

5. Basic Operation

This section describes how to perform some of the basic operations of the TRANZ 330 terminal. These operations are used with the standard application supplied with each terminal. However, because actual operations may vary in custom applications, refer to your application manual if you are not using the standard application.

Startup

The TRANZ 330 will start up automatically as soon as it is plugged into its power source. The terminal will first display "TRANZ 330" followed by the firmware version number. The terminal will then display the application ID number (if available) followed by the idle prompt. The idle prompt indicates the terminal is ready for operation.

The standard application's idle prompt is the day of the week, date, and time. For example: THU 7/23 10-18 A (Thursday, July 23, 10:18 a.m.).

Host Transaction Keys

The nine alphanumeric keys (labeled 1 through 9) are also known as the host transaction keys and perform operations requiring communication with a host computer.

1. Check the display for the idle prompt. If it is not displayed, press [CLEAR] to cancel the current operation and display the idle prompt.
2. Press the desired host transaction key to begin the transaction.
3. Follow the instructions given by the prompts on the display panel. These prompts help provide the host computer with information needed to complete the transaction.
4. When the transaction is finished, press [CLEAR] to display the idle prompt.

Note: These keys can also be used for local functions when [FUNC/ENTER] is pressed first. Refer to Section 4 for more information.

Using the Cardreader

The cardreader saves time and avoids the mistakes that can occur when manually entering information from the keypad.

1. Check the display for the idle prompt. If it is not being displayed, press [CLEAR] to end the current operation and return to the idle prompt.
2. Insert the credit or debit card into the rear of the card reader slot with the magnetic stripe facing down and to the right of the terminal. (See Figure 5-1.)

3. Without stopping, slide the card briskly through the slot.

If the terminal beeps, check the position of the magnetic stripe, and slide the card through the slot again. If the beep persists, the card may be damaged. Manually enter the account number from the keypad.

4. Complete the transaction following the displayed prompts.



Figure 5-1 Cardreader Operation

Note: Some transactions are initiated by pressing a transaction key first and then sliding the card through the slot. If a host key is not pressed before a transaction, the terminal will use the host key as defined by memory location 985 (default is key 1). Refer to your application manual for more details.

Using the Optional Bar Code Wand

The optional bar code wand can be used with terminals without a built-in bar code reader or for bar code labels that cannot fit through the card reader.

To use the wand, simply draw the tip of the wand smoothly across the entire bar code.

Memory Dialing

The memory dial feature, also known as auto dial, is used to automatically dial phone numbers stored in the TRANZ 330 memory. To use this feature, you must have a standard telephone connected to the terminal and at least one phone number stored in the terminal's memory.

Display	Response
1. (idle prompt)	Press the [0/AUTO] key.
2. MEMORY DIALER	Enter the three-digit memory location number that contains the desired phone number. Instructions for creating memory dial phone numbers are found in Section 6 "Entering Terminal Parameters."
3. (memory location and phone number)	The terminal will show the memory location and the phone number it contains and then dial the phone number.
4. PICK UP HANDSET	Pick up the telephone handset to complete the call. To cancel a call before the connection is made, press [CLEAR].

Entering Alphanumeric Data From the Keypad

The TRANZ 330 keypad has 16 keys; twelve 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].

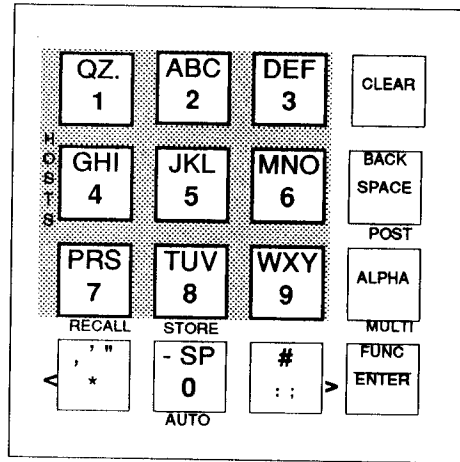


Figure 5-2 TRANZ 330 Keypad

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 following examples in Table 5-1 demonstrate how to enter the characters 2, A, B, and C using the [2] key and the [ALPHA] key.

