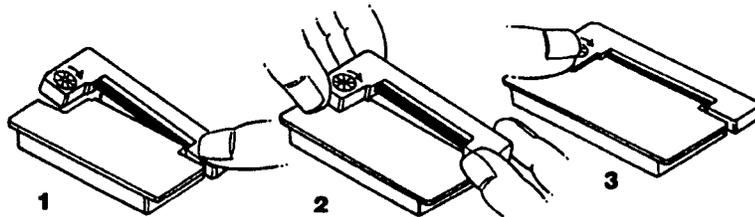


Figure 3-4. Loading and Unloading the Ribbon Cassette

Installation

Telephone Line Connection

1. Connect one end of the telephone line cord to the modular jack on the rear of the terminal (see Figure 3-5).
2. Connect the other end of the line cord to a modular telephone wall jack. If you do not have a modular wall jack, obtain an adapter from your local telephone company.

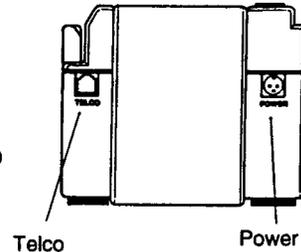


Figure 3-5. Connector Locations

Power Connection

1. Attach the small plug on the power pack cord to the power connector at the rear of the terminal (see Figure 3-6).
2. Plug the 3-prong AC connector on the other end of the power pack cord into a 120 VAC outlet.
3. If desired, you can secure the power pack to the wall (or counter) power outlet by removing the center screw on the outlet's faceplate, inserting this screw through the mounting tab on the power pack, then replacing the screw so that the power pack is flush against the power receptacle.
5. Remove the paper roll cover as shown in Figure 3-6 to expose the on/off switch on the inside back panel. Turn the battery on by sliding the switch to the right "on" position.
6. Once the battery is turned "on" and the terminal is connected to the power pack, notice that the POWER indicator at the top, left-hand corner of the terminal comes on, either "blinking" on and off (indicating that the battery is recharging) or "steady" (indicating that the battery is already fully charged).

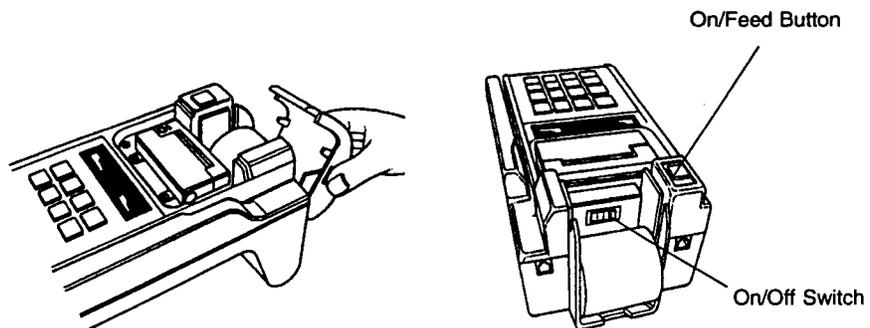


Figure 3-6. Battery Power Switch

Note: Because the power on/off switch is the only way the terminal can be completely powered down, set it to "off" and then "on" again any time you wish to reset the terminal (for example, during the software development stage).

Loading the Printer with Paper

Caution: Because impact, friction, temperature, humidity, light, and oil affect the coloring and storage characteristics of no-carbon-required paper, handle this type of paper carefully. Never load a roll of paper that has any folds, wrinkles, tears, or holes at edges or in the printing area.

1. Remove both printer mechanism cover and paper roll cover.
2. Unroll several inches of paper. With the cut edges of the paper pointing up, insert the paper spindle through the paper roll and place the roll into the slots on the inside of the terminal.
3. Slide edges of paper over second paper spindle and insert into slot at back of printer, making sure that the left edge of the paper is at the left edge of the slot and that the roll is aligned properly (upper and lower paper edges match).
4. Press the On/Feed button located at the top of the terminal to feed the paper through the printer (see top right, Figure 3-7).
5. Replace the paper roll cover.
6. Replace the printer mechanism cover on the terminal, making sure the paper is free to feed through the opening on the top of the cover.

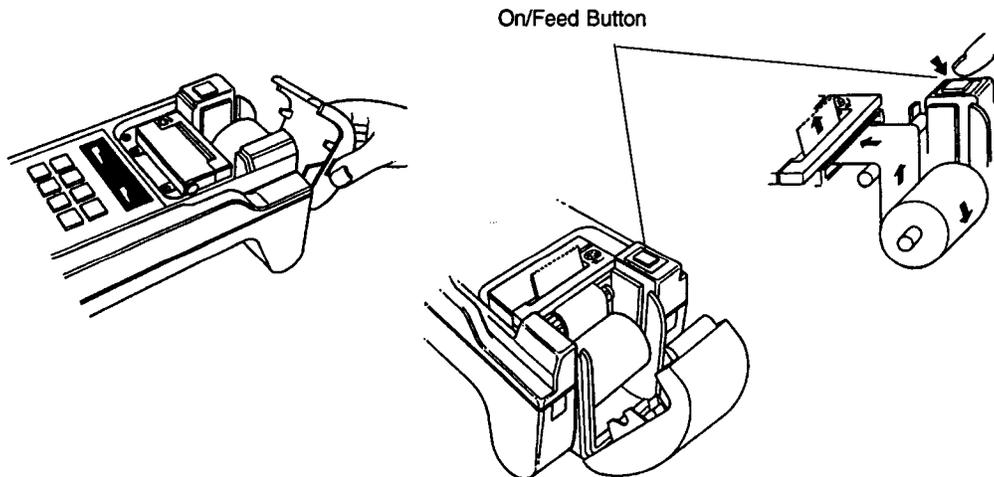


Figure 3-7. Loading the Printer with Paper

Display Panel

The 16-character alphanumeric display panel provides the visual prompts and information needed to operate the TRANZ 420. This bright blue, vacuum fluorescent display is easy to read, even under poor lighting conditions. It displays fully-formed numerals, letters and punctuation symbols.



Figure 3-8. TRANZ 420 Display Panel

Cardreader

The TRANZ 420 features an ISO Track 2 or optional Track 1 card-reader (slot on the right-hand side) for reading the magnetic stripe data on most major credit, private and debit cards. Customer identification information can be entered simply by sliding the credit or debit card through the slot.

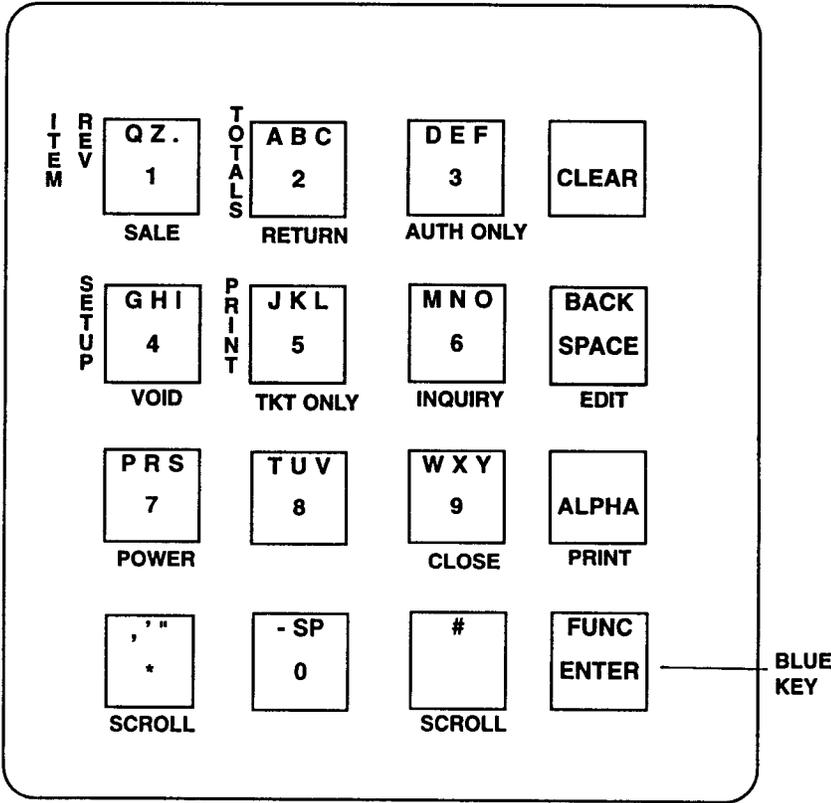


Figure 3-9. Cardreader

Place the card at the back of the cardreader slot with the magnetic stripe down and to the right, as illustrated in Figure 3-9. Slide the card towards you without stopping. The cardreader reads the card data for validation by the terminal's application.

Keypad

The keypad has 16 keys for entering alphabetical and numeric data. The functions of the keys are as shown below.



The keypad overlay for the FDC ETC PLUS Retail Debit application is VeriFone Part Number 10730-39. Please contact your VeriFone representative for ordering information.

Cleaning

Periodically clean your TRANZ 420 terminal using a cloth dampened with water and a mild soap or cleaner. Do not use harsh chemicals.

Warning: Because your terminal can be damaged by liquids, do not spray liquid cleaners directly on the terminal. Always apply the cleaner to the cloth before cleaning the terminal.

Returning the TRANZ 420 Terminal for Service

For replacement or repair of your TRANZ 420 terminal, call the toll free number given below. Be sure to mention the serial number found on the bottom of your terminal.

- If you are located in the United States, call 800-654-1674.
- If you are located outside the United States, call 714-979-1870.
- Unless otherwise instructed in this reference manual, do not, under any circumstances, attempt any service, adjustments, or repairs on this unit.
- If your equipment failure cannot be resolved, call the toll free (800-654-1674) VeriFone Customer Support Hot Line and ask for an MRA (Merchandise Return Authorization) approval number. You must have an MRA approval number before returning your equipment for repair.

Troubleshooting

These troubleshooting guidelines identify various problems and the appropriate corrective action. If you have problems operating your TRANZ 420 terminal, read these troubleshooting examples. If your problem persists, or if it is not listed here, call the VeriFone Customer Support Hot Line listed above.

Error Messages

Appendix C of this manual lists the different prompts and error messages that may appear on the display panel. If you see any of these messages, refer to this appendix for an explanation of the message.

Display Panel Does Not Display Correct Information

If the TRANZ 420 displays incorrect information, such as an unreadable message or nothing at all, you may have a power problem or a defective terminal. Follow these steps to determine the cause of the problem:

1. Your application may not have been properly loaded; repeat the downloading procedure again.

2. Run the Display Test, as described in Section 4, *Diagnostics*, of the *TRANZ 420 Reference Manual*, to ensure the display components are working.
3. If the problem persists, call the toll free VeriFone Customer Support Hot Line to have your terminal repaired or replaced.

Telephone Does Not Work Properly

1. Check your telephone line and telephone connections.
2. Check the phone lines using another standard telephone. If the other telephone works, have your telephone repaired or replaced.

Printer Does Not Work

1. Verify that there is a ribbon cassette properly loaded in the printer. (Disregard this step if the unit uses carbonless paper.)
2. Verify that the printer paper is properly loaded in the printer. The printer will not operate without a paper roll correctly installed.
3. Check the terminal for signs of power failure.
4. Press the CLEAR key and try the operation again; an improper command may have been used.

Terminal Transactions Do Not Work

1. Perform your transactions using several credit cards to ensure the problem is not a defective card. When sliding the cards through the cardreader, be sure the magnetic stripe faces down and to the right of the terminal.
2. Your application may not be properly loaded.
3. Perform a manual transaction using the keypad instead of the cardreader. If the transaction works, call the toll free VeriFone Customer Support Hot Line to have your terminal repaired or replaced.

Keypad Does Not Respond

1. Check the display panel. If it displays the wrong characters or nothing at all, refer to the first item in this troubleshooting section, "Display Panel Does Not Display Correct Information."
2. Press several keys. If Memory Location 009 contains a "0," you should hear a short beep each time you press a key. If key beep works, make sure you are entering the correct data.
3. Run the Keypad Test described in Section 4 of the *TRANZ 420 Reference Manual* to ensure the keypad components are working properly.
4. If Memory Location 009 contains a "0" or is <empty> and you do not hear a beep, or if the keys do not operate as the application says they should, contact the MRA desk.

Terminal Specifications

	Microprocessor: Z80A CPU operating at 3.579 MHz
	Memory: 32 Kbyte EPROM and 32 Kbyte RAM
	Cardreader: ISO 7811 Track 2 or Track 1 compatible
	Display: 16-character fluorescent, alphanumeric, 14-segment with decimal point and comma
	Communication: Automatic dialing
	Auto answer: Terminal dials whether touch tone or pulse (rotary mode) and accepts 32-digit telephone numbers
	Automatically dials host computer and call center numbers
	Modem: Internal modem with modular jack Model 103, 300 baud (Bell 103 type) modem Model 212A Standard Bell 212A high-speed dial-up modem, 1200/300 baud
Operating Environment	0 to 40°C, 32 to 104°F Humidity: 20 to 80%; no condensation
	Voltage: 95 to 130 VAC, 60 Hz (USA Model) 194 to 260 VAC, 50 Hz (International Model)
Dimensions and Weight	Height: 4.57 in. (116 mm) Width: 5.83 in. (148 mm) Depth: 11.85 in. (301 mm) Shipping Weight: Approximately 4 lb

Accessories

	Part Number	Description
Direct Download Cable	00764-XX	TRANZ 420 to IBM PC or compatible personal computer
	00765-XX	TRANZ 420 to IBM AT or compatible personal computer
	10600-XX	TRANZ 420 to TRANZ 420
	10602-XX	Adapter, mini 8 DIN (used with pn 10600-XX)
Peripheral Devices	P021-01-006	RAM Cartridge, 32 KB
	P021-01-007	RAM Cartridge, 64 KB
	P021-01-008	RAM Cartridge, 128 KB
	P021-01-009	RAM Cartridge, 256 KB
	00302-03	Bar Code Wand
	10601-XX	Adapter, mini 6 DIN

Peripheral Devices (cont'd)	P003-106-02 01582-00 10601-XX	PINpad 101 Cable, TRANZ 420 to PINpad 101 Adapter, mini 6 DIN
Programming Languages	P006-205-00 00368-01 10016	TCL Programming Package TCL Programmer's Manual (manual only) TCLOAD Manual and diskette
Reference Manuals	10768-01 10664 10663	ZONTALK 2000 Reference Manual TRANZ 420 Programmer's Manual TRANZ 420 Reference Manual

4. General Programming

The TRANZ 420 terminal allows you to:

- Review a field
- Move to another field
- Change it if necessary
- Display your new programmed data

Entering the General Programming Mode

To enter the general programming mode, press BLUE + 7. The terminal displays:

RECALL WHAT?

