

## Chapter 3 - Getting Acquainted with Your ZETA-THREE

This chapter provides step-by-step procedures to help you become familiar with the front panel of the ZETA-THREE, and explains how to read the display and how to access the ZETA-THREE's data displays and Menu items. Follow the steps described in each section to learn what the ZETA-THREE does when the keys are pressed.

When following this chapter, feel free to practice using the front panel keys. Don't worry about making mistakes; the ZETA-THREE will not be damaged if the wrong key is pressed.

### 3.1 The Display

When the ZETA-THREE's power is turned on, the front panel display appears as shown in Figure 3.1. This type of display is called a "Group". A Group display contains information relevant to that Group. The ZETA-THREE contains six Groups.

In each Group, the character on the left, in the IDENT section of the display, IDENTifies the Group. The IDENT characters are mnemonics of the actual names of the Groups: G for Generator, M for Master transport, S for Slave transport, D for MIDI, Z for ZETA-THREE system, E for Events.

The IDENT characters immediately to the right of the Group mnemonic IDENTify the display SELECTed. For instance, the letters G\_TC identify the display as "Generator Time Code".

The characters to the right of the Group's IDENTITY display information relevant to the current Group and SELECTION. In the case of the Generator Time Code display, the contents on the right represent the time code number that the generator is currently generating.

The location of the cursor is indicated by the blinking character (in Figure 3.1, the left hand digit in the "HOURS" section of the display). The cursor may be moved across the display. Its location defines which character on the display may be changed.

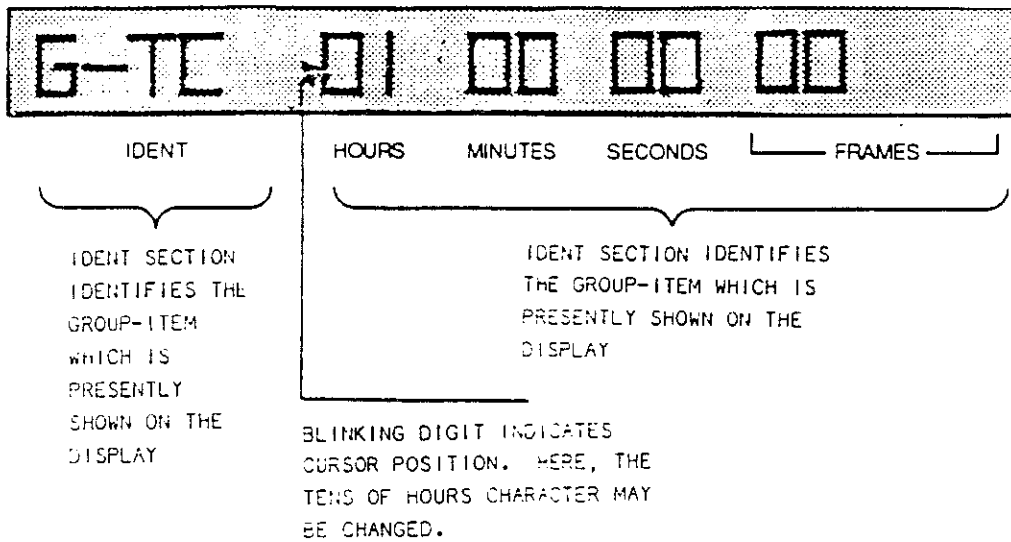


Figure 3.1 Power-up Display

### 3.2 The Front Panel Keys

The keys on the front panel are used to accomplish a variety of functions. This manual describes all of the ZETA-THREE functions that may be accessed through the front panel display and keys.

Figure 3.2 shows how the front panel key labels should be interpreted.

