

Users' Guides

AUGMENT™

**The AUGMENT 1250
Display Terminal Users' Guide:
How to Install and Use It**



THE AUGMENT 1250

DISPLAY TERMINAL USERS' GUIDE:

HOW TO INSTALL AND USE IT

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INTRODUCTION

The AUGMENT 1250 terminal is a cathode ray tube (CRT) display terminal designed especially for AUGMENT users. The terminal includes an Ontel model OP-1/15 display, an Ontel keyboard especially configured for AUGMENT, a mouse, and a keyset. The terminal has been programmed to take full advantage of AUGMENT's powerful information-handling features.

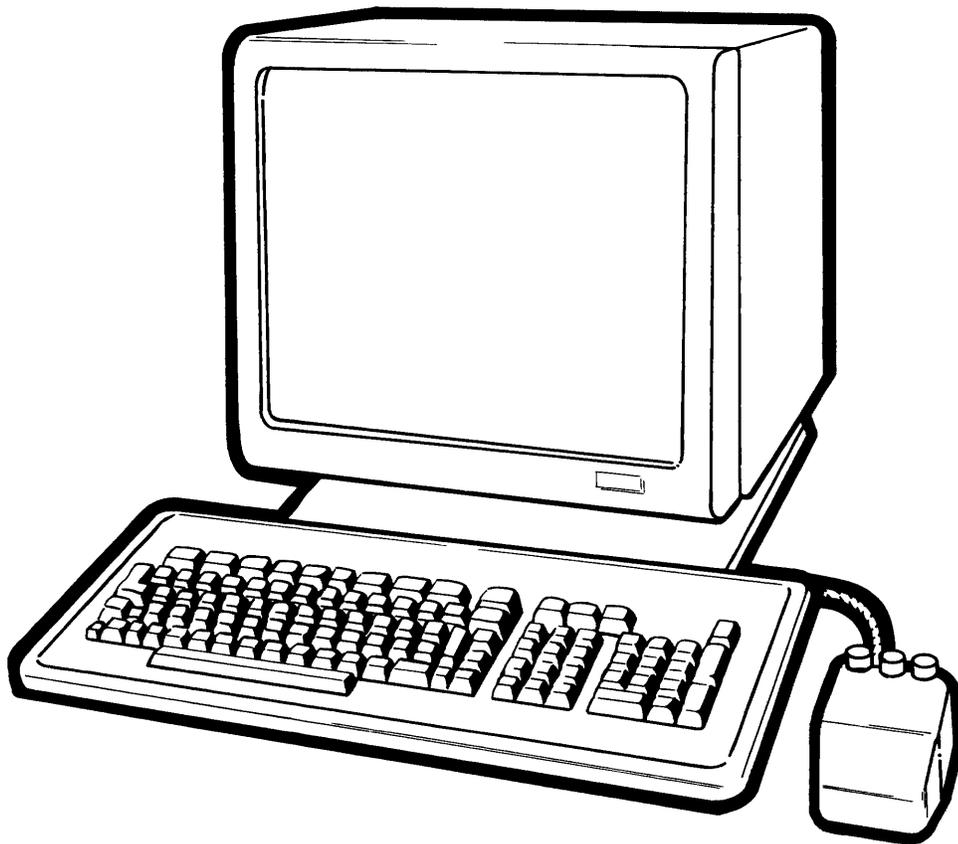


FIGURE 1: THE AUGMENT 1250 TERMINAL

The terminal has a 15-inch diagonal screen that displays 24 lines with up to 80 characters per line. The effective display area can be increased with the terminal's "long screen" and "wide screen"

Introduction

features. A long or wide screen can be viewed by scrolling the screen horizontally or vertically to view any 24-line by 80-character area of the image. A normal, long, or wide screen image can be saved for later viewing. The display can be tilted to a comfortable viewing angle; the large character size and non-glare screen allow easy viewing.

The keyboard has all alphabetic and numeric keys in addition to special function keys that allow you to enter both commands and text. It is detached from the display and can be placed in any convenient location near the display.

You can control cursor movement at the AUGMENT 1250 terminal with the "mouse". As you roll the mouse on a flat surface, the cursor moves correspondingly on the display and is independent of the writing position. In addition to cursor movement, the mouse has three keys that, when used in combination with the keyboard, allow you to enter commands and text.

You can also enter commands and text with the "keyset". The keyset is an optional device with five piano-like keys that allows one-hand typing of commands and text. Although mastering the keyset requires some practice, it is a valuable skill. The mouse and keyset are positioned at opposite sides of the keyboard; with your right hand on the mouse and your left hand on the keyset, you can control the system without looking down from the display and moving your hands back to the keyboard. However, the terminal can be used very effectively with the keyboard and mouse alone.

The AUGMENT 1250 terminal's "configuration", or its operating state, can be changed locally for a work session. At the AUGMENT 1250, you can adjust data transmission rates, parity, long and wide screen (described in the section "USING WIDE AND LONG SCREENS"), and a number of keyboard features.

An optional workstation printer or graphics display can be attached to the AUGMENT 1250 terminal. The terminal allows simultaneous operation of the printer or graphics terminal with no interruption of normal display use.