Review a Field Enter the field number you wish to review. For example, enter 100 to see the FDC primary host phone number.

100 = 18002289074

To review the contents of another specific field, enter the memory location number, then press [ENTER].

To quickly move to adjacent fields, press [ENTER] to go to the next field or press [ALPHA] to go back to the previous field.

Change a Field To program or change a field, press [BLUE] + 7.

Display	Response
RECALL WHAT?	100
100=18002289074	Press [BACKSPACE]
ENTER PASSWORD*	Key in "1[ALPHA][ALPHA]66831", press [ENTER]*.
100=	Key in new data, press [ENTER].

*Once you enter the system password, the terminal will remain unlocked until you press both the [CLEAR] and a function key or you remove the power cord from the terminal.

Note: FDC software has been designed with 10 unique Setup codes: BLUE + 4 + Codes 1 through 0. You should always use the Setup function to enter data in these fields. Use this alternate programming procedure only for entering data in other unique fields such as Fraud Control, etc.

"Emptying" a Field

You can easily delete data previously entered in a field in the FDC terminal.

1. Press [CLEAR], [BLUE] and [7].
2. Key in the field you wish to delete. The terminal displays the contents already stored in that field.
3. Press [BACKSPACE].
4. Key in "1[ALPHA][ALPHA]66831" and press [ENTER].
5. Press [ENTER] again.
6. The terminal displays that field again as <EMPTY>.

Entering Alphanumeric Data from the Keypad

The TRANZ 420 keypad has 16 keys; 12 of these keys can be used to enter as many as 47 different alphanumeric characters. These characters are the letters A through Z, the numerals 0 through 9, and the following special characters: + * , ' " - . # : ; @ and [space].

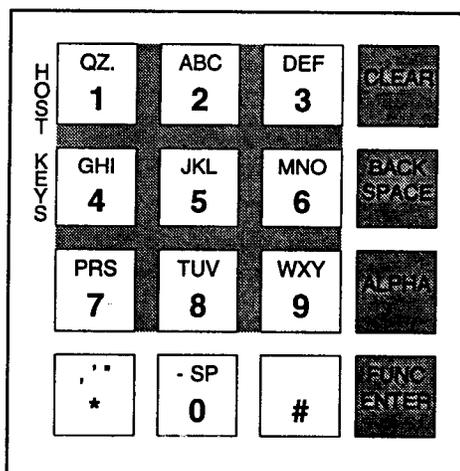


Figure 4-1. TRANZ 420 Keypad

Just as the [SHIFT] key on a typewriter selects one of two different characters assigned to a single key, the [ALPHA] key on the terminal selects the different characters available per key.

Press the key containing the character and then press the [ALPHA] key as many times as required to display the correct character.

Note: The terminal must be in a mode that allows data entry, such as the STORE or RECALL modes, before information can be entered from the keypad.

The examples listed in Table 4-1 demonstrate how to enter the characters 2, A, B, and C using the [2] and the [ALPHA] keys.

Table 4-1. Entering Alphanumeric Data

Desired Character	Keys to Press
2	Press the [2] key
A	Press the [2] key Press the [ALPHA] key once
B	Press the [2] key Press the [ALPHA] key twice
C	Press the [2] key Press the [ALPHA] key three times

Using the Multiple Transaction Function

The multiple transaction function enables you to perform more than one transaction during a single call to a host computer supporting this feature. As soon as one transaction is completed, the terminal stays on the line and waits for you to select the next transaction. Because numerous phone calls are eliminated, performing multiple transactions is faster than performing the transactions separately.

Before you can perform multiple transactions, the following requirements must be met:

1. The host computer must be capable of performing multiple transactions.
2. The multiple transaction timeout period must be set in Memory Location 007. To view the contents of Memory Location 007, refer to *Review a Field* on page 4-1 in this section.
3. All of the transactions used in a multiple transaction operation must use the same host computer. A special multiple transaction group code identifies the host computer assigned to a transaction. For example, if one host computer processes the transactions initiated by keys [1], [2] and [3], all three keys would have the same transaction group code.

You can view the transaction group number in Memory Locations X12 (X = the host transaction key numbers 1 through 9).

After the above conditions are met, use the following procedure to perform multiple transactions:

Display	Response
1. (idle prompt)	Press the [ALPHA/MULTI] key.
2. MULTI TRANS	Press the desired host transaction key to perform the first transaction. When the transaction is completed, the final response message will remain on the display panel.

Display	Response
	Press another host transaction key to initiate the next transaction. It must use the same host computer and belong to the same transaction group as the previous transaction.
	Press [CLEAR] to display the idle prompt after the last transaction is completed.

Changing the System Password

Certain functions, such as STORE and RECALL, require the use of the system password to prevent unauthorized or accidental destruction of data. Each TRANZ 420 is shipped with the factory-set system password "Z66831" (press: [1] [ALPHA] [ALPHA] [6] [6] [8] [3] [1]).

You may want to change this password to an unpublished number. You can change the password at any time provided you know what the current password is. The password may contain up to 10 alphanumeric characters.

Follow these steps to change the system password:

Display	Response
1. FUNCTION?	Press [FUNC/ENTER] and then [ALPHA].
2. ENTER OLD PASSWD *****	Enter the old password. Each keypress will be displayed as an asterisk (*). Press [FUNC/ENTER] key.
3. ENTER NEW PASSWD *****	Enter the new password, then press [ENTER].
4. ENT PASSWD AGAIN *****	Enter the new password again, then press [ENTER].

If you correctly entered the password both times, the change is successful and the terminal returns to the idle state.

Resetting the Calendar/Clock

Follow these steps to reset the terminal's internal clock.

Note: An important part of verifying credit cards is checking the expiration date of the card. In order to make this check valid, you must ensure that the correct date is entered and maintained in the terminal at all times.

Display	Response
1. (idle prompt)	Simultaneously press [*] and [3].
2. PASSWORD *****	If Memory Location 017 contains a non-zero number, you will be required to enter your password. Enter the system password to unlock the terminal's memory, then press [FUNC/ENTER]. Otherwise, skip to Step 3.
3. DIAGNOSTICS	Press [ALPHA] to begin the function.
4. RTC CHIP TEST	The terminal displays this message for 2 seconds while it tests the real time clock (RTC) chip. The terminal then prompts you through the following entries for resetting the date and time. If you make a mistake, press [BACKSPACE] and reenter the correct information. Press [FUNC/ENTER] after each entry.
5. YEAR 1980-2079 =	Enter the last two digits for the current year. For example, enter "95" for the year 1995.
6. MONTH =	Enter a number, 1 through 12, to identify the current month. For example, enter the number "6" for June.
7. DATE =	Enter a number, 1 through 31, to identify the current date. For example, enter "14" for the date June 14.
8. HOUR 0-23 =	Enter a number, 0 through 23, to identify the current hour. For example, enter "10" if the time is 10:14.
9. MINUTES =	Enter the number of minutes, from 0 to 59, currently past the hour. For example, enter "14" if the time is 10:14.
10. SECONDS =	Enter the number of seconds, from 0 to 59, currently past the minute. For example, enter "23" if the time is 10:14 and 23 seconds.
11. (day of week, date and time)	The terminal displays the new date and time.

Eliminating "PROGRAMING ERROR"

If your terminal displays a "PROGRAMING ERR X" message, where "X" is the error code, you have two options to attempt recovery:

1. Press the [3] and [5] keys simultaneously. The TRANZ 420 recalculates the checksum digit that may be the cause of the "PROGRAMING ERROR" and the application will be saved. VeriFone recommends that you reprogram the terminal once you transmit or close the batch.
2. Press the [1] and [ENTER] keys simultaneously until the calendar/clock reappears on the display. Your terminal is now ready to be reloaded with software.

Downloading from One Terminal to Another

You can quickly copy or "download" an application from one terminal to another, using the proper download cable. This method is much faster than downloads performed over the telephone line.

1. Plug both terminals into a 120 VAC power outlet.
2. Connect the communication cable to the 8-pin mini-DIN connector on the sides of both terminals.

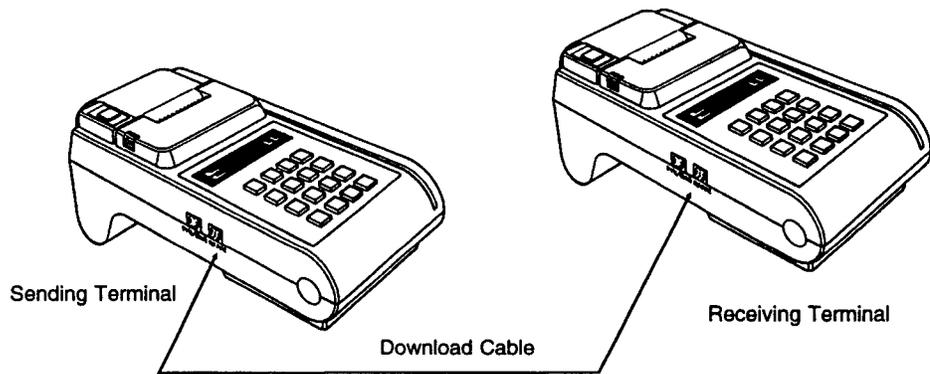


Figure 4-2. Terminal-to-Terminal Download Connections

3. Press [ENTER] + [*] on the sending terminal. The display shows:
UNIT SEND
4. Press [ENTER] + [#] on the receiving terminal. The display shows:
UNIT RECEIVE

Note: Steps 3 and 4 can be done in either order. You may be required to enter the system password.

Fraud Control Programming

You can help control credit card fraud at the merchant location several ways using an FDC terminal.

- Require the clerk to key in the last 4 digits of the embossed card number after sliding the card through the cardreader. The terminal compares data read off the card's magnetic stripe with data entered on the keypad.
- Check the contents of the card's magnetic stripe on the terminal display after sliding it through the cardreader.
- Program your terminal for both features.

Program Field X06 for each card key you want to have these features, where X = key number.

For example, if you want FRAUD CONTROL on your SALE and AUTH ONLY keys, program Fields 106 and 306 (Keys 1 and 3).

Field	Entry
X06 (X = key number)	Enter 0, 1, 2, or 3, then press [ENTER].
	0 = None
	1 = Enter last 4 digits
	2 = Display mag stripe
	3 = Options 1 and 2

5. Programming the TRANZ 420 Terminal for Use

Check Memory Location 019 to ensure your terminal is loaded with the correct software version before you begin programming. Press BLUE + 7 + 019. The terminal should display " 019 = FEPR421." If memory location 019 contains data other than this, contact your VeriFone representative.

To prepare your terminal for use, you must enter the Setup function key sequence (BLUE + 4) and Codes 0 through 9 for the selected setup.

- | | |
|--------------------------|------------------------|
| 1 = Host Setup | 7 = Printer Type |
| 2 = Account Range Tables | 8 = Change Idle Prompt |
| 3 = Security Setup | 9 = Clear Batch |
| 4 = Password Setup | 0 = Card Type Label |
| 5 = Terminal Options | |

Note: This application displays current data for verification or change.

Host Information

Use this function to store the FDC ETC PLUS host telephone numbers and merchant IDs. The Merchant ID should be programmed without a prefix. To enter the Host setup:

1. Press BLUE + 4.
2. Key in the manager password.
3. Press the BLUE enter key.
4. Press Code 1.

Note: You may press [ENTER] to bypass any field and not disturb what has already been programmed. If something is already programmed and you wish to make a change, first press [BACKSPACE], then key in the new data.

Display	Response
PRIMARY PHONE?	FDC Host primary and secondary phone numbers and merchant ID number. If you need to dial "9" first, then pause, enter "9-XXXXXXX". Each "-" causes a 2-second delay in dialing. If this is an FDC "public port" number, you must add "LØ" or "XØ" at the end of the telephone number. For example, if the local "public port" number is 123-4567, you must key in "1234567LØ" or "1234567XØ".
SECOND PHONE?	
CLOSE PHONE?	
MERCH ID?	

Account Ranges

Use this function to program the card types your terminal will accept. To enter the Account Range setup:

1. Press BLUE + 4.
2. Key in the manager password.
3. Press the BLUE enter key.
4. Press Code 2.

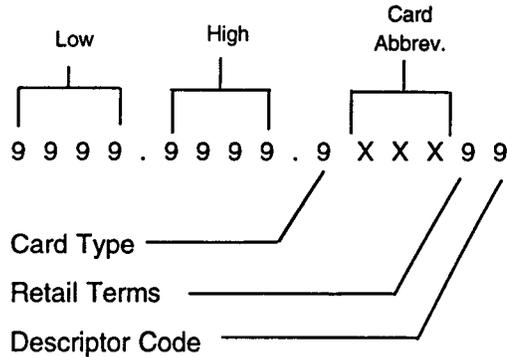
Note: You may scroll past fields you wish to leave unchanged unless the terminal prevents you, in which case you must enter a value.