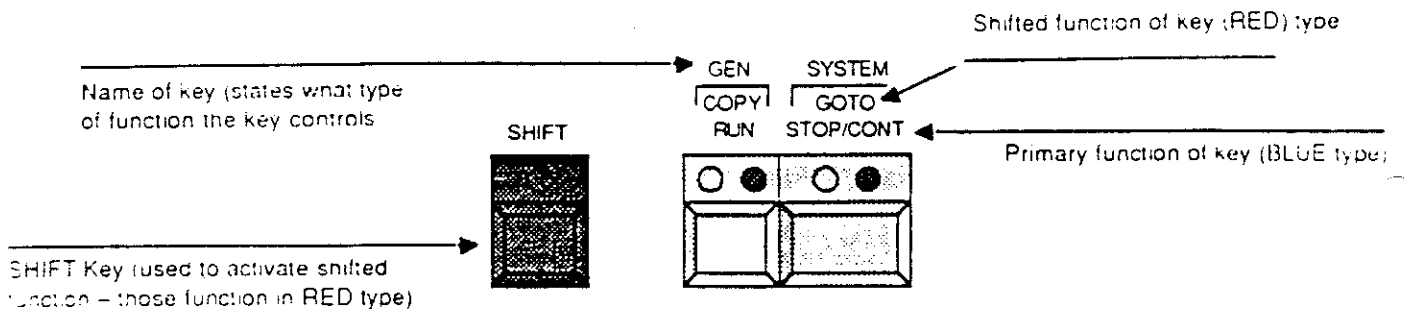


Figure 3.2 Front panel labels

Most of the keys support two functions. The primary function of a key is labeled above the key in blue and the SHIFTed (secondary) function is labeled in red. When the SHIFT key [9] is pressed, its LED lights. While that red LED is on, the key containing the desired SHIFTed function can be pressed to implement the SHIFTed function.

In this manual, the un-SHIFTed functions of a key will be written as, for example, GEN RUN. The shifted function of a key will be written as, for example, GEN COPY [SHIFT GEN RUN], indicating that both the SHIFT key (key number "9" on the diagram at the beginning of the manual) and the GEN RUN key need to be pressed to activate the function.

### 3.3 Using the SHIFT Key

The SHIFT key may be used one of two ways:

- 1) Press the SHIFT key once to light its red LED. Then press any other key, and the SHIFT key's LED will turn off. If the SHIFT key is pressed inadvertently, pressing the SHIFT key a second time will "unshift" the key, and the red LED on the SHIFT key will turn off.
- 2) Press and hold down the SHIFT key (its red LED remains On). Then, while holding the SHIFT key down, press the key which contains the desired function. This procedure is useful for repeated SHIFTed keystrokes because, as long as the SHIFT key is held down, the SHIFT function remains activated.

#### NOTE

The SHIFT key on the left side of the ZETA-THREE's front panel affects only the keys on the left side of the panel, while the SHIFT key on the right side of the panel affects only the keys on the right side of the ZETA-THREE panel.

### 3.4 Entering and Modifying Data (Using the Cursor)

Data in the ZETA-THREE's Selection and Menu displays is entered or modified by using the CURSOR -> and CURSOR <- keys to place a visual indicator (called a Cursor) at the character (or word) to be entered or modified. Once the cursor is in the correct position, the /\ (Index up) or \/

(Index down) key is used to enter or modify the character (or word).

For example, suppose it is desired to have the Time Code Generator begin counting from a particular time code number. This can be accomplished by entering the starting (initial) time code number into the generator time code.

To enter a particular number into the G\_TC selection, the CURSOR [15] and INDEX [14] keys are used. The cursor is located at the blinking number in the display. It may be moved across the display to the number that you wish to change by pressing the CURSOR -> key (to move the cursor to the right) or the CURSOR <- key [SHIFT CURSOR ->] (to move the cursor to the left).

Once the cursor is positioned at the number which is to be changed, press the /\ key [14] to index the number up (i.e. 1,2,3,4,...) or press the \/ key [SHIFT /\] to index the number down (i.e. 0,9,8,7,...). All of the numbers in the item can be changed in this manner.

Some items may sometimes require a negative entry. Negative numbers are entered by moving the cursor to the first (left-most) number in the item's contents and indexing the number up or down to zero. Pressing the INDEX \/ key will cause a "-" sign to then appear to the left of the number. Continuing to press the INDEX \/ key will cause the number to count backwards to -1, -2, etc.. The other numbers in the item may then be indexed up or down in any order. As long as the "-" is at the left, the number is recognized as a negative number.

When told to Run, the generator will begin counting from the number in the G\_TC selection. The cursor disappears (blinking stops) when the generator is running.