STANDARD FEATURES

This section describes the standard features of the AUGMENT 1250 terminal and what they do when used with the AUGMENT system. Optional attachments to the terminal are described in the section "OPTIONAL FEATURES".

Display

The display is the television-like device with a 15-inch screen (measured diagonally) on which you see information that is stored in the computer and your interaction with it. Facing the front of the terminal, you will find the ON/OFF switch at the rear of the display in the recessed area at the upper-right corner. You can adjust the contrast between the characters and the background with the brightness and contrast knobs labeled "BRIGHT" and "CONTRAST" at the rear of the display in the upper-left corner.

Keyboard

You can enter commands and text at the keyboard. The keyboard consists of four separate keypads: the top keypad, which contains special-function keys; the alphanumeric keypad, with alphabetic and numeric keys; the function keypad, which has another set of special function keys; and the numeric keypad, which has only numeric keys. Figure 2 shows the layout on the AUGMENT 1250 keyboard. A description of each keypad follows.

Top keypad: At the top of the keyboard is a row of 12 brown keys arranged in three groups of four. Nine of the keys perform the function indicated on the key label. The three blank keys currently have no function. You will find a description of the labeled keys in the section "Special Function Keys".

Alphanumeric keypad: This keypad most closely resembles a typewriter keyboard. It contains all alphabetic, punctuation, and numeric characters. In addition, there are some special function keys, which are also described in the section "Special Function Keys".

Function keypad: To the right of the alphanumeric keypad is the function keypad. The twelve brown keys in this keypad activate special functions, which are described later. There are also some punctuation keys.

Standard Features

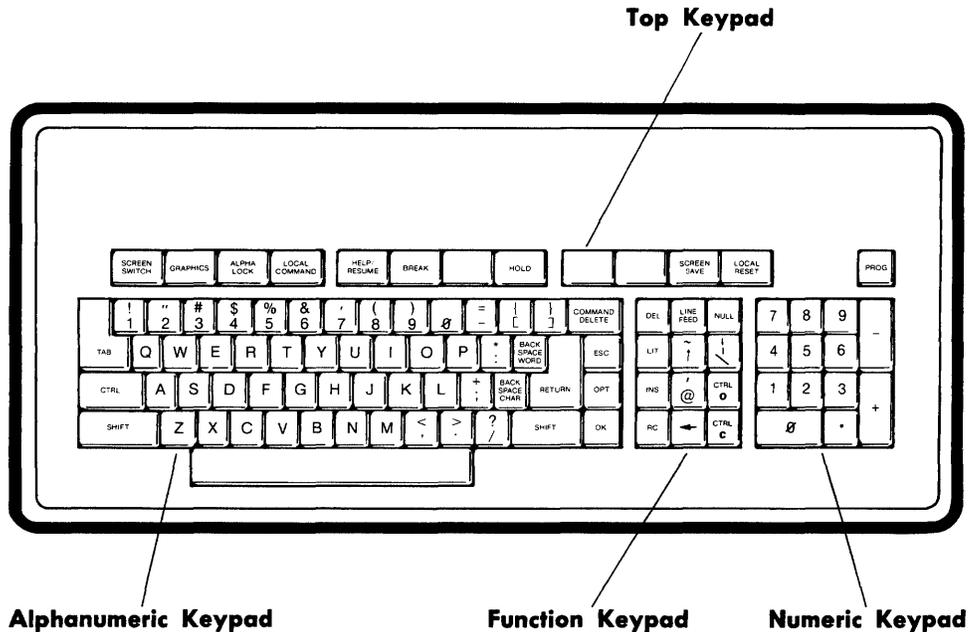


FIGURE 2: THE AUGMENT 1250 KEYBOARD

Numeric keypad: This keypad, the rightmost on the keyboard, contains only numeric keys, period (.), plus (+), and minus or dash (-). You can use this keypad in AUGMENT or in the Executive to enter numbers. In addition, holding down the SHIFT key and pressing 2, 4, 6, or 8 moves the cursor as follows:

Shifted "2" moves the cursor down as far as the bottom of the screen.

Shifted "4" moves the cursor to the left as far as the left edge of the screen.

Shifted "6" moves the cursor to the right as far as the right edge.

Shifted "8" moves the cursor up as far as the top of the screen.

Pressing one of these shifted numeric keys once moves the cursor one character position from its current position. If your terminal is set to repeating mode, continuous cursor movement will occur. See the "LOCAL COMMANDS" section to find out how to set your terminal to repeating mode. You can move the cursor in this manner only when the mouse is motionless. Moving the mouse moves the cursor from its original position.

Special Function Keys

The function keys on all keypads are listed here in alphabetical order.

ALPHA LOCK: This is a locking shift key used to shift only the alphabetic characters to uppercase. To release the lock, press the ALPHA LOCK key again. The red light on the key glows when the key is locked.

BACK SPACE CHAR (<CTRL-H>): Press this key to delete the last character that you typed, a <MARK>, or any step in the current AUGMENT command. This function is often abbreviated <BC>.

BACK SPACE WORD (<CTRL-W>): Press this key to delete the last word you typed (plus any spaces, punctuation marks, or other characters following the word) or the last command word you gave in the current command. This function is often abbreviated <BW>.