You can change/modify one item in a card account range provided you scroll past all remaining prompts in the card range.

Display	Response
CARD RANGE INFO ACCT RANGE ITEM?	Enter a digit 1–9. The number you enter here determines the field between 043 and 051 in which the card range is stored. If you enter "1", the entire account range will be stored in Field 043.
n-LOW?	Enter the first 4 digits of the low range of the credit card account number, then press [ENTER]. For example, the low account number range for VISA is 4000.
n-HIGH?	Enter the first 4 digits of the high range of the credit card account number, then press [ENTER]. For example, the high account number range for VISA is 4999.
n-CARD TYPE ?	Enter the card type, 1–6, then press [ENTER]. For example: 1 = VISA or MasterCard 2 = American Express or Diner's Club 3 = Discover etc. <i>Note: The application uses this information to generate reports by card type.</i>
n-CARD ABBREV?	Enter the card abbreviation, then press [ENTER]. (VIS = VISA, MC = MasterCard, etc.)
n-TERMS? Y/N	Select "Y" for Retail Terms prompting, or "N" for no prompt.
n-DES CODE 0/2/4	Select "0" for no Descriptor Code prompting, or "2" or "4" to allow 2- or 4-digit Descriptor Codes.

5. Programming the TRANZ 420 Terminal for Use

Normal Entries for All Card Types



Acct Range #1 (043) = 4000.4999.1VIS00
 Acct Range #2 (044) = 5000.5999.2MC 00
 Acct Range #3 (045) = 3400.3799.3AMX00
 Acct Range #4 (046) = 3000.3899.4DC 00
 Acct Range #5 (047) = 6011.6011.5DIS00
 Acct Range #6 (048) = 0000.0999.6FDC00
 Acct Range #7 (049) - #9 (051) =<empty>

Note: The "." after the low and high fields is required to make the account ranging work properly.

Security Setup

Use this function to set password protection for each individual terminal transaction or function. To enter the Security setup:

1. Press BLUE + 4.
2. Key in the manager password.
3. Press the BLUE enter key.
4. Press Code 3.

Display	Response
SECURITY	
SET SALE? Y/N	Enter [Y] to set password protection for a transaction, or [N] if you do not wish to password protect the transaction. Press keys [9] and [6] for "Y" and "N" responses.
SET RETURN? Y/N	
SET AUTH? Y/N	
SET VOID? Y/N	
SET TICKET ONLY? Y/N	To access protected functions, the operator must enter the manager password.
SET DEP INQ? Y/N	
SET CLOSE? Y/N	
SET ITM REV? Y/N	
SET TOT REV? Y/N	
SET SETUP? Y/N	
SET PRINT? Y/N	

Update Password

Use this function to update the manager password. To enter the Update Password setup:

1. Press BLUE + 4.
2. Key in the manager password.
3. Press the BLUE enter key.
4. Press Code 4.

Display	Response
UPDATE PASSWD ENTER NEW PASSWD VERIFY NEW PASSW	Enter the new manager password. Enter the password a second time to verify. If both entries match, the terminal displays "PASSWORD UPDATED."

Options Setup

Use this function to set terminal options. To enter the Options setup:

1. Press BLUE + 4.
2. Key in the manager password.
3. Press the BLUE enter key.
4. Press Code 5.

Display	Response
OPTIONS DEVICE ID?	Press [BACKSPACE], enter a 4-character operator ID if there is one, then press [ENTER]. Press [ENTER] to bypass this prompt or press [BACKSPACE] then [ENTER] to leave this field blank. <i>At the following prompts, press [9] for "Y" and [6] for "N" responses.</i>
INVOICE #? Y/N	Select "Y" for the terminal to prompt for entry of the invoice number, or "N" for no prompt.
OPERATOR ID? Y/N	Select "Y" for the terminal to prompt for entry of an operator ID, or "N" for no prompt.
PHONE ORDER? Y/N	Select "Y" for the terminal to prompt for Phone Orders, or "N" for no prompt.
PREPRINT? Y/N	Select "Y" if you are using a roll printer and wish the receipt header to print before the terminal dials, or "N" for no preprinting.
RECEIPT? Y/N	Select "Y" if you wish the printer to automatically print receipts for all transactions, or "N" for no receipt printing.

5. Programming the TRANZ 420 Terminal for Use

Display	Response
AUTO REPORT? Y/N	Select "Y" if you wish the printer to automatically print the Detail and Terminal Totals reports at Batch Close.
AUTO INSERT? Y/N	Select "Y" if you wish the terminal to automatically insert current batch totals during a batch close, or "N" for manual entry of totals.
DEBIT? Y/N	Select "Y" to enable Debit functionality.

Printer Type

Use this function to identify the type of printer you will be using. To enter the Printer Type setup:

1. Press BLUE + 4.
2. Key in the manager password.
3. Press the BLUE enter key.
4. Press Code 7.

Display	Response
PRINTER SELECT PRINTER? Y/N	This prompt appears if there is anything stored in Memory Location 950. Press [6] for "N" to remove the printer and return to the "ENTER SETUP CODE" prompt or press [9] for "Y" to continue.
MERCHANT LOGO LINE 1? LINE 6?	Enter the merchant name and address using up to 24 characters per line and up to six lines of information. If data is already present, press [BACKSPACE], enter the information, and press [ENTER], or [BACKSPACE] and [ENTER] to leave the field empty. If no data is present, key in data and press [ENTER].
FLEX AGREEMENT LINE 1? LINE 4?	Enter up to 4 flexible agreement lines using up to 24 alphanumeric characters per line. If data is already present, press [BACKSPACE], enter the agreement information, then press [ENTER], or press [BACKSPACE] and [ENTER] to leave this field empty. If no data is present, key in data and press [ENTER].

Display	Response
FLEX MESSAGE LINE 1? LINE 2?	Enter up to 2 flexible message lines, using up to 24 characters per line. If data is already present, press [BACKSPACE], enter the message line, then press [ENTER], or press [BACKSPACE] and [ENTER] to leave this field empty. If no data is present, key in data and press [ENTER].

Change Idle Prompt

Use this function to program your terminal to display a custom prompt. To enter the Change Idle Prompt setup:

1. Press BLUE + 4.
2. Key in the manager password.
3. Press the BLUE enter key.
4. Press Code 8.

Display	Response
IDLE PROMPT	Press [BACKSPACE] and enter up to 16 alphanumeric characters, then press [ENTER], or press [BACKSPACE], then [ENTER] to use the default idle prompt "READY **nnn**.

Clear Batch

Use this function to clear all terminal transactions. To enter the Clear Batch setup:

1. Press BLUE + 4.
2. Key in the manager password.
3. Press the BLUE enter key.
4. Press Code 9.

Display	Response
CLEAR BATCH CLEAR? Y/N	Enter [9] for "Y" to continue, or [6] for "N" to return to the ENTER SETUP CODE prompt.
ENTER TO CONFIRM	Press the [ENTER] key. The terminal clears the batch and returns to the setup code prompt.

Card Type

Use this function to enter the card type. To enter the Card Type setup:

1. Press BLUE + 4.
2. Key in the manager password.
3. Press the BLUE enter key.
4. Press Code 0.

Display	Response
CARD NAME	
ENTER CARD TYPE	Enter a number 1–6 to select the card type to name. 1 = VISA or MasterCard 2 = American Express or Diner's Club 3 = Discover 4 = FDC etc.
<card name>	Enter the card name, up to 8 characters, then press [ENTER].

Memory Map of Important Locations

You can review your programming of the FDC TRANZ terminal by pressing BLUE + 7, then keying in the desired field. See Section 4, *General Programming*, for procedures to follow if you wish to review or change selected fields. Refer to Appendix D, *ZONTALK 2000 Download Parameters*, for specific download information pertaining to this application.

6. Standard Key Operations

Retail transactions are common, unprotected transactions that all personnel can perform. These transactions include sale authorization, return/credit, void, ticket only, inquiry, close batch and debit transactions.

The FDC TRANZ 420 terminal idle prompt, "nnn" indicates spaces left for storage of transactions. For example, READY **3** indicates there is space to store 3 more transactions in the current batch. When the file is full, the idle display will show "BATCH FULL" and no further transactions will be stored until you close the batch and clear the file from the terminal.

Note: Displays that appear during terminal communications with the host may differ depending upon the selected protocol and log on.

Credit Sale

Follow these procedures to capture a credit sale transaction that requires host authorization.

Display	Response
1. READY **nnn** SALE	Press the [1] key labeled SALE and go to Step 3, or slide the card through the cardreader and go to Step 4.
2. ENTER PASSWORD *****	Enter the manager password if required, then press [ENTER]. The display echoes each keypress with an asterisk.
3. itm ENTER ACCT #	Enter the account number via the keypad, then press [ENTER].
	<i>Note: "itm" is the item number for this transaction.</i>
4. CREDIT=0 ATM=1	This prompt is displayed only if ATM is enabled in Setup and the Power Source is set to Y. Select "0" for a Credit Sale transaction, then press [ENTER].
5. EXPIRES MMY	Enter the 4-digit expiration date using 2 digits each for month and year, then press [ENTER].
PROCESSING...	

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Display	Response
<i>Note: The following prompts in Step 6 and Steps 8 through 11 may or may not appear, depending upon options selected in setup.</i>	
6. OPERATOR ID	Enter the 2-digit operator ID number, then press [ENTER].
7. AMOUNT OF SALE?	Enter the amount of the sale without the decimal, then press [ENTER].
8. RETAIL TERMS	Enter the retail terms, up to 4 digits, then press [ENTER].
9. PHONE ORDER? Y/N	Enter [9] for "Y" if this is a phone order, or [6] for "N" if it is not, then press [ENTER]. Press [ENTER] to bypass for no Phone Order.
10. DESC CODE	Enter the descriptor codes, up to 4 sets, then press [ENTER].
11. ENTER INVOICE #	Enter the invoice number up to 8 digits, then press [ENTER].
PROCESSING ...	
12. WAITING FOR ANSR CONNECTED TRANSMITTING RECEIVING	Wait—the terminal is communicating with the host computer.
13. <host message>	The terminal displays the host response. Record the approval number. If the transaction is disapproved, you should take necessary action. Press [CLEAR] to return to the idle prompt.
PRINTING...	If the transaction is approved and receipt printing is enabled, the printer prints a receipt of the transaction.
14. READY **nnn**	The terminal returns to the idle prompt indicating it is ready for the next transaction.

ATM Sale

Follow these procedures to capture an ATM sale transaction that requires host authorization.

Display	Response
1. READY **nnn** SALE	Press the [1] key labeled SALE and go to Step 3, or slide the card through the cardreader and go to Step 4.
2. ENTER PASSWORD *****	Enter the manager password if required, then press [ENTER]. The display echoes each keypress with an asterisk.
3. itm ENTER ACCT #	Enter the account number via the keypad, then press [ENTER].
	<i>Note: "itm" is the item number for this transaction.</i>
4. CREDIT=0 ATM=1	This prompt is displayed only if ATM is enabled in Setup and the Power Source is set to Y. Select "1" for an ATM Sale transaction, then press [ENTER].
5. EXPIRES MMY PROCESSING ...	Enter the 4-digit expiration date using 2 digits each for month and year, then press [ENTER].
6. OPERATOR ID	Enter the 2-digit operator ID number, then press [ENTER].
7. AMOUNT OF SALE?	Enter the amount of the sale without the decimal, then press [ENTER].
8. ENTER INVOICE #	Enter the invoice number up to 8 digits, then press [ENTER].
9. WAITING ON PIN <i>PINpad device:</i> TOT. \$99999.99	The terminal displays a "waiting" message. The PINpad device displays the amount.
10. WAITING ON PIN <i>PINpad device:</i> ENTER PIN PUSH "ENTER"	The terminal displays a "waiting" message. The customer enters his/her PIN on the PINpad device, followed by [ENTER].

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Display	Response
11. WAITING FOR ANSR CONNECTED TRANSMITTING RECEIVING <i>PINpad device:</i> PROCESSING	Wait—the terminal is communicating with the host computer. Wait—the terminal is processing data.
12. <host message> <i>PINpad device:</i> THANK YOU PRINTING...	The terminal displays the host response. Record the approval number. If the transaction is disapproved, you should take necessary action. Press [CLEAR] to return to the idle prompt. If the transaction is approved, the printer prints a receipt of the transaction.
13. READY **nnn**	The terminal returns to the idle prompt indicating it is ready for the next transaction.

Credit Return

Follow these procedures to authorize a credit return. This transaction is always performed offline.

Display	Response
1. READY **nnn** RETURN	Press the [2] key. The terminal pauses and displays the type of transaction.
2. ENTER PASSWORD *****	Enter the manager password if required, then press [ENTER]. The display echoes each keypress with an asterisk.
3. itm ENTER ACCT #	Enter the account number via the keypad, then press [ENTER] and continue with Step 6, or slide the card through the cardreader. If entry is made via the cardreader, continue with Step 5.
4. CREDIT=0 ATM=1	This prompt is displayed only if ATM is enabled in Setup and Power Source is set to Y. Enter "0" for a Credit Return, then press [ENTER].
5. EXPIRES MMY	Enter the 4-digit expiration date using 2 digits each for month and year, then press [ENTER].
PROCESSING ...	

Note: The following prompts in Step 6 and Steps 8 through 11 may or may not appear, depending upon options selected in setup.