#### NOTE

The number entered into an item must be a valid number for the type of function the item represents. In the case of the G\_TC Group selection, which contains a time code address, the values entered must always represent a valid time code number. Values outside the time code range, i.e. 69 minutes, cannot be entered or displayed.

The same method which is used to change the value in the G\_TC Group selection may be used to change the number in

any display. The method for gaining access to the other Groups and selections is described in Section 3.5.

Some Group selections (namely those in the System and Events Groups) contain a set of dashes instead of numbers. The dashes mean that there is no entry in the item or that the item has been cleared. Numbers can be entered, using the CURSOR and INDEX keys, as they were entered into the G\_TC display, but, if it is desirable to clear the item, the CLEAR key [SHIFT CAPTURE] must be pressed. It is not acceptable to enter a value of 00:00:00:00 into the item to clear it, as the ZETA-THREE will interpret an entry of 00:00:00:00 as a valid time code address instead of "no entry".

### 3.5 Gaining Access to Other Groups and Selections

In Figure 3.1 a Group Selection is shown. The name, or the title, of the Group is given in the IDENT section of the display. The first character, "G", tells us that this display is associated with the Generator.

The DISPLAY SELECT key allows you to SELECT the next item in the Generator Group. When pressing the DISPLAY SELECT key, the ZETA-THREE will only access Selections within the present Group. In Figure 3.1, the display shows the TIME CODE Selection of the GENERATOR Group.

When the Generator Time Code (G\_TC) display shown on the display, press the DISPLAY SELECT key once [SHIFT DISPLAY GROUP] to change the display to the Generator User Bits (G\_UB) Selection. Pressing the key again will toggle back to G\_TC.

Each of the six Groups -- Generator (G), Master (M), Slave (S), MIDI (D), System (Z), and Event (E) -- contains two or more Selections which are related to the Group name. For example, the Generator Group contains two Selections which were shown to be Generator Time Code (G\_TC) and Generator User Bits (G\_UB). The Slave Group, on the other hand, contains five Selections: S\_TC (Slave Time Code), S\_UB (Slave User Bits), S\_OFS (Slave OFSet), S\_ERR (Slave ERROR) and S\_SLEW (Slave SLEW).

To gain access to the other Groups, press the DISPLAY GROUP key. The display will sequence to the next Group each time the DISPLAY GROUP key is pressed. After all six Groups in the list have been displayed, pressing the DISPLAY GROUP key again will toggle the display to the first Group (Generator). The list of Groups, and the Selections found in each Group, is shown in Figure 3.3.

The Selections in any Group may be accessed by pressing the DISPLAY SELECT key [SHIFT DISPLAY GROUP], as was described in the Generator Group example. By pressing the DISPLAY SELECT key repeatedly, the ZETA-THREE will toggle through the list of Selections and, after all the items in the Group have been displayed, return to the top of the list.