BREAK: The BREAK key has no function in AUGMENT. Pressing the BREAK key raises the voltage in the terminal's transmit line to the high EIA voltage level, or the "break" condition.

COMMAND DELETE (<CTRL-X>): Press this key to cancel any AUGMENT command you have not finished (that is, before you have given the final <OK>). You may then begin a new command.

CTRL: By holding down the CTRL key while typing a specific character on the keyboard, you can produce special characters called "control characters". Control characters have specific functions and ordinarily are not displayed.

CTRL C: Press this key to interrupt your AUGMENT session and get the attention of the Executive. You may have to press this key more than once if you are deeply involved in some process. Pressing this key has the same effect as holding down the CTRL key while typing an uppercase or lowercase "c".

CTRL O: Press this key to stop whatever the system is doing, such as

Standard Features

printing or searching for something. Pressing this key once is usually enough, but it might not take effect immediately. This has the same effect as pressing the CTRL key while typing an uppercase or lowercase "o".

DEL: This key enters the DEL or RUBOUT character. Normally, AUGMENT used in display mode ignores this character. In the Executive, it serves a "delete" function.

ESC: Press this key to have the system automatically fill out a file name or a directory name when you have typed enough characters to make the name unique. You can also use this key to fill out commands or parts of commands in the Executive.

GRAPHICS: Press this key to move the cursor from the AUGMENT display screen to the connected graphics display screen. To move the cursor back to the AUGMENT display, simply press the key again. The red light on the key glows when the key is depressed.

HELP/RESUME (<CTRL-Q>): In AUGMENT, press this key at any point in a command to see a description of what you were doing. You are placed in the Help command, which allows you to ask for the meaning of other terms, commands, and procedures. To return to what you were doing, delete the Help command. (See COMMAND DELETE above.) In addition, this key serves to resume output when you press it after you have pressed the HOLD key.

HOLD (<CTRL-S>): Press this key to halt and hold output from the terminal until it is resumed by pressing the HELP/RESUME key or <CTRL-Q>. HOLD is usually used to suspend any lengthy scrolling display of information on your screen so that you can read part of it before resuming.

INS (<CTRL-E>): In AUGMENT, press this key to enter "insert mode", which allows uninterrupted entry of text. Refer to AUGMENT documentation for more information on insert mode.

LIT (<CTRL-V>): Press this key to insert the special character you type following it as literal text so it no longer has a special function. For example, you can enter <CTRL-H> as text by typing LIT and then the BACK SPACE CHAR key.

LINE FEED (<CTRL-J>): When typed as part of inserted text, this key enters a line feed character into your text; any text that follows the line feed character will begin on the next line. LINE FEED has other

meanings in AUGMENT and other programs when typed as part of a command.

LOCAL COMMAND: Press this key to enter "local commands", which allow you to modify the configuration, or operating characteristics, of the terminal. (Local commands are described later.) The red light on the key glows when in local mode. To leave local mode, press the key again.

LOCAL RESET: Press this key to clear the display image. This key is most useful when there is some error. If AUGMENT is running in display mode, all text will first be cleared from the screen and will then be rewritten. If you are not in AUGMENT, the screen will simply be cleared.

NULL (<CTRL-N>): In AUGMENT, this key enters a special character that means "nothing" or "no text". If you want to specify "nothing" in the part of a command that prompts you to type some text, you can press this key.

OK (<CTRL-D>): In AUGMENT, press this key to indicate that you are finished specifying an AUGMENT command or part of a command (such as viewspecs or text that you type in).

OPT (<CTRL-U>): There are optional parts in some AUGMENT commands that will not be available unless you specifically ask for them. To select such an option, press this key when prompted by "OPT", or by something in square brackets (for example, "[A]") in an AUGMENT command.

PROG: Pressing the PROG key alone has no effect. However, holding down the SHIFT key while pressing PROG breaks your network connection.

RC (<CTRL-B>): Press this key in place of the final <OK> in a command to enter repeat mode. The command will then be repeated up to the step where you have to select something. After you give the final <OK> for the repeated command, it will automatically repeat again until you delete the command. (See COMMAND DELETE above.)

RETURN (<CTRL-M>): This key has a command confirmation function in many systems; however, when you use AUGMENT in display mode, OK serves for confirmation and RETURN simply functions in text as a return character.

SCREEN SAVE: This key enables you to store your current screen image

Standard Features

to be recalled for future viewing. When you press this key, the system saves the current image. Initially, you can save one screen image, but after giving the appropriate local command, you can save up to six screen images. All saved images are cleared from the terminal's memory when you switch the terminal off. For more information, see the section "USING SAVED SCREENS".

SCREEN SWITCH: Press this key to display a screen image that was stored when you pressed the SCREEN SAVE key. You can only display the image; no commands will take effect on that image. Pressing this key once displays the most recently saved image. Pressing the key a second time returns you to your current, or operable, screen image. If more than one image has been saved, pressing this key repeatedly switches the display through the saved images in the order in which they were saved. The red light on the key glows when a saved image is being displayed. For more information, see the section "USING SAVED SCREENS".