6. OPERATOR ID	Enter the 2-digit operator ID number, then press [ENTER].
7. AMOUNT OF SALE?	Enter the amount of the sale without the decimal, then press [ENTER].
8. RETAIL TERMS	Enter the 4-digit retail terms, then press [ENTER].
9. PHONE ORDER? Y/N	Enter [9] for "Y" if this is a phone order, or [6] for "N" if it is not, then press [ENTER]. Press [ENTER] to bypass for no Phone Order.
10. DESC CODE	Enter the descriptor codes, up to 4 sets, then press [ENTER].
11. ENTER INVOICE #	Enter the invoice number up to 8 digits, then press [ENTER].

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Display	Response
PROCESSING...	
12. ACCEPTED itm (itm=trans. item #)	Record the approval number. Press [CLEAR] to return to the idle prompt.
PRINTING...	If receipt printing is enabled, the printer prints a receipt of the transaction.
13. READY **nnn**	The terminal returns to the idle prompt indicating it is ready for the next transaction.

ATM Return

Follow these procedures to authorize an ATM return. This transaction is always performed online.

Display	Response
1. READY **nnn** RETURN	Press the [2] key. The terminal pauses and displays the type of transaction.
2. ENTER PASSWORD *****	Enter the manager password if required, then press [ENTER]. The display echoes each keypress with an asterisk.
3. itm ENTER ACCT #	Enter the account number via the keypad, then press [ENTER] and continue with Step 5, or slide the card through the cardreader. If entry is made via the cardreader, continue with Step 4.
4. CREDIT=0 ATM=1	This prompt is displayed only if Debit is enabled in Setup and you entered "Y" in Step 4. Enter "1" for a Debit Return, then press [ENTER].
5. EXPIRES MMY PROCESSING ...	Enter the 4-digit expiration date using 2 digits each for month and year, then press [ENTER].
6. OPERATOR ID	Enter the 2-digit operator ID number, then press [ENTER].
7. AMOUNT OF SALE?	Enter the amount of the sale without the decimal, then press [ENTER].
8. ENTER INVOICE #	Enter the invoice number up to 8 digits, then press [ENTER].
9. WAITING ON PIN <i>PINpad device:</i> TOT. \$99999.99	The terminal displays a "waiting" message. The PINpad device displays the transaction amount.
10. WAITING ON PIN <i>PINpad device:</i> ENTER PIN PUSH "ENTER"	The terminal displays a "waiting" message. The customer enters his/her PIN on the PINpad device, followed by [ENTER].

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Display	Response
11. WAITING FOR ANSR CONNECTED TRANSMITTING RECEIVING <i>PINpad device:</i> PROCESSING	Wait—the terminal is communicating with the host computer. Wait—the terminal is processing data.
12. <host message> <i>PINpad device:</i> THANK YOU PRINTING...	The terminal displays the host response. Record the approval number. If the transaction is disapproved, you should take necessary action. Press [CLEAR] to return to the idle prompt. If the transaction is approved, the printer prints a receipt of the transaction.
13. READY **nnn**	The terminal returns to the idle prompt indicating it is ready for the next transaction.

Auth Only

This transaction is used to authorize a transaction without ticket data capture.

Display	Response
1. READY **nnn** AUTH ONLY	Press the [3] key labeled AUTH ONLY. The terminal displays the type of transaction.
2. ENTER PASSWORD *****	Enter the manager password if required, then press [ENTER]. The display echoes each keypress with an asterisk.
3. ENTER ACCOUNT #	Enter the account number via the keypad or slide the card through the cardreader. If entry is made via the cardreader, go to Step 5.
4. EXPIRES MMY PROCESSING ...	Enter the card's expiration date, using 2 digits each for month and year, then press [ENTER].
5. AMOUNT OF SALE ?	Enter the amount of the sale without the decimal, then press [ENTER].
6. PHONE ORDER? Y/N	Enter [9] for "Y" if this is a phone order, or [6] for "N" if it is not, then press [ENTER]. Press [ENTER] to bypass for no Phone Order.
	<i>Note: This prompt may or may not appear, depending upon options selected in Setup.</i>
7. WAITING FOR ANSR CONNECTED TRANSMITTING RECEIVING	Wait—the terminal is communicating with the host computer.
8. <host message> PRINTING...	The terminal displays the host response. Record the approval number. If the transaction is disapproved, you should take necessary action. Press [CLEAR] to return to the idle prompt. If the transaction is approved and receipt printing is enabled, the printer prints a receipt of the transaction.
9. READY **nnn**	The terminal returns to the idle prompt indicating it is ready for the next transaction.

Void

Follow these procedures to void a transaction completed earlier in the batch. Voids are always approved offline.

Note: You cannot void a debit transaction.

Display	Response
1. READY **nnn** VOID	Press the [4] key labeled VOID.
2. ENTER PASSWORD *****	Enter the manager password if required, then press [ENTER]. The display echoes each keypress with an asterisk.
3. ENTER ITEM # NOT FOUND	Press [ENTER] to display the last transaction or enter the item number of the transaction you wish to void, then press [ENTER]. The terminal cannot find the entered item number. Press [CLEAR] to return to the idle prompt.
4. itm AA \$99999.99 9999999999999999 OP I I I I I I I I RET TERMS 9999 8888888888888888 AAAAAAAAAAAXXXXXX	The terminal displays the transaction data where: itm = item number AA = transaction type \$99999.99 = amount of sale 999....999 = account number OP = operator ID I I I I I I I I = invoice number RE TERMS 9999 = retail terms 8888888888888888 = descriptor codes AAAAAAAAAAAA = host response Press [*] or [#] to scroll the display. Press [ENTER] to continue or [CLEAR] to end the transaction.
5. VOID-PRESS ENTER	Press [ENTER] to continue or [CLEAR] to return to the idle prompt.
6. ENTER TO CONFIRM PROCESSING ...	Press [ENTER] to confirm the void, or [CLEAR] to end the transaction.
7. ACCEPTED itm (itm=trans. item #) PRINTING...	The transaction was approved offline. If receipt printing is enabled, the printer prints a receipt of the transaction. Press [CLEAR] to return to the idle prompt.

6. Standard Key Operations

Display	Response
8. READY **nnn**	The terminal returns to the idle prompt indicating it is ready for the next transaction.

Ticket Only

Follow these steps to process Ticket Only transactions.

Note: This transaction is always processed offline.

Display	Response
1. READY **nnn** TKT ONLY	Press the [5] key, labeled TKT ONLY.
2. ENTER PASSWORD *****	Enter the manager password if required, then press [ENTER]. The display echoes each keypress with an asterisk.
3. itm ENTER ACCT #	Slide the card through the cardreader or enter the account number on the keyboard, then press [ENTER]. If entry is made via the cardreader, go to Step 5.
4. EXPIRES MMY PROCESSING...	Enter the 4-digit card expiration date using 2 digits each for the month and year, then press [ENTER].

Note: The following prompts in Step 5 and Steps 7 through 11 may or may not appear, depending upon options selected in setup.

5. OPERATOR ID	Enter the 2-digit operator ID number, then press [ENTER].
6. AMOUNT OF SALE ?	Enter the amount of the sale without the decimal, then press [ENTER].
7. RETAIL TERMS	Enter the 4-digit retail terms, then press [ENTER].
8. PHONE ORDER? Y/N	Enter [9] for "Y" if this is a phone order, or [6] for "N" if it is not, then press [ENTER]. Press [ENTER] to bypass for no Phone Order.
9. ENTER AUTH CODE	Enter the authorization code, up to 6 alphanumeric characters, then press [ENTER].
10. DESC CODE	Enter the descriptor code, up to 4 sets, then press [ENTER].
11. ENTER INVOICE # PROCESSING ...	Enter the invoice number up to 8 digits, then press [ENTER].

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Display	Response
12. ACCEPTED itm	The terminal displays this response if the transaction was approved. Record the approval number. Press [CLEAR] to return to the idle prompt.
PRINTING...	If the transaction is approved and auto print is enabled, the printer prints a receipt of the transaction.
13. READY **nnn**	The terminal returns to the idle prompt indicating it is ready for the next transaction.

Inquiry

Follow these procedures to check the dollar amount of the previous business day's deposits.

Display	Response
1. READY **nnn** INQUIRY	Press the [6] key labeled INQUIRY.
2. ENTER PASSWORD *****	Enter the manager password if required, then press [ENTER]. The display echoes each keypress with an asterisk.
3. CREDIT=0 ATM=1	This prompt only appears if ATM is enabled in Setup and Power Source is set to Y. Enter "0" for a Credit inquiry, or "1" for an ATM inquiry, then press [ENTER].
4. WAITING FOR ANSR CONNECTED TRANSMITTING RECEIVING	Wait—the terminal is communicating with the host computer.
5. <host response>	A dollar amount is displayed on the terminal. Press [*] or [#] to scroll the display. Press [CLEAR] to return to the idle prompt.
6. READY **nnn**	The terminal returns to the idle prompt indicating it is ready to proceed with the next transaction.

Power Source

Press Key [7] to prompt for the Power Source. Press "9" for Yes (normal power) or "6" for No. You must select "Y" to enable the CREDIT=0 ATM=1 prompt.

Display	Response
1. READY **nnn**	Press the [7] key labeled POWER.
2. POWER SOURCE Y/N	Press "9" and [ENTER] for "Y" if the power source is plugged in. Press "6" and [ENTER] for "N" if the power is not plugged in.
3. READY **nnn**	The terminal returns to the idle prompt.

Close Batch

Follow this procedure to close a batch of transactions with the host. This clears the batch from the terminal's memory and enables it to store future transactions.

Display	Response
1. READY **nnn**	Press the [9] key labeled CLOSE.
CLOSE BATCH	
2. ENTER PASSWORD	Enter the manager password if required, then press [ENTER]. The display echoes each keypress with an asterisk.

3. ENTER AMOUNT	This prompt will only appear if the auto-insert totals option is set to "OFF". Enter the terminal total amount without the decimal, then press [ENTER].
PRINTING...	If Auto Report is set to "ON", the printer prints the Detail Report and Terminal Totals Report.
4. REPORTING? Y/N	This prompt only appears if Auto Report is set to "OFF". Enter [9] for "Y" to go to the print options menu and print the transactions in the batch, or [6] for "N" to continue.

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Display	Response
5. CLOSING > > > > CLOSING > > > >	The terminal is formally closing the batch with the host computer. The display alternates messages indicating it is transmitting and receiving.
6. <host response> PRINTING ...	Press [CLEAR] to return to the idle prompt. If Auto Print is enabled, the printer prints the close report.
7. READY **nnn**	The terminal returns to the idle prompt indicating it is ready to proceed with the next transaction.

7. Terminal Functions

Terminal functions include operations that do not require communication with a host. To use the terminal in the function mode, press the [FUNC/ENTER] blue key followed by the desired function key.

*Note: The **nnn** indicates the number of spaces left for storage of data capture transactions. For example, READY **3** indicates that there is space for storage of three more transactions.*

Item Review

Use this function to review items stored in the terminal capture file. You may also void a record using the [4] key, print an item and edit an amount field, however, you may not edit a voided record.

Note: Debit transactions cannot be edited.

Display	Response
1. READY **nnn**	Press [FUNC] and the [1] key labeled ITEM REV.
2. ENTER PASSWORD *****	Enter the manager password if required, then press [ENTER]. The terminal echoes each keypress with an asterisk.
3. ENTER CARD TYPE	Enter [1], [2] ... [6] for card type or press [ENTER] to review the beginning of the batch. <i>Note: If only one card type was set up for all cards, this prompt will not appear.</i>
4. ENTER ITEM #	Enter the item number of the transaction to review or press [ENTER] to review the first item in the batch.
NOT FOUND	The terminal cannot find the item number. Press [CLEAR] to return to the idle prompt. <i>Note: This prompt is a warning and may not be displayed. When it is displayed, follow the recommended response.</i>

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Display	Response
5. itm AA \$99999.99 9999999999999999 OPIIIIIII RET TERMS 9999 88888.....8888 AAAAAAAAAAAXXXXXX	<p>Press [*] or [#] to scroll the display fields. The terminal displays transaction data in 6 screens which contain the following data:</p> <p>itm = Item number AA = Transaction type \$99999.99 = Amount 9999999999999999 = Account number OP = Operator ID, if enabled IIIIIIII = Invoice number, if enabled RET TERMS 9999 = Retail terms, if enabled 88888.....88888 = Descriptor codes, if enabled AAAAAAAAAXXXXXX = Host response</p> <p>Press [ALPHA] to print this record and remain on this step. Press [4] to Void the record and continue with Step 6. If you are viewing an amount field and wish to change the amount, press [BACKSPACE], key in the new amount, press [ENTER] and remain at this step. Press [CLEAR] to end the record review, or press [ENTER] to view the next item.</p>
6. VOID-PRESS ENTER	Press [ENTER] to void this record, or press [CLEAR] to quit.
7. ENTER TO CONFIRM	Press [ENTER] again to confirm the void, or press any other key to return to Step 5. Press [CLEAR] to return to the idle prompt.
END OF BATCH	The terminal displays "END OF BATCH" after review of the last item in the batch. Press [CLEAR] to return to the idle prompt.
8. READY **nnn**	The terminal returns to the idle prompt indicating it is ready to proceed with the next function.

Totals Review

Follow this procedure to review terminal totals by card type(s), or operator ID.