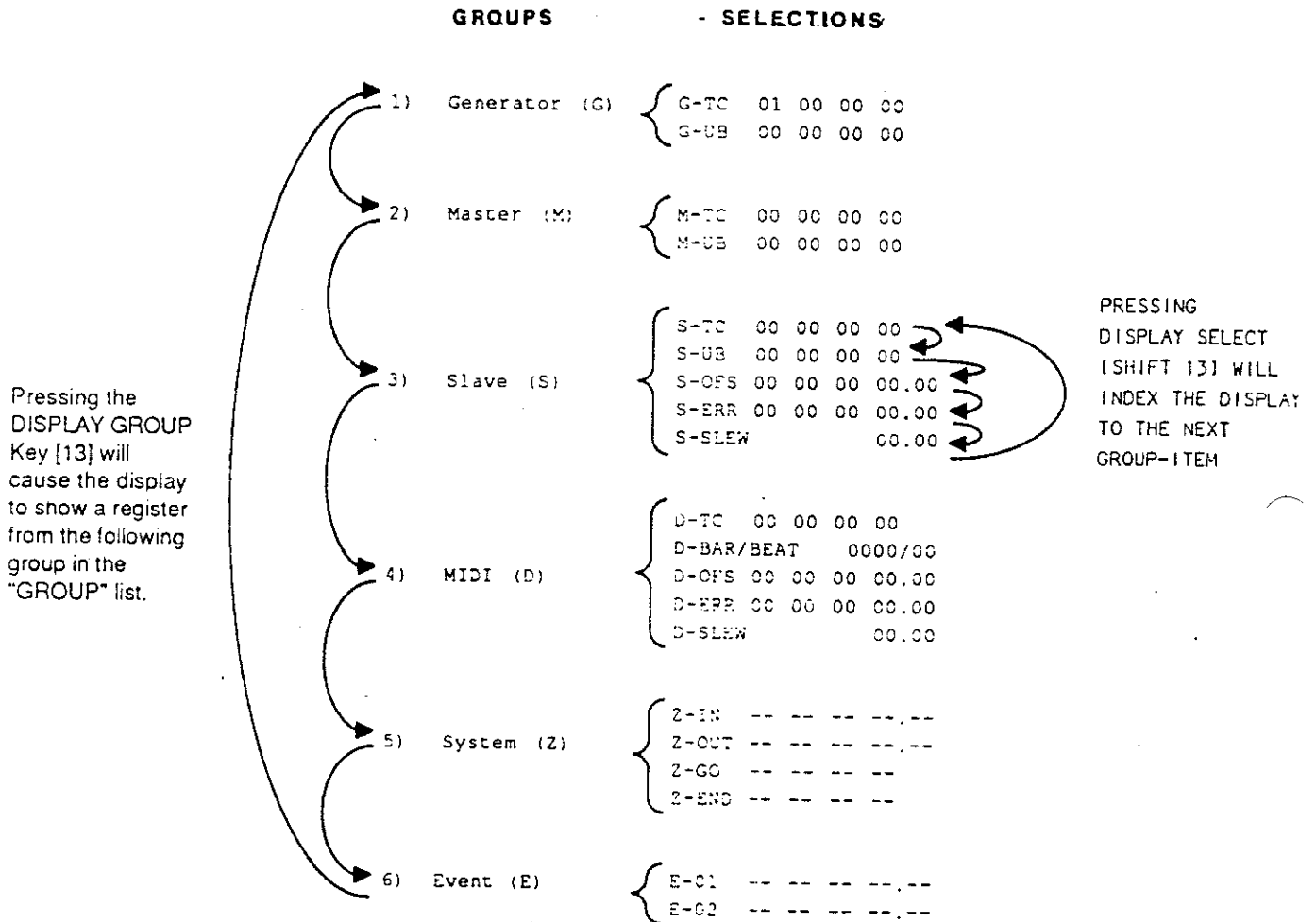


Figure 3.3 LIST OF GROUPS AND SELECTIONS

### 3.6 Using Menus

#### 3.6.1 What Is a Menu?

There are six Menus in the ZETA-THREE, one for each Group. Each Menu contains a list of items related to that Group and, like the Group selections, the title of the Menu item describes the function that the item affects. For example, the Generator Menu, shown in Figure 3.4 contains four items which determine how the ZETA-THREE's time code generator will operate.