Table 5-1 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.

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The following table lists the different characters available from the keypad and how to access these characters.

Table 5-2 TRANZ 330 Alphanumeric Characters

Key to Press	Without Pressing [ALPHA] Key	Press [ALPHA] Key One Time	Press [ALPHA] Key Two Times	Press [ALPHA] Key Three Times
1 QZ.	1	Q	Z	.
2 ABC	2	A	B	C
3 DEF	3	D	E	F
4 GHI	4	G	H	I
5 JKL	5	J	K	L
6 MNO	6	M	N	O
7 PRS	7	P	R	S
8 TUV	8	T	U	V
9 WXY	9	W	X	Y
0 -SP	0	-	(space)	+
* ,"	*	,	'	"
# ;@	#	:	;	@

Using the STORE Function

The STORE function allows you to store data in a single memory location. If data is already stored in that location, the STORE function will replace the existing data with the new data.

To prevent unauthorized manipulation of the data stored in the terminal, the system password is required before the STORE function can be used.

The following steps describe how to use the STORE function.

Display	Response
1. (idle prompt)	Press [FUNC/ENTER].
2. FUNCTION?	Press [8/STORE].
3. PASSWORD?	Enter the system password to unlock memory. The system password supplied with each terminal is Z66831 (press: [1] [ALPHA] [ALPHA] [6] [6] [8] [3] [1]). However, if you or the application programmer have already created a new password, enter the new password instead.

Display	Response
4. *****	The terminal will display an asterisk for each key entered. After entering the complete password, press [FUNC/ENTER].
5. STORE WHAT?	Enter the three-digit memory location number (000 through 999) where you want to store the data. For example, to store the telephone number of a remote download computer, enter 000, which is the memory location for the telephone number.
6. (memory location) =	The memory location number you entered will be displayed. Now enter the data you want to store in the memory location. For this example, enter the telephone number of the remote download computer.
7. (memory location) = (data)	The memory location number plus the data you just entered will be displayed. If you make any errors, press [BACKSPACE] to erase them. Then reenter the correct data. Press [FUNC/ENTER] to complete the entry.
8. STORE WHAT?	To select the next memory location to be modified, follow steps 5 through 7. To exit the STORE function, press [CLEAR]. <i>Caution: Once the terminal's memory has been unlocked, it will remain unlocked until the unit is powered down and started up again or a host transaction key (1-9) is pressed.</i> <i>To ensure the memory is locked after using the STORE function, press one of the host transaction keys (1-9) after the idle prompt and then immediately press the [CLEAR] key. This will lock the memory so it cannot be changed until the password is entered again.</i>

Using the RECALL Function

The RECALL function displays and changes data stored in a memory location. For example, to look up the current download computer telephone number, use the RECALL function to display the contents of memory location 000.

Displaying Information

The following steps describe how to use the RECALL function to display information.

Display	Response
1. (idle prompt)	Press [FUNC/ENTER].
2. FUNCTION?	Press [7/RECALL]. <i>Note: If memory location 017 contains a non-zero number, the system password will be required before data can be displayed. This is a feature designed to prevent unauthorized access to the data stored in the terminal. If memory location 017 contains a zero, the password is not required and you can proceed to step 5.</i>
3. PASSWORD?	Enter the system password to unlock memory information. The system password supplied with each terminal is Z66831. However, if you or the application programmer have already created a new password, enter the new password instead.
4. *****	The terminal will display an asterisk for each key entered. After entering the complete password, press [FUNC/ENTER].
5. RECALL WHAT?	Enter the desired memory location number (000 to 999) of the data you wish to see. For example, to see the telephone number of a remote download computer, enter 000.
6. (memory location) = (data)	The terminal will display the number of the memory location and the data it contains. You now have the following options: To view the data in the next memory location, press [FUNC/ENTER]. To view the data in the previous memory location press [ALPHA]. If the entire contents of a memory location does not fit on the display panel, use the scroll keys [*] and [#] to view the additional characters. To exit the RECALL mode, press [CLEAR]. If you want to add or change the data, follow steps 7 through 9.