SHIFT: Hold this key down while typing another character to enter an uppercase alphabetic character or the top symbol if two symbols appear on the key.

Space bar: Press the space bar to enter a space into some text or to type the space that precedes some AUGMENT command words. In AUGMENT text, a space is an actual character that separates one word from another and can be inserted, deleted, moved, or copied; it is not emptiness.

TAB (<CTRL-I>): In AUGMENT, the TAB key has two functions, depending on context. When entering text, TAB enters an invisible character that causes the next character you type to print at the next tab stop. (You can set the positions of tab stops with the Set Profile command in the Base subsystem.) The other use of TAB is to search for content in an AUGMENT file. That is, after you have given an AUGMENT command that searches a file for content, you can simply type TAB to search for later occurrences of the content.

Mouse

The mouse is a hand-sized device with three buttons on the top. When you are working in AUGMENT in display mode, use your right hand to roll the mouse on a flat surface, which moves the cursor (traveling mark) on the display screen correspondingly. With the cord of the mouse directed toward the back of the table, the mouse moves the

cursor right on the screen when you roll the mouse right, left when you roll the mouse left, downward when you roll the mouse toward you, and upward when you roll the mouse away from you. If you reach the edge of the table before reaching the edge of the screen, pick up the mouse and set it down farther in the opposite direction. The mouse is the easiest and fastest way to move the cursor at an AUGMENT 1250 terminal.

The three buttons on top of the mouse can be used alone or in combination with the keyboard or keyset to enter commands and text in AUGMENT. The rightmost mouse button has the same function as the OK key, the center button corresponds to the COMMAND DELETE key, and the leftmost button corresponds to BACK SPACE CHAR. Either the mouse button or the equivalent key on the keyboard can be used in any situation.

The buttons provide other functions when you press more than one and when you hold them down while typing letters on the keyboard or keyset. Figure 3 shows all the combinations. The characters listed in the second row (following "OOOO", which means the keyset is not used), indicate the meaning of each of the mouse buttons and combinations in the first row when they are simply pressed alone. For example, pressing the two left mouse buttons gives the character "<BW>", the Backspace Word function, and is equivalent to typing the BACK SPACE WORD key. Functions listed below this row are the characters specified when you hold down the mouse buttons shown at the top of the column while typing the keyset keys shown at the beginning of the row. (In the figure, "O" or an empty circle indicates keys not pressed, and "1" or a filled-in circle indicates keys that are pressed.)

Keyset

An alternative to entering characters from the keyboard is to use the five piano-like keys of the keyset. The keyset is not necessary for use of the AUGMENT 1250 Terminal; it is simply a convenience you may use to increase your efficiency, especially for rapid editing, as you become more familiar with AUGMENT.

With one hand typing on the keyset and the other hand typing buttons on the mouse, you can quickly enter commands and characters and move the cursor. When you work in AUGMENT, you will often find that you type two or three characters at the keyboard, then point with the mouse, and then type two or three more characters. You probably have

Standard Features

to glance down at the keyboard, away from the screen, every time you move your hand from the mouse to the keyboard, which costs time. That is why the keyset was designed. The keyset allows you to keep your eyes on the screen and your hands in the same position while you specify commands, mark characters to edit, move around in files, and change views.

| Buttons: | ○○○ | ○○○ | ●○○ | ○○● | ●●○ | ○○● | ●○○ | ●●● |
|----------|------|-------|-------|---|------|------|-------|-----|
| Keys: | | | | | | | | |
| 00000 | | (CD) | (BC) | (OK) | (BW) | (RC) | (ESC) | |
| 00001 | a | A | ! | | | | | |
| 00010 | b | B | " | | | | | |
| 00011 | c | C | # | ●○○ | | | | |
| 00100 | d | D | \$ | Has no meaning with keyset input | | | | |
| 00101 | e | E | % | | | | | |
| 00110 | f | F | & | | | | | |
| 00111 | g | G | ' | | | | | |
| 01000 | h | H | (| ●●○ | | | | |
| 01001 | i | I |) | Take each keyset code as a lowercase viewspec | | | | |
| 01010 | j | J | @ | | | | | |
| 01011 | k | K | + | | | | | |
| 01100 | l | L | - | | | | | |
| 01101 | m | M | * | | | | | |
| 01110 | n | N | / | | | | | |
| 01111 | o | O | ↑ | ○○● | | | | |
| 10000 | p | P | 0 | Take each keyset code as control character | | | | |
| 10001 | q | Q | 1 | | | | | |
| 10010 | r | R | 2 | | | | | |
| 10011 | s | S | 3 | | | | | |
| 10100 | t | T | 4 | | | | | |
| 10101 | u | U | 5 | | | | | |
| 10110 | v | V | 6 | | | | | |
| 10111 | w | W | 7 | | | | | |
| 11000 | x | X | 8 | | | | | |
| 11001 | y | Y | 9 | | | | | |
| 11010 | z | Z | = | | | | | |
| 11011 | . | < | [| | | | | |
| 11100 | , | > |] | | | | | |
| 11101 | : | : | ← | ●●● | | | | |
| 11110 | ? | \ | (ESC) | Take each keyset code as a capital viewspec | | | | |
| 11111 | (SP) | (TAB) | (RET) | | | | | |

FIGURE 3: MOUSE AND KEYSSET COMBINATIONS

Figure 3, also available as a card in two sizes, shows the characters for each of the keyset combinations. The pattern is based on binary counting. If you decide to use the keyset, we recommend an alternative to learning by memorizing the combinations all at once. You can start slowly by learning the combinations for a couple of frequently used commands that require you to point with the mouse and type just a few characters, such as the Jump, Copy, and Delete commands. In a short time, you will be using the keyset for most of your commands,

making your work faster and free of fatigue. You will probably find that even after you master the keyset, it remains easier to move your hands back to the keyboard to type long strings of text.