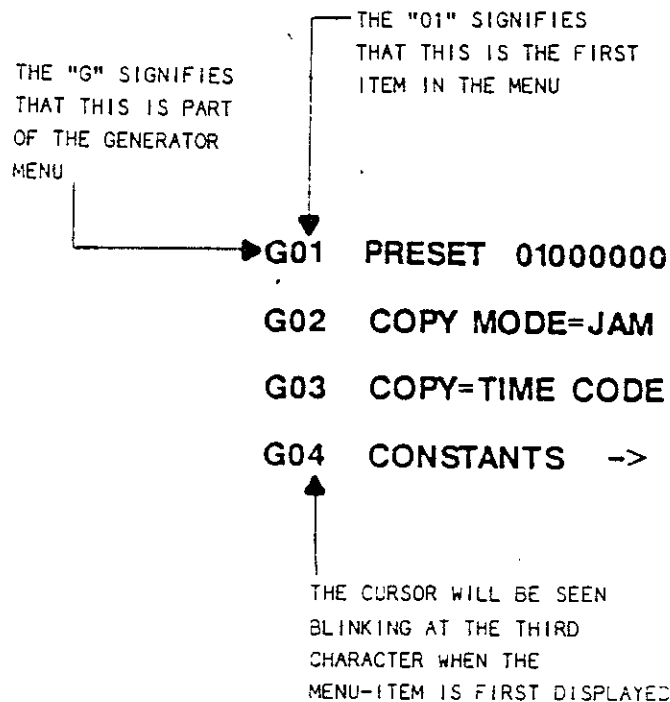


Figure 3.4 THE GENERATOR MENU

Virtually all of the ZETA-THREE's operations are directed through the use of the Menus. A complete list of the Menu items, and information about what each item affects, is given in Appendix D.

#### 3.6.2 How to Enter and Leave Menus

To access a Menu, press the MENU key. The display will then show an item of the Menu relevant to the Group displayed before the MENU key was pressed. For example, if

# Display Menu List

## ADAMS-SMITH ZETA-THREE

### Quick Reference Card - Software Version 3.50

Groups	Selections	Menu Items
1) Generator (G)	G_TC 01 00 00 00 G_UB 00 00 00 00	G01 PRESET 01000000 G02 COPY MODE = XFER/JAM G03 TC COPY = TC/UB/ZETATIME G04 UB COPY = UB/TC/OFF G05 CONSTANTS ->
2) Master (M)	M_TC 00 00 00 00 M_UB 00 00 00 00	M01 PRESET ----- M02 MASTER = READER/GENERATOR M03 OUTPUT = TRANSPORT/OFF/AUX3-10 M04 LIMIT ----- M05 TRANSPORT -> M06 SAVE TRANSPORT-> M07 CONSTANTS ->
3) Slave (S)	S_TC 00 00 00 00 S_UB 00 00 00 00 S_OFS 00 00 00 00.00 S_ERR 00 00 00 00.00 S_SLEW 00.00	S01 PRESET ----- S02 LOCK MODE = ADR/FWL/AUTO S03 SLOW RELOCK = OFF/ON S04 SPLICE TRAP = OFF/ON S05 LIMIT ----- S06 TRANSPORT -> S07 SAVE TRANSPORT-> S08 CONSTANTS ->
4) MIDI (D)	D_3120.00 0001/01.1 D_TC 00 00 00 00 D_OFS 00 00 00 00.00 D_ERR 00 00 00 00.00 D_SLEW 00.00	D01 EDIT -> D02 SONG SETUP -> D03 LEARN MODE -> D04 LEARN QNTIZE = 8 D05 FPB FRM = 24 D06 MERGE = OFF/REAL-TIME/NO REAL-TIME/ALL D07 MIDI CLK = ON/ON+SSEL/DT LOCK/OFF D08 MIDI THRU = IN/OUT-2 D09 MIDI TC = OFF/ZETATIME D10 LOCK MODE = ADR/FWL/AUTO D11 SLOW RELOCK = OFF/ON D12 SPLICE TRAP = OFF/ON D13 TIMEBASE -> D14 MAP LOAD/SAVE -> D15 BEEP = OFF/RMT/RMT COUNT/MIDI/MIDI COUNT/RMT-MIDI/RMT-MIDI CT D16 MIDI CONSTS ->
5) System (Z)	Z_30 ----- Z_1N ----- Z_OUT ----- Z_END -----	Z01 IN/OUT = RECORD/REHEARSE Z02 AUTO EDIT = OFF/ON/ON+CUE Z03 PREROLL = 00 00 Z04 LOOP = OFF/CYCLE/AUTO REW/AUTO STOP Z05 FRAMES = 30.00/24/25/29.97/29.97 DF Z06 RESOLVE = OFF/VIDEO/AUX IN Z07 ZETATIME = MASTER/SLAVE Z08 COMPUTER PORT -> Z09 RS-232 BAUD -> Z10 RS-232 FORMAT -> Z11 CONTROL PORT -> Z12 SYS ADDR = 0/8282 Z13 XOUT TIP = AUX 1/TIMBASE/OFF Z14 XOUT RING = AUX 2/OFF Z15 LOCAL CHASE = ON/OFF Z16 RMT REC'D = SYSTEM/SLAVE Z17 RMT Z-ECHO = OFF/ON Z18 ZETA TC LINK = OFF/ON Z19 CLEAR REGISTERS Z20 SYSTEM RESET ->
6) Event (E)	E_01 ----- E_02 ----- E_03 ----- E_04 ----- E_05 ----- E_06 ----- E_07 ----- E_08 ----- E_09 ----- E_10 -----	E01 EV_01 = DISARMED/AUX OUT/MIDI NOTE/MIDI PROG/REMOTE FN . . E10 EV_10 = DISARMED/AUX OUT/MIDI NOTE/MIDI PROG/REMOTE FN E11 EV_ALL DISARM E12 MIDI TRIGGERS -> E13 EVENT CONSTANTS ->