Adding and Changing Information

Follow these steps when using the RECALL function to change the information in a memory location.

Display	Response
7. (memory location) = (data)	If the desired memory location is not displayed, use the RECALL function to display the contents of the memory location. Press [BACKSPACE].
8. PASSWORD?	You must unlock the memory with the system password before you can change the contents of the memory location. The password is required even if you entered it previously in step 3.
9. (memory location) =	Enter the new data for the memory location.
10. (memory location) = (data)	The memory location number plus the data you just entered will be displayed. If you make any errors, press [BACKSPACE] to erase them. Then reenter the correct data. Press [FUNC/ENTER] to complete the entry.

Caution: Once the terminal's memory has been unlocked, it will remain unlocked until the unit is powered down and started up again or a host transaction key (1-9) is pressed.

To ensure the memory is locked after using the RECALL function, press one of the host transaction keys (1-9) after the idle prompt and then immediately press the [CLEAR] key. This will lock the memory so it cannot be changed until the password is entered again.

Using the Multiple Transaction Function

The multiple transaction feature enables you to perform more than one transaction during a single call to a host computer that supports 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 "Using the RECALL Function" 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 1-9). For more information on entering transaction group codes, refer to Section 7 in this manual.

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	<p>Press the desired host transaction key to perform the first transaction.</p> <p>When the transaction is completed, the final response message will remain on the display panel.</p> <p>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.</p> <p>Press [CLEAR] to display the idle prompt after the last transaction is completed.</p> <p><i>Note: If you do not press the [CLEAR] key, the terminal will automatically end the operation when the multiple transaction timeout is reached.</i></p>

Using the POST Function

When using the TRANZ 330 standard application, the terminal automatically dials the selected host computer as soon as a host transaction key is pressed. This auto dial feature saves time by permitting you to enter transaction data from the keypad or cardreader while the terminal is dialing the host computer.

However, for transactions requiring a lot of data, you may prefer to enter all of the data before dialing the host computer. You can delay the data process using the POST or post-dial function as follows.

1. Press [CLEAR] to display the idle prompt.
2. Press [BACKSPACE/POST] before beginning a transaction. This invokes the post-dial feature.
3. Press the host transaction key and proceed with your transaction as you normally would. However, the terminal will not dial the host computer until all of the data is entered.
4. When the transaction is completed, the terminal returns to the normal, pre-dial mode.

Post-dialing is only enabled for one transaction at a time. You must press [BACKSPACE/POST] before beginning each transaction that you want post-dialed.

Resetting the Calendar/Clock

The Calendar/Clock in the TRANZ 330 terminal has a built-in lithium battery to maintain the correct time even when power is removed from terminal.

To reset the clock to match your time zone or daylight saving time, follow these steps:

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. Otherwise, skip to step 4. Enter the system password to unlock the terminal's memory. The system password supplied with each terminal is Z66831 (press: [1] [ALPHA] [ALPHA] [6] [6] [8] [3] [1]). However, if you or the application programmer have already created a new password, enter the new password.
3. *****	The terminal will display an asterisk for each key entered. After entering the complete password, press [FUNC/ENTER].
4. DIAGNOSTICS	Press [ALPHA] to begin the "reset clock" function.
5. RTC CHIP TEST	The terminal will display this message for two seconds while it tests the real time clock (RTC) chip. The terminal will then prompt 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.

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Display	Response
6. DAY OF WEEK	Enter a digit identifying the current day of the week. Valid entries are: 0 = Sunday 1 = Monday 2 = Tuesday 3 = Wednesday 4 = Thursday 5 = Friday 6 = Saturday 7 = Sunday
7. YEAR = 19	Enter the last two digits for the current year. For example, enter "87" for the year 1987.
8. MONTH =	Enter a number, 1 through 12, to identify the current month. For example, enter the number "6" for June.
9. DATE =	Enter a number, 1 through 31, to identify the current date. For example, enter "14" for the date June 14.
10. HOUR =	Enter a number, 1 through 12, to identify the current hour. For example, enter "10" if the time is 10:14.
11. AM = 0 PM = 1	Enter a "0" to indicate AM or a "1" to indicate PM.
12. MINUTES =	Enter the number of minutes, from 0 to 59, currently past the hour. For example, enter "14" if the time is 10:14.
13. 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.
14. (day of week, date and time)	The terminal will display the new date and time.