Optional Features

OPTIONAL FEATURES

This section describes the optional devices that can be attached to the AUGMENT 1250 terminal. These features are not supplied with the terminal; contact your Tymshare representative for information about obtaining them.

Workstation Printer

The workstation printer is a device attached to and operated by your AUGMENT display terminal and used to make paper copies of online information. Printing at a workstation printer does not interrupt your work session; you can keep on working while the printer is operating. In addition, a number of workstations can use the same workstation printer. The section "HOW TO INSTALL THE TERMINAL" describes where to connect an EIA cable from your printer to the back of your AUGMENT 1250 terminal. For instructions on how to set up AUGMENT to recognize your specific printing device and to handle your printing requests as desired, contact your Tymshare representative. Use of the Print command is described in AUGMENT documentation.

NOTE: It is recommended that you not use a workstation printer when you have the terminal's "wide screen" and "long screen" features simultaneously enabled. More information is available in the section "USING WIDE AND LONG SCREENS".

Graphics Display

The graphics display is a high-resolution display terminal that can be attached to and operated by your AUGMENT display terminal and used for the AUGMENT Graphics and Compose subsystems. Some types currently supported are Genisco G-1000, Tektronix 4014, and Tektronix 4012. See the "EXPERIMENTAL GRAPHICS USERS' GUIDE" for information about installing and using the Graphics display. Note that the AUGMENT 1250 keyboard provides the GRAPHICS key for switching cursor movement back and forth between the alphanumeric and graphics displays. The section "HOW TO INSTALL THE TERMINAL" describes where to connect the cable from the graphics display to the back of your AUGMENT 1250 terminal.

HOW TO INSTALL THE TERMINAL

Set up the terminal on a low table; the ideal height is 26 inches. The table should be large enough to accommodate books, papers, pencils, and an adjustable lamp as well as the terminal. A good working environment will contribute to the effectiveness of the people who use the work station.

Position the keyboard in front of the display. Place the mouse on the right side of the keyboard and the keyset, if you use it, on the left.

There are five connectors on the back of the display. The connectors are arranged in two horizontal rows, three in the top row and two in the bottom row. From left to right (facing the rear of the terminal), the connectors in the top row are for attaching the mouse, keyset, and printer or graphics display. The two in the bottom row are for attaching the line transmitting to the host computer and for the terminal's keyboard. The diagram on the back of the terminal shows the relative positions of each connector. Install the terminal as follows:

1. Connect the plug from the keyboard to the bottom rightmost connector, labeled "KEYBOARD" in the diagram.
2. Connect the plug from the communications line for the external processor, as described below, to the bottom leftmost connector, labeled "LINE" in the diagram.
3. Connect the plug from the mouse to the top leftmost connector, labeled "MOUSE" in the diagram.
4. Connect the plug from the keyset to the top middle connector, labeled "KEYSET" in the diagram.
5. Connect an EIA RS-232 cable from the printer or graphics terminal to the top rightmost connector, labeled "PRINTER/GRAPHICS" in the diagram. (This is optional.)
6. Connect the female end of the power cord to the three-pronged receptacle in the upper-right recessed area at the rear of the display. After the power cord is connected to the terminal, plug the terminal into a standard 120-volt electrical outlet.

WARNING: To avoid electrical shock, do not attempt to use a receptacle not intended for a 3-conductor plug. Additionally, do not detach any covers from the terminal while the power is switched on and/or the

How to Install the Terminal

power cord is connected. The user need not perform any maintenance functions requiring removal of covers.