Figure 3.5



the Generator Group is displayed (either Selection), press the MENU key and the Generator Menu is accessed, as shown in Figure 3.5.

After pressing the MENU key, notice that the cursor is located on the last digit of the Menu number (the second and third characters of the IDENT section of the display). The cursor must be located on the Menu item number to index to other items in the Menu. Each item in every Menu is described thoroughly in Appendix D.

To exit the Menu, and return to the Group which was displayed before the MENU key was pressed, press the DISPLAY GROUP key.

With the cursor located on the Menu number, index up or down through the various Menu items for the current Group by pressing the /\ key or the \/ key. Once a Menu has been accessed, pressing the /\ key and \/ key will index the display only through the items of that particular Menu. To gain access to the items in a different Menu, it is necessary to press the DISPLAY GROUP key to exit the current Menu, and then to press it again until the display has been toggled to the desired Group. Enter that Group's Menu by pressing the MENU key again.

### 3.6.3 The Menu Display

For practice, set the display to the Generator Group (either Selection). Press the MENU key, and an item from the Generator Menu appears on the display.

Use the /\ or \/ key, if necessary, to index to the Menu item titled "G01 PRESET 01 00 00 00", shown in Figure 3.6. The prefix "G" indicates that this Menu item relates to the ZETA-THREE's time code generator. The next two characters (01) indicate that this is Generator Menu number 01. The next word (PRESET) is the title of the Menu. The rest of the display shows the ten digits which, since the Generator Preset is a time code address, is read as: 1 hour, zero minutes, zero seconds, and zero frames.

Appendix D shows that Menu Number G01 is responsible for setting the preset value on the generator. The Menu's display requires a specific number to be entered into it. For convenience, the Generator Preset has been given a default of 01:00:00:00, but any other valid time code address may be entered using the CURSOR key and indexing the number up or down.

### 3.6.4 Data Entry into a Menu Item

There are three types of Menu items: those that require entering a number, those which require picking one of several possible choices, and those which contain additional Menu levels.

The Menu shown in Figure 3.6, requires the entry of a number. To change the number in the item, Cursor to the first digit of the Menu item, Index the digit up or down to the desired value, and repeat as necessary. Note that, as with Group Selections, only valid values will be accepted by the ZETA-THREE.

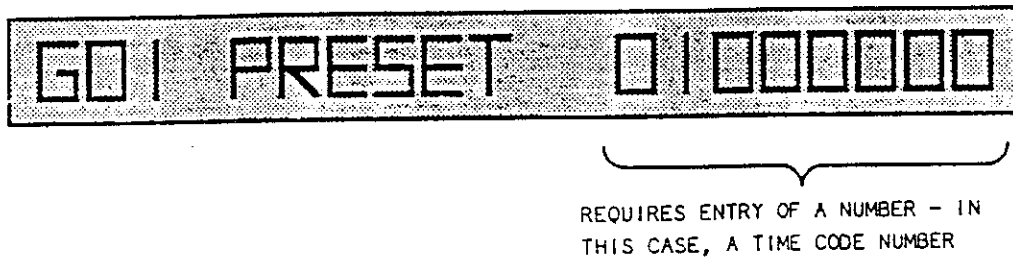


Figure 3.6

In some cases, an item which requires a number entry, such as Menu item M03, contains a set of short dashes instead of some default number. As was the case with certain System and Event Selections, the dashes mean that there is no entry in the Menu item. Numbers can be entered into these Menu items by the usual Cursoring and Indexing routines. If it is desirable to clear this type of Menu item, the CLEAR key must be pressed, as the ZETA-THREE will interpret an entry of "all zeroes" as a valid number.