Changing the System Password

Certain operations such as STORE and RECALL, require the use of the system password to prevent unauthorized or accidental destruction of data. Each TRANZ 330 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 nine alphanumeric characters.

Caution: If you change the system password and then forget or lose the new password, there is no method you can use to determine the new password! Losing or forgetting the new password will prevent you from adding information to memory or changing any of the information already stored in memory! However, transactions that do not require use of the password may still be executed.

The VeriFone Customer Support Department can reset the password back to Z66831. This involves shipping the terminal to the VeriFone Customer Support Center and will incur a service charge.

Follow these steps to change the system password.

Display	Response
1. (idle prompt)	Press [FUNC/ENTER].
2. FUNCTION?	Press [ALPHA].
3. ENTER OLD PASSWD	Enter the old password. <i>Note: Each keystroke is displayed as a "*" (asterisk).</i> After entering the password, press the [FUNC/ENTER] key. If the password entered does not match the current system password, the terminal will display the prompt "INVALID PASSWORD"=. Press [FUNC/ENTER] and [ALPHA] to restart the procedure and enter the correct password. If the password entered matches the current system password you will be prompted for the new password.
4. ENTER NEW PASSWD	Enter the new password. <i>Note: Each keystroke is displayed as a "*" (asterisk).</i> After entering the password, press the [FUNC/ENTER] key.

Display	Response
5. ENT PASSWD AGAIN	<p>Enter the new password again. <i>Note: Each keystroke is displayed as a "*" (asterisk).</i> After entering the password, press the [FUNC/ENTER] key.</p> <p>If you incorrectly enter the password, the terminal will abort the change password routine.</p> <p>If you correctly enter the password both times, the change is successful and the terminal returns to the idle state.</p>

Programming Error

An error condition may occur when the TRANZ 330 is in any of its five modes of operation that requires access to nonvolatile RAM and a checksum error is noted.

Error Condition Recovery

Programming error recovery allows you three options:

- to specify the last type of access to nonvolatile RAM;
- to log the programming error event;
- to manually override the operating system freeze due to nonmatching memory checksums.

Note: If the manual override is performed, memory may still be corrupted. When the override option is selected, you should reload the application as soon as possible.

There are nine codes to identify the last successful memory access operation. The code, shown below in Table 5-3, shows the type of operation running at the time of the error and when the error occurred--either at the start or end of the operation.

Table 5-3 Programming Error Type Codes

Operation Type	Begin Operation	Finish Operation
Power-up	0	
Store from TCL	1	2
Dial-up download	3	4
Store from keypad	5	6
Unit-to-unit download	7	8

**Error Condition
Display and Override**

Once the error condition has been logged, the message, "PROGRAMMING ERR X" will be displayed by the TRANZ 330, where "X" is the error code. Once this message is displayed, the terminal will remain frozen until either a re-initialization of memory or an override of the programming error is performed. Both procedures are described below:

Re-initialize Memory Procedure

Display	Response
1. PROGRAMMING ERR X	Press [1] and [ENTER] simultaneously. Wait one to two seconds.
2. DAY 1/31 12=00A (time)	RAM has been reinitialized and the terminal is ready to be reprogrammed.

Programming Error Override

Display	Response
1. PROGRAMMING ERR X	Press [5] and [3] simultaneously. Wait one to two seconds.
2. (idle prompt)	Continue with normal operations.

If the override function is activated, an entry is made into the TRANZ 330 programming error log kept in memory location 999. Up to 12 error log entries can be kept in memory location 999.

The record format is MMDDYYHHC-, where:

Value	Description
MM	month
DD	day
YY	year
HH	hour in 24 hour format
C	programming error type code
-	entry separator