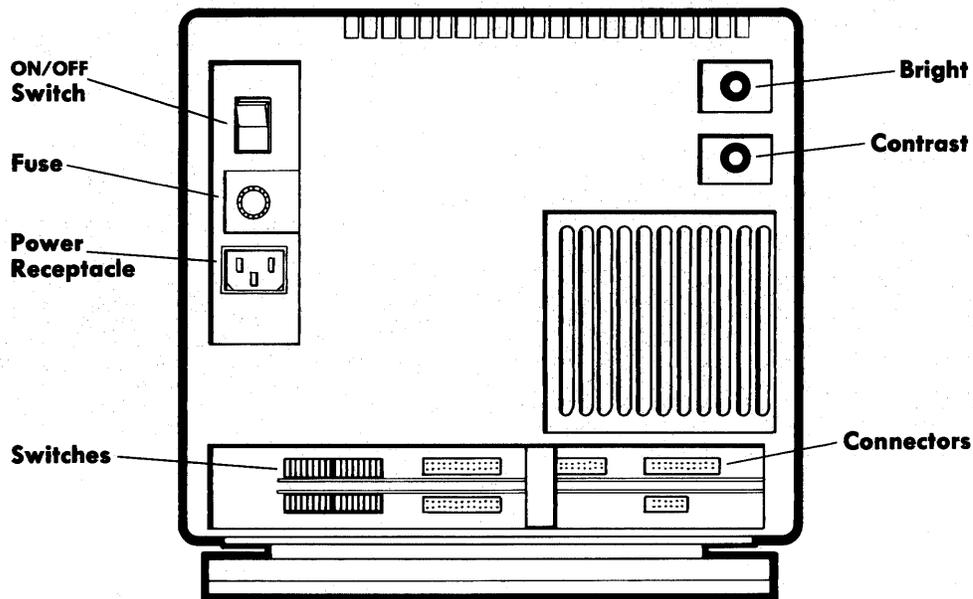


FIGURE 4: AUGMENT 1250 TERMINAL REAR VIEW

Connecting to the External Processor

The terminal can be connected to a communications line directly to a local computer or to a remote computer via an ARPANET TIP, TYMNET node, and/or a modem. (For information on ARPANET TIPS, see the TIP Users' Manual.) The terminal can be connected to any line that will accept an EIA-type typewriter terminal (e.g. TI 700 series, GE Terminet). A cable is provided for the communications line from the terminal to an external processing device. This cable must be attached to an EIA standard 25-pin female connector, which is available from TRW-Cinch

Corp. as P/N DB25S. The following signals should be attached with the pins on the female connector:

Pin 1: Chassis ground

Pin 7: Signal ground

Pin 2: Data sent from the terminal (EPS)

Pin 3: Data received by the terminal (EPR)

Pin 20: Data terminal RDY -- "on" condition indicates display power is on

Setting the Switches at the Rear of the Terminal

There are four sets of switches at the rear of the terminal that you must set for your work station. The switches control the data transmission rate, terminal type, display characteristics, keyboard configuration, and other operating characteristics of your terminal. You will find the switches at the rear of the terminal next to the connectors. The switches are arranged in two rows, one above the other, with two sets of eight switches in each row. You should set the switches appropriately (either "up" or "down") before switching the terminal on.

The switches described in this section determine the terminal's "default" settings, that is, the configuration of the terminal when you first switch it on. You can change the defaults by altering the switch settings. After switching the terminal on, you can change the default conditions for the current work session by using the "local commands" described in the "LOCAL COMMANDS" section of this document.

Use your fingertip or a pointed object, such as a ball-point pen, to set the switches. With a light force, push them either "up" or "down" as described in the following paragraphs.

Set all switches in the two upper sets to the "up" position. The rest of this section describes the functions of the switches in the two lower sets.

Adjusting Data Transmission Switches

You must set the data transmission baud rate to match your line by adjusting the first through fourth switches (from the left, facing the rear of the terminal) of the lower-right set. The switches are

How to Install the Terminal

numbered, but the numbers are upside-down, so you should disregard them and simply count the switches from left to right. For example, the first switch is the leftmost switch, and the fourth switch is the fourth one from the left. Set these four switches from left to right for the appropriate baud rate exactly as shown in the table below. This sets the initial baud rate. You can later change it by giving the appropriate local command, as described in the section dealing with local commands.

Counting from the left:

| | | Switch | | | |
|-------------------|------|---------------|------|------|------|
| | | 1st | 2nd | 3rd | 4th |
| Baud Rates | 300 | down | up | down | up |
| | 600 | up | down | down | up |
| | 1200 | down | down | down | up |
| | 2400 | up | down | up | down |
| | 4800 | up | up | down | down |
| | 9600 | up | down | down | down |

The fifth through eighth switches of the lower-right set control the baud rate for the workstation printer or graphics connection. For a graphics terminal, the baud rate should be set to 9600. Set the baud rate for the workstation printer according to the specifications for the printer you are using.

Counting from the left:

| | | Switch | | | |
|-------------------|------|---------------|------|------|------|
| | | 5th | 6th | 7th | 8th |
| Baud Rates | 300 | down | up | down | up |
| | 600 | up | down | down | up |
| | 1200 | down | down | down | up |
| | 2400 | up | down | up | down |
| | 4800 | up | up | down | down |
| | 9600 | up | down | down | down |

Adjusting Program Switches

The lower-left set of switches (facing the rear of the terminal) controls a variety of terminal functions and should be set as follows:

Terminal type: Set the 1st switch (from the left) "down" for normal AUGMENT 1250 operation. Setting the switch "up" causes the terminal to operate so that it supports most Digital Equipment Corporation (DEC) VT100 ANSI standards. This setting can be changed with a local command once the terminal is switched on.

Keyboard click: The 2nd switch (from the left) controls the keyboard "click" function. Setting the switch "up" causes a "click" to sound when any key on the keyboard is typed after the terminal is switched on. Setting the switch "down" causes no keyboard click when the terminal is first turned on. This setting can be changed with the appropriate local command (see the section "LOCAL COMMANDS"). Note that the SHIFT, CTRL, LOCAL RESET, and PROG keys never click when pressed. Setting the switch "down" turns off keyboard click.