Display	Response
1. READY **nnn**	Press [FUNC] and the [2] key labeled TOTALS.
2. ENTER PASSWORD *****	Enter the manager password if required, then press [ENTER]. The terminal echoes each keypress with an asterisk.
3. CARD=1 OP=2	Enter "1" for credit card transaction totals and continue with Step 4, or enter "2" for operator totals and continue with Step 7.
4. ENTER CARD TYPE	Enter [1], [2] . . . [6], for card type or press [ENTER] to go to Step 6 for the terminal grand total.
5. AAAAAAA 9T999 99999.99 9S999 99999.99 9R999 99999.99 9VS999 99999.99 9VR999 99999.99	The terminal displays the accumulator name for one second, then the specified totals for the card type. Press [*] or [#] to scroll the display. Press [ENTER] to return to Step 4 or [CLEAR] to end. 9 = card type 1-6 T = totals, no. items and amount S = Sale totals, no. items and amount R = Return totals, no. items and amount VS = Void Sale totals, no. items, amount VR = Void Return totals, no. items, amount
6. TT 999 999999.99 CDT 999 999999.99 DBT 999 999999.99	The terminal displays terminal totals, credit and debit totals. Press [ENTER] to return to Step 4 and enter another card type to review or press [CLEAR] to return to the idle prompt.
7. OPERATOR ID	Enter the operator ID for individual totals, then press [ENTER] and continue with Step 9, or press [ENTER] for all totals and continue with Step 8.
8. OT999999.99	The terminal displays totals for all operator IDs (OT= Operator Totals). Press [ENTER] to return to Step 7 and enter another operator ID.
9. O nn999999.99	The terminal displays totals for the selected operator ID. Press [ENTER] to return to Step 7 or [CLEAR] to return to the idle prompt.

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Display	Response
10. READY **nnn**	The terminal returns to the idle prompt indicating it is ready to proceed with the next function.

Print Options

Follow these procedures to print batch details, operator totals, terminal totals or to reprint the last receipt.

Display	Response
1. READY **nnn**	Press [FUNC] and the [5] key labeled PRINT.
2. ENTER PASSWORD *****	Enter the manager password if required, then press [ENTER]. The terminal echoes each keypress with an asterisk.
3. PRINT OPTION?	Enter the number that corresponds to the item you wish to print, then press [ENTER]. 1 - detail items 2 - terminal totals 3 - reprint last receipt If you select "1", continue with Step 4. If you select "2", continue with Step 7. If you select "3", continue with Step 8.
4. DETAIL ENTER CARD TYPE	Enter the card type, then press [ENTER] or press [ENTER] for all card types.
5. SORT BY ID? Y/N	Select "Y" to print a detail report by operator number and in item number order, and continue with Step 9. Select "N" for a detail report in item number order only and continue with Step 6.
6. ENTER ITEM #	Enter the item number and press [ENTER], or press [ENTER] for a printed list of all items and continue with Step 9.
7. TOTALS CARD=1 OP=2	Enter "1" for a printed report of credit card transaction totals, then press [ENTER], or enter "2" for a printed report of operator totals. Continue with Step 9.
RE-PRINT	The terminal displays this message for one second, then proceeds to reprint the last receipt.

7. Terminal Functions

Display	Response
8. ENTER ITEM #	Enter the item number of the record you wish to reprint, or press [ENTER] to reprint the last transaction, provided no new transaction has been initiated.
9. PRINTING....	The printer prints the selected option.
10. READY **nnn**	The terminal returns to the idle prompt and is ready to proceed with the next function.

8. TRANZ 420 Accessories

VeriFone provides an assortment of accessories to enhance your TRANZ 420 terminals.

- An extended 3-year warranty on all TRANZ 420 terminals
- Silk-screened custom overlays that display your company's logo and other special key functions



Telephone Cord

- An assortment of AC power packs for your "spares" inventory

- Telephone cords



PINpad 201 Device

- Duplex telephone adapters for connecting multiple telephone devices to a single jack

- PINpad devices for entering customer personal identification numbers

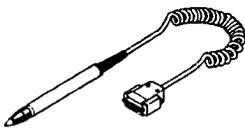
- Bar code wands for scanning bar codes



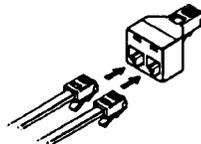
PINpad 101 Device

- RAM cartridges with variable memory configurations

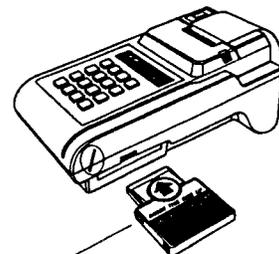
- Consumables such as paper and ribbons you can order by phone (800-233-0522) or FAX (714-434-2498)



Bar Code Wand



Telephone Adapter



RAM Cartridge

Appendix A. TRANZ 420 Integral Printer

The TRANZ 420 terminal features an integral Epson Model 180 24-character roll printer. Besides the default USA 96-character set, it is capable of supporting a number of special printing enhancements such as TALL, WIDE and INVERSE, 11 different country character sets and a number of useful graphics. Refer to Appendix E of the *TRANZ 420 Reference Manual*, Part Number 10663, for a list and examples of the different character sets as well as printer commands used to control the TRANZ 420 printer.

Paper Detect

There is a paper detection device that prevents printing a transaction without producing a printed receipt. When the paper sensor detects the lack of paper, the printer completes the line it is currently printing, then stops any additional printing.

Refer to Section 3 of this manual for instructions on loading a paper roll and ribbon cassette in the printer.

Specifications

Model: Epson Model M-180 mechanical micro-dot

Printing Method: Impact dot matrix (6 print solenoids)

Print Format: Total dots—144 max/1 dot line
Total columns—24 Max

Copy Capacity: 1 original + 1 copy

Ribbon Cassette: CRM0012-01, Black
CRM0012-02, Purple

Paper: CRM0013, woodfree, pressure sensitive

Reliability: MCBF (mean character between failure) 1 million lines

Dimensions: 91 mm wide, 46.9 mm deep, 15.8 mm high

Following is a sample printed receipt for the FDC Sale transaction, and samples of other printed reports.

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HEADER LINE 1 HEADER LINE 2 HEADER LINE 3 HEADER LINE 4 HEADER LINE 5 HEADER LINE 6	_____ Six programmable merchant message lines
XXXXXXXXXXXXXXXXXXXX XXXX DATE MM/DD/YY TIME HH:MM ?M ** RE-PRINT **	_____ Merchant ID, Terminal ID _____ Terminal Date and Time _____ Reprinted receipts only
ITEM: ITM CCC AAAAAA OP: XXXX ACCT: XXXXXXXXXXXXXXXXXXXX EXP: XXXX RESP: AAAAAAAA XXXXXX INV: X X X X X X X X AUTH: X X X X X X	_____ Item #, card, trantype _____ Operator ID _____ Account number _____ Expiration date _____ Host response _____ Invoice No. _____ Authorization code (optional)
P H O N E O R D E R	_____ Phone Order marker
TOTAL: \$ 9 9 9 9 9 . 9 9	_____ Total amount
.....	
I AGREE TO PAY ABOVE TOTAL AMOUNT ACCORDING TO CARD ISSUER AGREEMENT (MERCHANT AGREEMENT IF CREDIT VOUCHER)	_____ Cardholder agreement (flexible lines)
X _____ SIGNATURE	_____ Cardholder signature
TOP COPY - MERCHANT BOTTOM COPY - CUSTOMER	_____ Message to cardholder
FLEX MESSAGE 1 FLEX MESSAGE 2	_____ (2 flexible lines)

Figure A-1. Sample Sale Receipt

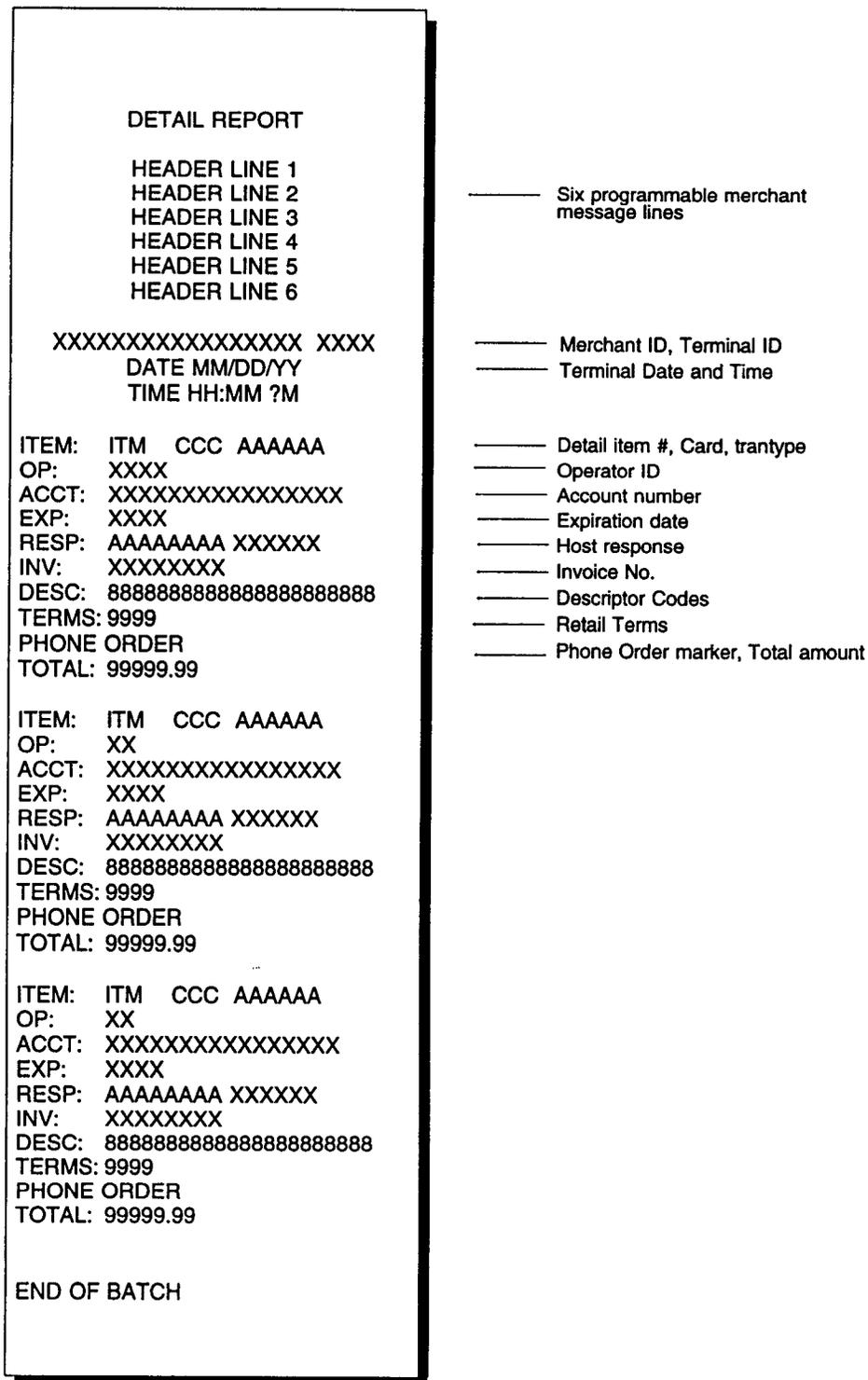


Figure A-2. Sample Detail Report

TOTALS REPORT			
HEADER LINE 1			_____ Six programmable merchant message lines
HEADER LINE 2			
HEADER LINE 3			
HEADER LINE 4			
HEADER LINE 5			
HEADER LINE 6			
XXXXXXXXXXXXXXXXXXXX XXXX			_____ Merchant ID, Terminal ID
DATE MM/DD/YY			_____ Terminal Date and Time
TIME HH:MM ?M			
# TRAN	COUNT	AMOUNT	
TT	nnn	xxxxxx.xx	_____ Terminal Total
1 S	nnn	xxxxxx.xx	_____ Card type 1, Sale total
1 R	nnn	xxxxxx.xx	_____ Card type 1, Return total
1 VS	nnn	xxxxxx.xx	_____ Card type 1, Void Sale total
1 VR	nnn	xxxxxx.xx	_____ Card type 1, Void Return total
2 S	nnn	xxxxxx.xx	_____ Card type 2, Sale total
.	.	.	
.	.	.	
.	.	.	
6 S	nnn	xxxxxx.xx	_____ Card type 6, Sale total
6 R	nnn	xxxxxx.xx	_____ Card type 6, Return total
6 VS	nnn	xxxxxx.xx	_____ Card type 6, Void Sale total
6 VR	nnn	xxxxxx.xx	_____ Card type 6, Void Return total
DEBITS T	nnn	xxxxxx.xx	_____ Debit count and amount