REQUIRES A SELECTION OF ONE OF  
SEVERAL CHOICES BY MEANS OF THE  
INDEX KEY

Figure 3.7

Menu Number G02, in Figure 3.7, is an example of a Menu which requires choosing one of several alternative displays. When the CURSOR key is pressed once, the entire word at the right side of the display starts to blink, indicating that the entire word may be changed by Indexing up or down. The choice displayed when this Menu display is accessed is the setting that the ZETA-THREE will follow. See Appendix D for more information about how each Menu item affects the ZETA-THREE.

### 3.6.5 Identifying and Using Higher Menu Levels

Some Menu items contain additional Menu levels. When an item of this type is accessed, an arrow appears on the right side of the display (indicating an additional Menu level), as shown in Figure 3.8, and the LED on the MENU key starts to blink. Pressing the MENU key again will access the higher Menu level. Items in a higher-level Menu are numbered and can be Indexed up or down, just as lower level Menu items are.

There are two ways to exit from a higher Menu level: 1) press DISPLAY GROUP to exit to the original Group display; 2) press PREV (SHIFT MENU) to return to the PREVIOUS Menu level.

The PREV key may also be used when it is desirable to return quickly to a higher Menu level from a Group Selection display. When a particular Group Selection is displayed,

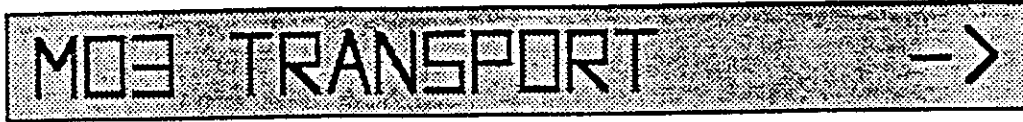
pressing PREV will return the display to the Menu which was last accessed, regardless of the Menu level.

Some higher-level Menus may be a list of items from among which a choice is to be made. If, when a higher-level Menu is accessed, the LED on the CAPTURE key lights solidly, it is indicating that: 1) the higher-level Menu is a list of choices; and 2) the item currently being displayed is the most recently CAPTURED choice (or is the default).

If the higher-level Menu list is Indexed up or down from the previously-chosen item, the CAPTURE key's LED will begin to blink. If another item in the Menu list is preferred, pressing CAPTURE will cause the CAPTURE key's LED to light solidly again, indicating that the currently displayed item is the most recent choice. If the higher-level Menu list is Indexed up or down from the previously-chosen item, but the higher-level Menu list is exited without CAPTURE having been pressed, the choice will not change.

For example:

- 1) access the M\_TC Selection.
- 2) press MENU, and Index up or down to Menu Number M04. The arrow indicates that there is a higher Menu level to be accessed.
- 3) press MENU again. The CAPTURE LED will light solidly, indicating that the transport displayed is either the most recently CAPTURED transport or that is the default.
- 4) Index up or down to a different transport. The CAPTURE key LED will begin to blink, indicating that the item has not been CAPTURED.
- 5) press the CAPTURE key to CAPTURE the item on the display. The CAPTURE key's LED will light solidly again.
- 6) Index up or down to a different transport. The CAPTURE key LED will again begin to blink.
- 7) press the DISPLAY GROUP key to exit the Menus.
- 8) press PREV [SHIFT MENU] to return to the PREVIOUSLY accessed Menu level. The display will return to the Menu level which was last accessed, but the display will show the item which was CAPTURED, not the item which was last seen on the display.



THE ARROW INDICATES THAT THIS  
MENU-ITEM CONTAINS A LIST OF  
POSSIBLE CHOICES IN A SUB-MENU  
REQUIRES ENTERING A SUB-MENU  
LIST BY PRESSING THE MENU KEY AGAIN

Figure 3.8

The entire list of Menu items is found in Figure 3.9  
and the Quick Reference Card.