The 3rd and 4th switches should be "up".

Reverse video: The fifth switch (from the left) controls the terminal's "reverse video" feature: set it "up" for black characters on a white background, "down" for white characters on a black background. (If you set this switch after switching the terminal on, press LOCAL RESET after setting the switch.)

Down-loaded programs: The next three switches allow you to "download" programs into the terminal's memory and should be set "down", "down", and "up", in that order.

All settings take effect when the power is turned on, or the local command "Set All (options to Power-up state)" is given.

HOW TO USE THE TERMINAL

After installing the AUGMENT 1250 terminal as described in the preceding section, follow these seven steps to use it:

1. Begin by switching on the power. Press the power switch at the rear of the display, just above the power cord, to the "on" (upper) position. See Figure 4. When you switch on the power, the "bell" rings. (The bell produces a short, high-pitched sound.)
2. Adjust the brightness of the screen image by turning the knob labeled "BRIGHT" at the rear of the display. Adjust the contrast by turning the knob labeled "CONTRAST" at the rear of the display so that the cursor (traveling mark) comes into clear view. See Figure 4. Roll the mouse across the table and check to see that the cursor moves across the screen correspondingly.
3. Tilt the display to the most comfortable viewing angle by facing the front of the terminal, holding in the button on the left side of its base with your left hand, and tilting the display up or down with your right hand.
4. Log into the computer. (For instructions on how to log into the computer, see the AUGMENT Textbook lesson "Starting and Ending an AUGMENT Work Session" for your network connection, or contact your Tymshare representative.)
5. (optional) Modify the terminal's operating configuration for the current work session by setting the appropriate "local commands", as described in the section "LOCAL COMMANDS". Local commands can be used any time during a work session.
6. Proceed with your AUGMENT work session as described in AUGMENT documentation.
7. When finished with your work session, log out of the computer, as described in the appropriate "Starting and Ending an AUGMENT Work Session" lesson, or by your Tymshare representative, and switch off the power by pressing the power switch at the rear of the terminal to the "off" (lower) position.

MODIFYING THE TERMINAL'S CONFIGURATION: LOCAL COMMANDS

You can modify the configuration, or the operating characteristics, of the AUGMENT 1250 terminal for your current work session by giving "local commands". Local commands control the operation of the terminal for your current work session only; they have no effect on information stored in the host computer.

By pressing the LOCAL COMMAND key, you enter "local command mode", which allows you to select a specific terminal configuration for your current work session. The red light on the LOCAL COMMAND key glows when you are in local command mode. Pressing the LOCAL COMMAND key again exits local command mode, and the red light on the key goes out. Select the configuration you want by entering local command mode, giving the appropriate local commands, and then leaving local command mode. The local commands you choose remain in effect until you change them with other local commands or switch off the terminal. Some characteristics are reset to the initial setting when you type LOCAL RESET.

You can enter local command mode before you log in or any time during a work session. However, when you enter local command mode during a work session, you can give only local commands, not AUGMENT or Exec commands. You must leave local command mode before you can continue with your work session. Whenever you enter local command mode, the length of the terminal's display area increases by one line and a "C:" prompt appears in the lower left corner of the display. The "C:" means you can enter any of the available local commands.

You may type a question mark (?) at the "C:" prompt to see the command word choices, listed as follows:

? Quit/Go/Set/Emulate C:

At the "C:" prompt, type the first character of the command word. The full word, plus any additional helpful words (called "noise words") will be filled out. Next you will see another prompt, that is, a letter followed by a colon. The "C:" prompt indicates you have a choice of command words. You may type a question mark to see the list of command word choices, again typing the first letter of the command at the "C:" prompt.

A "T:" prompt indicates that you should type some text, usually a

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number, followed by <OK>. In response to a "Y/N:" prompt, you may type "y" or <OK> to specify YES, or "n" to specify NO. In response to an "OK:" prompt, simply type <OK> (the OK key) to complete the command or <CD> (the COMMAND DELETE key) to cancel it. Typing <CD> at any time before the final <OK> cancels the command. Typing the LOCAL COMMAND key a second time before the final <OK> cancels the command and exits local command mode. After you specify your local commands, leave local command mode and go on with your work session. Each local command is described below. Following each explanation is an example of what the command will look like on your screen.

NOTE: Your terminal may have some local commands not listed in this document. If so, see your Tymshare representative for information about them.

Leaving Local Command Mode

The "Quit" command causes you to leave local command mode. This has the same effect as pressing the LOCAL COMMAND key a second time; the light on the key goes out and you leave local command mode.

Quit OK:

Saved Screen Images

The following are descriptions of local commands that affect the terminal's "screen save" feature. For more information on saving screens and viewing them later, see the section "USING SAVED SCREENS".

The "Set SaveScreen Number" command allows you to specify the number of screen images that can be saved for later viewing. You can save from one to six screen images. Initially, you can save one screen image. For NUMBER, type a number from 1 to 6, followed by <OK>.