Figure A-3. Sample Totals Report

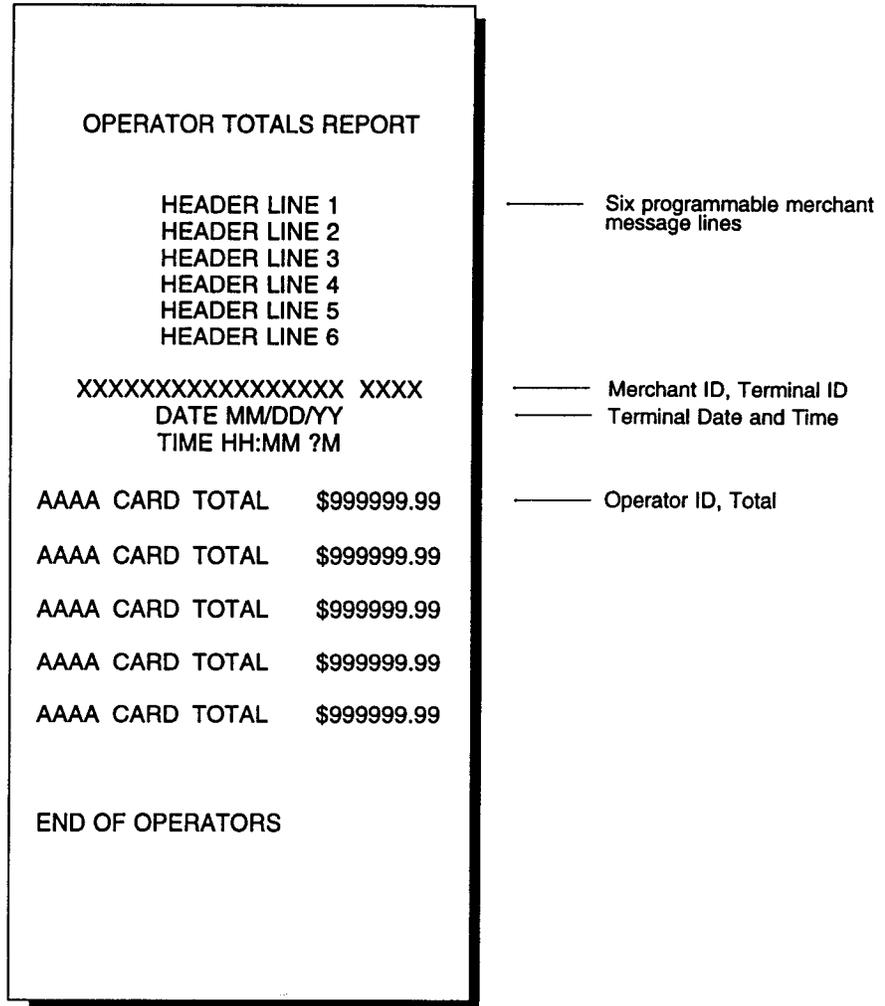


Figure A-4. Sample Operator Totals Report

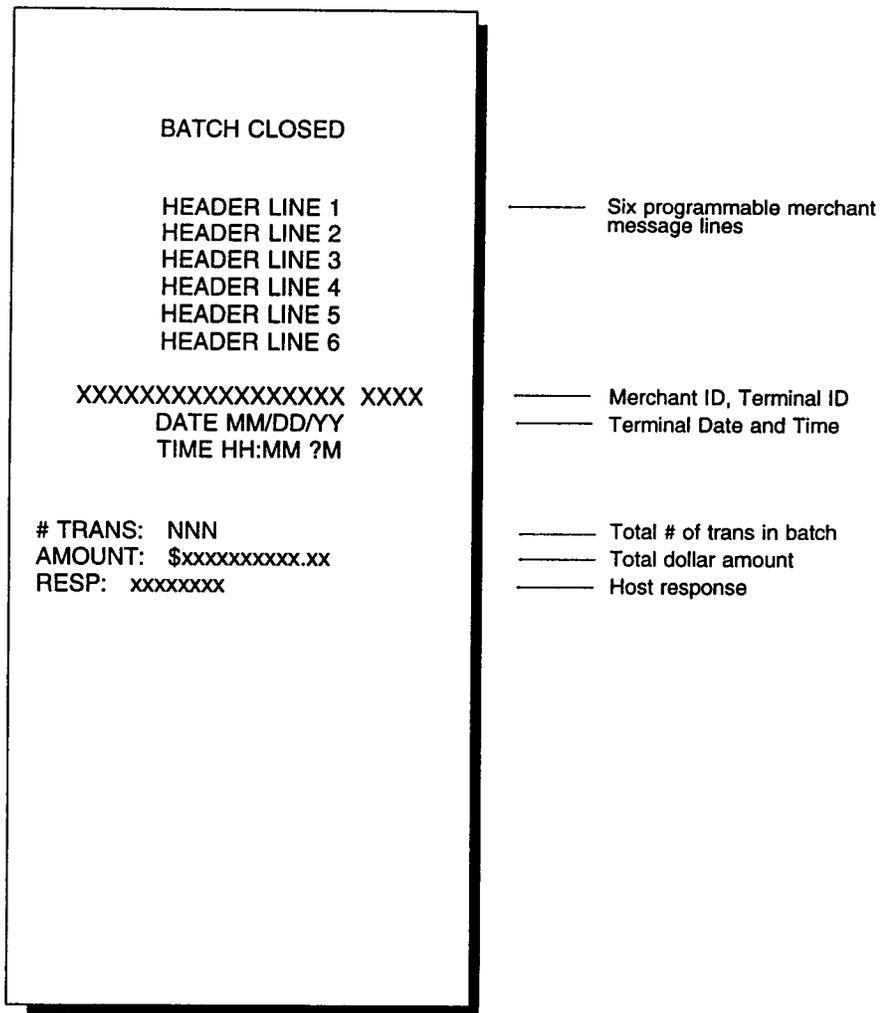


Figure A-5. Sample Batch Closed Header

Note: The batch number "xxxxxxx" appears in the form the user entered. It appears as blanks if the user pressed [ENTER] to bypass this field during the transaction. If the batch number option is set to OFF, a blank line appears instead of the batch number line.

Appendix B. PINpad 101 Device

Introduction

The PINpad 101 data entry device accepts Personal Identification Numbers (PINs) for Debit card transactions. Typically, a PIN is a 4- to 12-digit code known only by the customer and the bank. A PIN is used during retail transactions to verify that the customer is authorized to use the credit card offered; the PIN also serves as the electronic signature for the credit or debit transaction.

The PINpad device connects to a TRANZ 420 terminal that controls PIN operations and does the actual communication with the host computer.

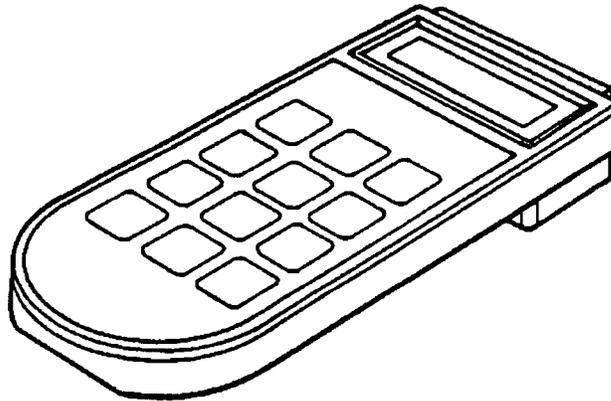


Figure B-1. PINpad 101 Device

PINpad 101 Device Components

The PINpad 101 device components include:

- 8-character display
- 12-key telephone-style keypad

Display

The 8-character display shows up to 16 characters through automatic scrolling. The PINpad 101 device displays fully-formed numerals, letters and special characters * and #. Information displayed includes characters entered from the keypad, instructions, prompts and error messages.

Selecting a Location for the PINpad Device

Select a location for the PINpad 101 device that is convenient for the customer and offers adequate ventilation and protection for the unit.

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

Unpacking

Carefully inspect the shipping carton and its contents for shipping damage. If the PINpad 101 device was damaged during shipment, immediately file a claim with the shipping company and notify VeriFone, Inc.

Note: Do not use the device if it has been damaged.

1. Remove the PINpad unit from the shipping carton.
2. Remove any protective plastic wrap and place the unit on a table or counter top.
3. Remove the protective plastic wrap from the display panel on the top of the PINpad device.
4. Replace all the packing materials, close the lid and save the carton for repacking or moving the PINpad unit in the future.

Connecting the PINpad Device to the Terminal

Unplug the terminal power pack before connecting the PINpad device.

The PINpad 101 device rear panel has a modular, 4-wire interface port for power and communication connection to the terminal.

Warning: Turn off or unplug the terminal whenever you connect or disconnect the PINpad 101 device. Be sure the terminal is not processing data when you cut power. Memory corruption and data loss can result.

Figure B-2 illustrates how to connect the unit to a TRANZ 420 terminal.

Plug the cable into the PIN connector on the rear of the terminal. Use the rubber grommet (cable cover) to protect the cord. See the lower illustrations for more detail.

1. Connect the modular plug on the PINpad unit cable to the modular jack on the rear of the PINpad device.
2. Connect the other end of the cable to the PINpad port on the rear of the terminal.
3. Spread the grommet open and put it on the cord with the narrow end facing the PINpad device.

- Slide the grommet up the cord and push its narrow end into the modular jack. When properly installed, the grommet should fit flat against the rear of the PINpad device.

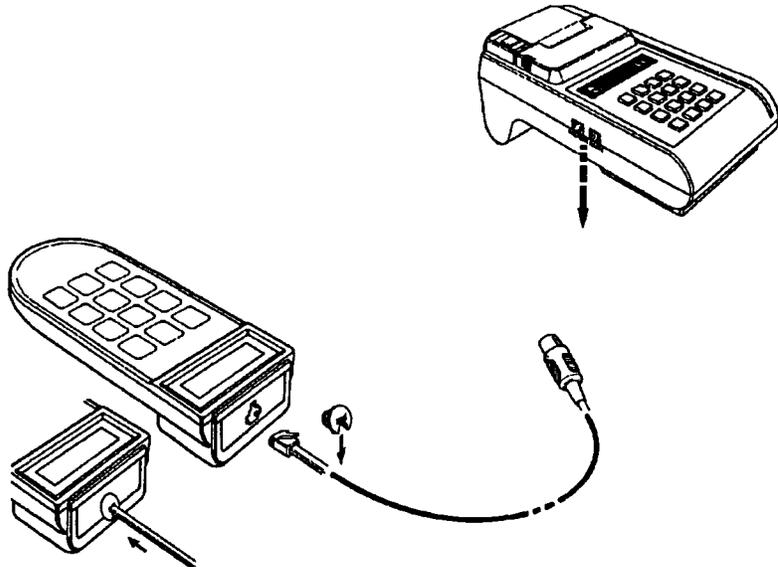


Figure B-2. PINpad 101 Device Cable Connections

PINpad Unit Mounting

The optional PINpad 101 unit mount holds your PINpad device securely to a counter top or a wall. The unit can be lifted from the mount anytime for hand-held operation.

First select a location for the mount on a smooth wall or counter top. Be sure the cable can easily reach the terminal from this position without stretching.

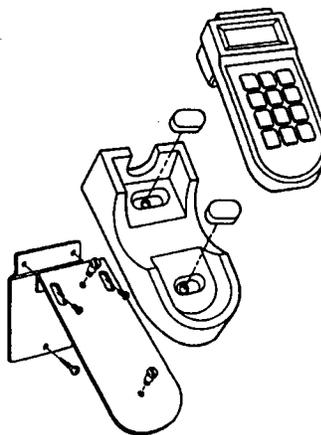


Figure B-3. PINpad 101 Unit Mount Components (Exploded View)

- Wall Mounting**
1. Screw the flat wall plate securely to the wall as shown in Figure B-3. Use screw anchors if you are fastening the mount to a cement or brick wall. If you are fastening the plate to drywall, the screws must go into the studs behind the wall. Screw anchors alone will not safely hold the PINpad mount to drywall.
 2. Fasten the angled metal bracket to the wall mount using the TORX machine screws provided. The two slots on the bracket allow a TORX screwdriver to reach these screws.
 3. Insert the two large slotted screws into the top of the angled bracket but do not tighten them yet.
 4. Position the keyholes on the molded cradle over the slotted screws on the angled bracket. Slide the mount to the right until both screws are in the narrow ends of the keyholes. If necessary, loosen the screws slightly until the cradle slides easily.
 5. Tighten the slotted screws to secure the cradle to the angled bracket. Insert the small molded covers to conceal the keyholes.
 6. Place the device firmly into cradle.

- Counter Top Mounting**
1. To secure the cradle, screw the wood screws into the counter top through the narrow ends of the keyholes. If you do not want to make any holes, use the double-faced tape provided with the wall mount.
 2. Place the PINpad unit firmly into the cradle.

PINpad 101 Device Startup

If the PINpad device master keys are loaded, the unit automatically starts up when connected to the terminal. Upon startup, the PINpad unit briefly displays the version and date followed by the idle prompt.

The Idle Prompt

The PINpad device displays rows of characters that resemble a marching arrow (< - - - - -). This is the idle prompt and indicates the PINpad 101 device is ready for use.

Using the Keypad

The PINpad 101 device has 12 keys—much like a standard telephone—including letters A through Z, numerals 0 through 9 and special characters * and # (see Figure B-4).

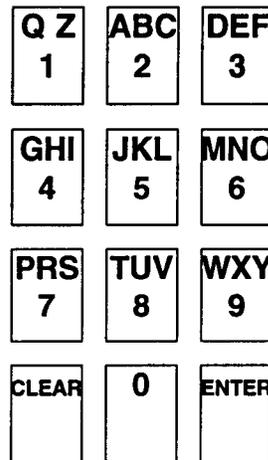


Figure B-4. PINpad Device Keypad

To complete a transaction, the PINpad device displays a prompt requesting PIN entry. Enter your PIN number and press [ENTER]. The PINpad device rotates a processing display when it successfully receives the PIN entry.

Note: You can clear the PINpad device display to reenter a PIN by pressing [CLEAR]. Refer to the PINpad 101 Reference and Programmer's Manual, P/N 10420, for more complete details.

Maintenance

VeriFone follows stringent quality control standards in manufacturing the PINpad 101 device. Each unit receives numerous tests before leaving the factory to ensure quality and reliability. However, should you encounter a problem in operation, read this section for possible causes and solutions.

Cleaning

Periodically clean the PINpad device with a clean cloth dampened with water and a mild soap or cleaner. Do not use harsh chemicals.

Warning: Because your PINpad device can be damaged by liquids, do not spray liquid cleaners directly on the unit. Always apply the cleaner to the cloth before cleaning the PINpad device.

Returning the PINpad Device

If you need to return your PINpad 101 unit for service or replacement, call the toll free number given below and ask for the VeriFone MRA (Merchant Return Authorization) desk. Be sure to mention the serial number found on the bottom of your unit.

If phoning from the United States, call 800-654-1674.

If phoning from outside the United States, call 714-979-1870.

Warning: Do not try to service, repair or adjust the PINpad device in any other way. Return the device to VeriFone if it does not operate properly.

Send the malfunctioning PINpad unit to VeriFone, Inc. 3080 Airway Ave., Costa Mesa, CA 92626 for repair or replacement.

Troubleshooting

These troubleshooting guidelines identify various problems and the appropriate corrective action. If you have a problem with your PINpad, read these

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troubleshooting examples. If your problem persists or is not listed here, call the toll free number (800-654-1674) and ask for the VeriFone MRA (Merchant Return Authorization) desk. You must have MRA desk approval before returning your equipment for repair.

Warning: Turn off or unplug the terminal whenever connecting or disconnecting it from the PINpad 101 unit. Do not turn off or unplug the controller while it is processing; memory corruption and data loss can result. See the controller instructions for controller-specific information and warnings.

Problem	Solution
Display Panel does not work	<ol style="list-style-type: none">1. Check all your cable connections.2. Check your terminal's AC outlet to be sure it's supplying sufficient power; substitute the terminal's power pack with another power pack.3. Your application program might not be loaded correctly; download the application program and try again.4. Run the display reliability test as described in the PINpad 101 Reference and Programmer's Manual, Part Number 10402. If the problem persists, phone the VeriFone MRA desk.
Keypad does not respond	<ol style="list-style-type: none">1. Check your display panel. If the wrong characters are displayed or nothing at all, refer to the solutions for previous problem.2. Run the manual keypad diagnostic as described in the PINpad 101 Reference and Programmer's Manual. If the problem persists, phone the VeriFone MRA desk.

Appendix C. Prompts and Error Messages

The following list includes the prompts and error messages that may appear on your terminal's display. The list consists of two columns:

- The left column is the message or prompt
- The right column contains an explanation of the message and any appropriate required response.

ACCEPTED itm	Approval response if the transaction was performed offline. Press [CLEAR] to return to the idle prompt.
ACCT RANGE ITEM?	Enter the account range item number 1–9, then continue to answer all prompts.
ALREADY VOIDED	Display indicating that the transaction selected to be voided has already been voided. Press [CLEAR] to return to the idle prompt.
AMOUNT OF SALE?	Enter the total amount of the sale without the decimal, then press [ENTER].
APPROVED: nnnnnn	Approval number on AUTHORIZATION ONLY transactions sent from the host.
AUTH ONLY	Display when key [3] is pressed when initiating procedures to authorize a sale. Wait for the next prompt.
BATCH IS FULL	Indicates that data capture memory is full and no more transactions can be stored in memory until data capture file is cleared.
CALL CENTER	Operator should call the credit authorization center voice line.
CARD=1 OP=2	In a Totals Review function, press "1" to review totals by card type or "2" to review operator totals. This prompt also appears in the Print Totals Report function.

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CARD RANGE INFO ACCT RANGE ITEM? n-LOW? n-HIGH? n-CARD TYPE? n-CARD ABBREV? n-TERMS? Y/N n-DES CODE 0/2/4	Setup Code 2 was entered allowing the operator to enter card range information. <i>Note: You must answer ALL prompts. Press [9] or [6] for "Y" and "N" responses.</i>
CARD NAME	Card Type setup display indicating you selected Code 0 of the Setup function. Wait for the next prompt.
CHECK PRINTER	The printer is not responding. Verify the printer is connected and turned ON. Press [CLEAR] to return to the idle prompt.
CLEAR BATCH	Display when Code 9 of the Setup function is selected. Wait for the next prompt.
CLEAR? Y/N	Setup function Code 9 allowing the operator to clear the terminal buffer and return to the setup mode. Press "Y" to continue or "N" to exit the function.
CLOSE BATCH	The Close Batch transaction, key [9], was selected.
CLOSING > > >	Close Batch display when the terminal is closing with the host.
COMMUNICATING	Display when the terminal is sending or receiving data from the download host.
CREDIT=0 ATM=1	Select "0" for a credit transaction, or "1" for an ATM transaction, then press [ENTER].
DECLINED	The host computer has declined authorization of a transaction.
DES CODE	Enter the descriptor codes, up to 4 sets, then press [ENTER].
DETAIL	Display indicating Print Option 1, audit detail, was selected.
DEVICE ID?	Terminal options setup prompt. Enter a 4-digit operator identifier, then press [ENTER], or press [ENTER] to bypass.
DIALING	The terminal is dialing the host computer.
DOES NOT BALANCE	Display indicating the amount keyed in at the time of the Close is not in agreement with the terminal balance.

Appendix C. Prompts and Error Messages

DOWNLOAD DONE	Display after completion of successful download.
END OF BATCH	Display in an Item Review function indicating the last item in the batch was reviewed. Press [CLEAR] to return to the idle prompt.
itm ENTER ACCT #	Enter the account number on the keyboard or slide the card through the cardreader. "itm" is the transaction item number, for example 001, 002, 010, etc.
ENTER AMOUNT	Enter the terminal total dollar amount of the batch you wish to close, then press [ENTER].
ENTER AUTH CODE	Enter the authorization Code up to 6 alphanumeric characters, then press [ENTER].
ENTER CARD TYPE	When reviewing terminal totals and detail transactions, press [1], [2]....[6] for the card type you wish to review. This prompt also appears in the Card Type setup function and the Print function.
ENTER ID NUMBER	Enter the ID number on the keyboard, then press [ENTER].
ENTER INVOICE #	Enter the invoice number for the transaction, then press [ENTER].
ENTER ITEM #	Enter the item number of the transaction to review, or press [ENTER] to review the first item in the batch.
ENTER NEW PASSWD	Enter the new manager password, then press [ENTER].
ENTER PASSWORD	Enter the manager password, then press [ENTER].
ENTER SETUP CODE	Enter the Code that corresponds to the selected option during a terminal setup function.
ENTER TO CONFIRM	Void transaction prompt. Press [ENTER] to confirm voiding the selected transaction record.
ENTER TRAN CODE	Enter the numeric transaction code, then press [ENTER] when requesting check authorization.
EXPIRY DATE MMY	Enter the 4-digit expiration date using 2 digits each for the month and year, then press [ENTER].

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FLEX AGREEMENT LINE 1? LINE 4?	Printer setup prompt. Enter up to 4 flexible agreement lines, using up to 39 alphanumeric characters per line. Press [BACKSPACE], then key in data and press [ENTER], or press [BACKSPACE] and [ENTER] to leave the line blank.
FLEX MESSAGE LINE 1? LINE 2?	Printer setup prompt. Enter up to 2 flexible message lines, using up to 39 alphanumeric characters per line. Press [BACKSPACE], then key in data and press [ENTER], or press [BACKSPACE] and [ENTER] to leave the line blank.
FUNCTION?	Prompt when the [FUNC/ENTER] key is pressed asking which function the operator wishes to initiate.
HOST INFO PRIMARY PHONE? SECOND PHONE? CLOSE PHONE? MERCH ID?	Setup Code 1 was selected. Enter the required host information.
IDLE PROMPT	Code 8 of the Setup function was selected. Press [ENTER] to leave the idle prompt unchanged. Press [BACKSPACE] and enter up to 16 alphanumeric characters to change the idle prompt, or [BACKSPACE] and [ENTER] to keep the default idle prompt READY **nnn**.
INQUIRY	Display indicating key [6] was pressed. Wait for the next prompt.
MERCHANT LOGO LINE 1? LINE 6?	Printer setup prompt. Enter up to 6 lines of merchant information, using up to 26 alphanumeric characters per line. Press [BACKSPACE], then key in data and press [ENTER], or press [BACKSPACE] and [ENTER] to leave the line blank.
NO ENQ FROM HOST	The terminal did not see the ENQ character from the host. Repeat the transaction, and if you receive the same message, call your authorization center for help.
NO MERCHANT ID	Display when a transaction is initiated and the merchant ID number was not entered in its memory location. Press [CLEAR] to return to the idle prompt, and follow procedures to enter the merchant ID number in the correct location.
NO TEL NUM	Display when a transaction is initiated and the host telephone number was not entered in its memory location. Press [CLEAR] to return to the idle prompt, and follow procedures to enter the telephone number in the correct location.

Appendix C. Prompts and Error Messages

NO TRANSACTIONS	Display when the operator attempts to close, review or print a batch and there are no transactions stored in the terminal's memory. Press [CLEAR] to return to the idle prompt.
NOT FOUND	The terminal cannot find the item number of the transaction to review that has been entered by user. Press [CLEAR] to return to the idle prompt.
OPERATOR ID	Enter the operator ID number, then press [ENTER].
OPERATOR ID? Y/N	Second display of Terminal options setup. Select "Y" to be prompted for the operator ID, or "N" for no prompt.
OPTIONS DEVICE ID? INVOICE #? Y/N? OPERATOR ID? Y/N PHONE ORDER? Y/N PREPRINT? Y/N RECEIPT? Y/N AUTO REPORT? Y/N AUTO INSERT? Y/N DEBIT? Y/N	Setup Code 5 was entered enabling the operator to enter the terminal identifier and application options. <i>Note: Answer all prompts. Press [9] and [6] for "Y" and "N" responses.</i>
PASSWORD?	Enter the system password, then press [ENTER], to unlock the terminal's memory. The display echoes each entry with an asterisk (*).
PASSWORD UPDATED	Display that indicates new manager password was updated correctly. Press [CLEAR] to return to the idle prompt.
PHONE ORDER? Y/N	Select "Y" if the transaction is a phone order, or "N" if it is not, then press [ENTER].
PLEASE TRY AGAIN	The cardreader was unable to read the card swipe. Slide the card again.
POWER SOURCE? Y/N	Prompt when you press Key [7]. Select "Y" to enable the CREDIT=0 ATM=1 prompt for processing ATM transactions.
PRINT OPTION?	Enter [1] to print detail items, [2] to print terminal totals, or [3] to reprint the last receipt.
PRINTER SELECT PRINTER? Y/N	Setup Code 7 was entered in the Setup function. Enter "Y" or "N" or press [ENTER] to keep the printer already installed.
PRNTR NOT READY	The terminal displays this message if no printer has been specified in Setup or the Receipts terminal option is OFF. Press [CLEAR] to return to the idle prompt.

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PROGRAMING ERR Ø	If your terminal displays this message, you can attempt recovery by pressing the [3] and [5] keys simultaneously, causing the terminal to recalculate the checksum digit that may be the cause of the error message. An alternate method is to hold down the [1] key and press the [ENTER] key until the calendar/clock reappears on the display, then reload the program.
READY *nnn*	The terminal displays "READY" when it is available to process transactions, where nnn = the number of transactions left to be stored in the terminal. For example, READY **3** would indicate that there is space for storage of three more transactions.
RECALL WHAT?	Enter the memory location you wish to review.
RECEIVING	The terminal is receiving a response from the host computer.
REPORTING? Y/N	Enter "Y" to print the records in the Close Batch transaction, or "N" to continue with the closing.
RE-PRINT	Display indicating a reprint function was selected.
RETAIL TERMS	Enter the 4-digit retail terms, then press [ENTER].
RETURN	Display when initiating procedures to authorize a return/credit.
SALE	Display when the [1] key is pressed to process a standard credit card sale transaction. Wait for the next prompt.
SECURITY SET SALE? Y/N SET RETURN? Y/N SET AUTH? Y/N SET VOID? Y/N SET TICKET? Y/N SET DEP INQ? Y/N SET CLOSE? Y/N SET ITM REV? Y/N SET TOT REV? Y/N SET SETUP? Y/N SET PRINT? Y/N	Setup Code 3 was entered enabling the operator to set security flags. Press [9] or [6] for "Y" or "N" responses. A "Y" response will require entry of the manager password to perform the selected transaction/function.
SERIAL # NOT FND	Response from the download host when the terminal serial number stored in Location 001 does not match valid serial numbers for a download. Perform the Recall function [FUNC] [7] and check the serial number. Correct it if necessary.
SETUP	[FUNC] [4] was pressed for terminal setup.

Appendix C. Prompts and Error Messages

SORT BY ID? Y/N	Enter "Y" to print a detail report by operator number and item number order, or "N" to print a detail report in item number order only.
STORE WHAT?	Enter the desired memory location (numbers 000 through 999) for storing data in the terminal.
SUCCESSFUL DL	The terminal has successfully completed the download. Press [CLEAR] to return to the idle prompt.
TKT ONLY	The [5] key was pressed to dial for an ETC item. Wait for the next prompt.
TRANSMITTING	The terminal is communicating with the host computer.
UNDEFINED CARD	This prompt appears when a card that is not defined in the Account Range table is swiped through the cardreader.
UNREADABLE CARD	The terminal cannot read the card. Press [CLEAR] to return to the idle prompt.
UNSUCCESSFUL DL	The terminal was unable to complete the download. Press the [CLEAR] key and reinitiate the download.
UPDATE PASSWD ENTER NEW PASSWD VERIFY NEW PASSW	Setup Code 4 was entered enabling the operator to update the manager password.
VOID	Display when the [VOID] key is pressed for voiding a transaction that was captured at the host. Wait for the next prompt.
WAITING FOR PIN	The terminal is waiting for the PINpad device to display the transaction total and for the customer to enter his PIN, then press [ENTER].

PINpad 101 Device Messages

ENTER PIN PUSH "ENTER"	The PINpad device is prompting the customer to enter his/her PIN, then press [ENTER].
PROCESSING	The PINpad device displays this message indicating that the terminal is processing data and communicating with the host.
TOT. \$99999.99	The PINpad device displays the transaction amount.
THANK YOU	The PINpad device displays this message at the end of a successful Debit transaction.

Appendix D. ZONTALK 2000 Download Parameters

The ZONTALK 2000 program simplifies the process of updating or completely reprogramming your VeriFone terminal. Designed to run on an IBM PC[®], XT[®], AT[®] or compatible, the ZONTALK 2000 program performs modem downloads to your terminals in the field or direct downloads to terminals physically connected via RS-232 cable to the computer's serial port.

To obtain a download of the FDC ETC PLUS Retail Debit application using the ZONTALK 2000 program, you must program the following memory locations with specific information. Refer to Section 4 of this reference manual for an explanation of how to program the contents of a field location.

Location	Information to Enter
----------	----------------------

000	Enter the phone number of a computer running the ZONTALK 2000 program
001	Enter the serial number of the terminal.
019	Enter the application ID (FEPR421). Call your customer service representative for the most current application ID.
960	Enter the download speed. A "2" enables the terminal to download at 1200 baud. A "1" enables the terminal to download at 300 baud.

When you receive a download, certain memory locations (parameters) already have a default setting. These settings may be changed later through the terminal setup function or through manual programming of the terminal. The following list contains the parameters for the FDC ETC PLUS Retail Debit application. The list is organized in 4 columns containing a description of the contents, memory location, data type code, and the field length.

Data Type Codes

Codes	Description	Legal Character Set
A	Alphabet	[A..Z, a..z, #, -, ., space]
N	Numbers	[0..9]
X	Alphanumeric	[space...~]
P	Phone	[0..9, -, *, #, A, L, P, T, space]
Q	Question	[Y, N]
B	Binary	[0, 1]
I	IBM	[full IBM ASCII set]

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Memory Locations

Description	Location	Type/ No. Chars	Contents/ Comments
Download Phone Number	000	P(20)	
Download Date	004	N(6)	
Printer Type Flag	950	N(1)	2 <empty>=None 2=Roll 3=Slip
Printer Line Feeds	951	N(1)	5
Download Speed	960	N(5)	2 (1=300, 2=1200)
Beep On/Off	009	B(1)	0
Dial Type	010	B(1)	0 (T=0 P=1)
Speed Dial Flag	011	N(1)	
Telephone Line Test	014	N(1)	
Work. Key/Master key ptr	016	X(20)	0000000000000000-1
RECALL Password	017	B(1)	
Device ID	058	X(4)	
Security Bit Map	059	B(11)	0000000010 (See Note 2)
Manager Password	060	N(6)	123123
Application Options Map	061	B(8)	00010001 (See Note 3)
Login String #0	020	X(60)	3-81636
Login String #8	028	X(60)	
Header Line #1	465	X(26)	
Header Line #2	466	X(26)	
Header Line #3	467	X(26)	
Header Line #4	468	X(26)	
Header Line #5	469	X(26)	
Header Line #6	470	X(26)	
Cardholder Flex line	392	X(40)	I AGREE TO PAY ABOVE TOTAL AMOUNT
Cardholder Flex Line	393	X(40)	ACCORDING TO CARD ISSUER AGREEMENT
Cardholder Flex Line	394	X(40)	(MERCHANT AGREEMENT IF CREDIT VOUCHER)
Cardholder Flex Line	395	X(40)	
Message Line	396	X(40)	TOP COPY-MERCHANT BOTTOM COPY-CUSTOMER
Message Line	397	X(40)	
1st Account Range	043	X(42)	See Note 1 for details
2nd Account Range	044	X(42)	
3rd Account Range	045	X(42)	
4th Account Range	046	X(42)	
5th Account Range	047	X(42)	
6th Account Range	048	X(42)	
7th Account Range	049	X(42)	
8th Account Range	050	X(42)	
9th Account Range	051	X(42)	
Accumulator Names	363	X(55)	(separate each name with "/")

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Acct Range #1 (043) = 4000.4999.1VIS00
Acct Range #2 (044) = 5000.5999.2MC 00
Acct Range #3 (045) = 3400.3799.3AMX00
Acct Range #4 (046) = 3000.3899.4DC 00
Acct Range #5 (047) = 6011.6011.5DIS00
Acct Range #6 (048) = 0000.0999.6FDC00
Acct Range #7 (049)–#9 (051) =<empty>

Note: The "." after the low and high fields is required to make the account ranging work properly.

Note 2 Location 059, Security Bit Map, contains the string for password protection on transactions and functions. A "1" indicates that the corresponding transaction is password-protected. The following lists transactions and functions by position in the string, with an example setting:

Position	Transaction	Position	Transaction
1	Sale	7	Close
2	Return	8	Item Review
3	Auth	9	Totals Review
4	Void	10	Setup
5	Ticket	11	Print
6	Dep Inquiry		

For example, a string "10000010000" in location 059 indicates that Sale and Close Batch functions are password-protected.

Note 3 Location 061, Application Options Map, contains the string for terminal options settings where 0 = Off and 1 = On.

Position	Option
1	Invoice number
2	Operator ID
3	Phone order
4	Preprint
5	Receipt
6	Auto Report
7	Auto-insert option
8	Debit option

If you have any questions regarding these parameter settings, contact your VeriFone representative.

Glossary

AC	Alternating Current—used as a primary source of power by power packs and power supplies.
Account Number	(1) A unique series or group of digits used to numerically identify each cardholder. (2) The unique identification number assigned to the account of a specific party, within a given institution.
Alpha Mode	A means of allowing you to use the keypad to enter alphabetic characters.
Alphanumeric	Capable of utilizing both alphabetic and numeric characters such as a display panel or keypad or a computer keyboard.
Application	A software program designed with special codes stored in memory for a specific purpose or customer.
Application ID Number	The number identifying which application program is to be downloaded by the ZONTALK software from an IBM PC compatible computer.
ASCII	An abbreviation for American Standard Code for Information Interchange. This standard code is used for transmitting data and is composed of 128 characters in 7-bit binary format.
Asynchronous	Method of transmitting data in which the interval between characters may be of unequal length.
Bar Code	A printed code consisting of vertical lines of varying spacing and thicknesses used for identification purposes. These lines are read by drawing the tip of a bar code wand across them.
Bar Code Wand	A pencil or wand shaped optical scanner for reading bar codes.
Batch File	A file containing a series of transaction details to be processed as a single unit.
Batch Header	A unique heading or title that identifies a batch.
Baud	The signaling speed equal to the number of signal events per second.
Buffer	A temporary storage area.
Byte	A group of consecutive bits that make up a character or a logical unit of information. A byte usually consists of eight bits.
Calendar/Clock Chip	A terminal electronic component that keeps track of the date and time.

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Cardreader	The slot on the terminal that automatically reads the magnetic stripe or bar code on the back of a specially encoded card.
Card Security or Fraud Control	Measures taken to prevent unauthorized use of encoded identification cards.
Carrier	A frequency signal or tone sent over the telephone or communication line and modulated by the modem to transmit/receive data.
CCITT	Committee Consultative International Telegraph and Telephone. International committee that sets standards for international data communications.
Character	A standard bit representation of a letter, number, punctuation, figure or other symbol used in a message or in a control function.
Code	Program text representing letters, digits and other data symbols with binary numbers, such as ASCII.
Control String	A series of terminal control language commands linked together to control the execution of a terminal operation.
Copy	To produce a replica of information, usually done to guard against loss or corruption of important records.
CPU	Central Processing Unit. The brain of the computer or terminal that controls either directly or indirectly every function and device associated with the computer/terminal.
Custom Application	An application created to meet the specialized needs of an individual company or institution.
Custom Prompt	A prompt, programmed by a user and stored in one of the terminal's general record memory locations.
Data	Information prepared in a particular format for use by the terminal or host computer for a specific transaction or operation.
Data Entry	The process of using a keyboard or other device to input data directly into a system.
Data Packets	A packet of information transmitted from one device to another.
Default	A value automatically assigned by the program when another value has not been specified.
Delete	To remove a record or item of data.
Diagnostics	The procedure for detecting and isolating a problem with the terminal or peripheral.

Dial-Up Line	A regular public telephone line. The switching equipment on a dial-up line requires that a party dial the other party before a connection can be made.
Display	The small screen on your terminal that displays prompts and messages to guide you through different operations and to alert you when errors or problems occur.
Download	The process of transferring data from one device to another.
EPROM	Erasable Programmable Read-Only Memory. A type of memory chip permanently stored in the terminal. Contains the standard application, operating system and fixed prompts.
File	A collection of logically related records.
Firmware	The basic instructions built into the terminal, stored in ROM and executed automatically.
Fraud Control	Measures taken to prevent unauthorized use of a credit or debit card.
Handshaking	The process of exchanging codes, or control characters, between two devices. The codes are predetermined and establish a connection between both terminals.
Header	Information and codes added to the beginning of user data, such as a transmission block or packet, which contains the destination, address, source address and message number.
Hookswitch	The switch on a telephone instrument that operates when the handset is removed from its cradle.
Host Computer	A central computer used to process transactions; also called a host.
Input	To enter data into a processing system or peripheral device, or the data that is entered.
Idle Prompt	The information shown on the display panel when the device is not performing any operations or transactions. Normally the date and time.
Keypad	The key panel used for entering data and performing operations.
Leased-Line	A private telephone line connected directly to another party.
Line Cord	A telephone type cord with modular plugs for connecting a device to another device or outlet.
Login	Password information for a particular organization that allows access to a system such as a public switched network (e.g., Telenet, Tymnet). The login also opens an accounting file for the session.

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Login String	A code consisting of a network code, user name and password used to login to a network.
Luhn Check-Digit	A fraud control measure used in transactions.
Manual Transaction	Transaction using account information entered from the keypad rather than automatic reading devices such as the card reader.
Memory	The storage of codes and data in the circuitry of a terminal or computer or other media such as magnetic disk or tape.
Memory Dialing	A method of automatically dialing telephone numbers stored in a device's memory rather than dialing by hand.
Memory Location	An exact storage location in the terminal's memory, identified by a three-digit location number.
Messages	Words and symbols appearing on the display panel which tell you the kind of information required, the result of a process or if an error has occurred.
Mobidem	A special type of modem used for wireless POS data exchange over a RAM mobile data network.
Modem	Short for modulator/demodulator; a device that converts digital data to analog signals (for transmission over telephone wires) and analog signals back to digital data.
Network	An interconnected group of systems, terminals or data facilities that route numerous transactions and data to the proper terminals and host computers.
Nonvolatile Memory	Memory that retains its contents when power is turned off or lost.
Packet	A group of bits transmitted as a complete package on a packet-switched network. Often called a message.
Parameters	Information stored in memory that sets up the device for use with transactions and other operations.
Password	A confidential code used to gain access to terminal memory or a host computer.
PC	IBM PC or compatible personal computer used to download applications and data to the terminal. A PC can also be used as a local or remote host computer.
Peripheral	An attached device (e.g., a printer or PIN Pad), not the central processing device or computer; typically used for I/O.

PIN	Personal Identification Number. A 4- to 16-digit confidential code or electronic signature used by card holders to identify themselves as the proper users of a credit or debit card to the host computer.
PIN Pad	A Personal Identification Number input device used for entering a private identification code to validate a transaction.
Port	An interface device capable of attaching to a peripheral, computer, network or other electronic device.
POS Terminal	A terminal used at the Point-Of-Sale (POS) that can process transactions and communicate transaction information with a larger remote computer directly or through a network.
Post Dialing	A feature that dials the host computer after all of the account and transaction information is entered into the terminal.
Power Pack	A device that converts a voltage to a different level so it can be used by a particular device.
Printer	A device used for imprinting records of a transaction on paper.
Prompt	A message appearing on the display panel telling you what action is required or what type of information to specify.
Pulse Dialing	A method of telephone dialing that specifies a phone number by the number of electrical pulses sent.
Queue	A group of jobs or messages waiting for service. All insertions are made at one end of the queue and all removals and accesses at the other.
RAM	Random Access Memory used to store custom applications and temporary data entered during a transaction.
RECALL	Procedure used to display data in a memory location. RECALL can also be used to add or change data.
Record	A collection of data handled together in transfers.
Refund	Refund transaction credits a customer's account with a refunded amount; the terms "refund" and "return" are used interchangeably.
Remote Host Computer	A host computer requiring connection to the transaction system via a dial-up or leased telephone line.
Remote Host Network	A network that connects the terminal to a remote host computer.
Request Data Packet	A request for information from a terminal to the host computer.

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Return	A refund transaction which credits a customer's account with the refunded amount.
Ringer	A bell or alarm on a telephone that announces incoming calls.
ROM	Read Only Memory permanently stored in the device. Contains the standard application program and operating system.
Scroll	To move text across a display screen.
Select	To initiate an action or enable a data path.
Serial Port	An RS-232 connector for communicating with download computers, other terminals, and printers.
Start Up	The sequence that occurs when the terminal is turned on (powered up). This sequence includes turning on power and automatic downloading of configuration data for an application.
STORE	Procedure used to store data in a memory location.
String Constant	A sequence of alphanumeric characters enclosed in single quotation marks; for example—'SLIDE CARD' or '1989'.
Swipe	The action of sliding a card through a terminal cardreader.
System Password	The password (1[ALPHA][ALPHA]66831) supplied with each TRANZ 330 terminal.
Telephone Jack	Modular type sockets for connecting telephone line cords.
Telephone Line	The standard telephone wiring connecting you to your local or private telephone company.
Terminal	A device used to initiate transactions. The transactions are processed by the terminal itself or by a host computer. These devices have a display panel, keypad, and cardreader, and are used to enter transaction information.
Terminal ID	An identification number used by the download computer to determine what data and application programs to send to an individual terminal or controller.
Terminal Parameters	Parameter data related to a specific terminal.
Timeout	A specified period of time in which the terminal stops processing or undertakes a predetermined alternate action.
Tone Dialing	Also called touch-tone dialing. A method of telephone dialing that uses different pitched tones to specify a phone number.

Track 1 Data	Information stored on Track 1 of the magnetic stripe that can be read by the cardreader.
Track 2 Data	Information stored on Track 2 of the magnetic stripe that can be read by the cardreader.
Trunk Cable	A cable to which all the components are connected.
User	The person who is using the terminal.
ZONTALK 2000	A communications program for IBM PC compatible computers used to download applications from the computer to a terminal.

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