Set SaveScreen Number (of buffers to) T: NUMBER

The "Set SaveScreen Freeze" command allows you to "freeze" a saved screen image so that it will be saved regardless of how often the SCREEN SAVE key is pressed. The saved screen image must be showing on your terminal before you can freeze it.

Set SaveScreen Freeze (current buffer) OK:

The "Set SaveScreen Release" command releases a frozen saved screen image so that the buffer that contained the image can be used to hold

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another screen image. The frozen screen image must be showing on your terminal before you can release it. This command has no effect on saved screen images that have not been frozen.

Set SaveScreen Release (current buffer) OK:

The "Set SaveScreen Utilize" command allows the area of the terminal's memory that normally is reserved for printing on a workstation printer to be used for storing a saved screen image. It is recommended that you choose NO for this alternative if you use a workstation printer attached to your terminal. The command takes effect when you leave local command mode.

Set SaveScreen Utilize (print buffer) (now NO/YES) Y/N:

Keyboard Configuration

The "Set Keyboard Clicking" command causes a "click" to sound when a key is pressed. Specifying NO sets the keyboard so that no click sounds when you press a key. The command takes effect immediately.

Set Keyboard (mode) Clicking (now NO/YES) Y/N:

The "Set Keyboard Repeating" command sets the keyboard so that if you hold down a key, the specified character is sent repeatedly after a momentary pause. Specifying NO causes a character to be sent only once, regardless of how long the key is depressed. Initially, the keyboard is non-repeating. The command takes effect immediately.

Set Keyboard (mode) Repeating (now NO/YES) Y/N:

The "Set Keyboard (mode) Dvorak" command sets the keyboard to Dvorak mode, a keyboard layout designed for fast typing. Specifying NO sets the keyboard to the standard layout. Information on the Dvorak keyboard layout can be obtained from the Office Automation Division of Tymshare, Inc. The command takes effect immediately.

Set Keyboard (mode) Dvorak (now NO/YES) Y/N:

WARNING: If you set the keyboard to Dvorak mode, almost none of the alphabetic or numeric key labels on the keyboard will match the characters that are actually specified. If you accidentally set Dvorak mode to YES, you can reset it as follows: In local command mode, type a semicolon (;) for "Set"; "v" for "Keyboard"; "h" for "Dvorak"; and "1" for NO. Then the terminal will be restored to the standard layout. Optionally, you can press ALPHA LOCK and LOCAL RESET simultaneously,

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or switch the terminal off and then switch it back on, to reset the keyboard to the standard layout. Switching off the terminal, however, may result in a detached job.

Data Communications Line Settings

The "Set Communications (line) Baudrate" command sets the terminal's baud rate (the rate at which the terminal sends and receives information) to match the network connection. The terminal's baud rate must match that of the network connection. You may specify baud rates from 300 to 19,200; each higher baud rate is double the preceding baud rate. To specify the baud rate, type the first digit in the number followed by <OK>. To specify 19,200, first type a space. The terminal's initial baud rate is determined by the setting of the appropriate switches at the rear of the terminal.

Set Communications (line) Baudrate 300/600/1200/2400/4800/9600/19200 <OK>

The "Set Printer Baudrate" command sets the baud rate for the terminal's PRINTER/GRAPHICS port to match that of an attached workstation printer or graphics display. The baud rate for the terminal's PRINTER/GRAPHICS port must match that of the workstation printer or graphics display. For a graphics display, specify 9600. Refer to the operator's manual for the workstation printer to determine the printer's baud rate.

Set Printer Baudrate 300/600/1200/2400/4800/9600 <OK>

The "Set Communications (line) Half (duplex)" command sets the communications line to half duplex. Specifying NO sets the line to full duplex. Full duplex, the initial setting, is required by AUGMENT. The command takes effect when you leave local command mode.

Set Communications (line) Half (duplex) (now NO/YES) Y/N:

The "Set Communications (line) Local (mode)" sets the communications line so that characters are simply printed on the terminal instead of being sent to the host computer. Specifying NO, the initial setting, sets the line so characters typed at the terminal are sent to the remote processor. Typing LOCAL RESET at any time causes local mode to reset to NO. The command takes effect when you leave local command mode.

Set Communications (line) Local (mode) (now NO/YES) Y/N:

Wide and Long Screen

The "Set Display Length" command enables "long screen", which nearly doubles the length of your display to 44 lines. Setting the display length to 24 resets the display to the initial length. Type "2" to specify "24" and "4" to specify "44". Complete the command by typing <OK>. For more information on the long screen feature, see the section "USING WIDE AND LONG SCREENS". The command takes effect when you leave local command mode.

Set Display Length 24/44 OK:

The "Set Display Width" command enables "wide screen", which doubles the width of your display to 160 characters. Setting the display width to 80 resets the display to the initial setting. Type "8" to specify "80" and "1" to specify "160". Complete the command by typing <OK>. For more information on the wide screen feature, see the section "USING WIDE AND LONG SCREENS". The command takes effect when you leave local command mode.

Set Display Width 80/160 OK:

Terminal Type

The "Emulate Ansi" command causes the terminal to operate so that most Digital Equipment Corp. (DEC) VT100 ANSI standards are supported. Specifying NO resets the terminal to normal AUGMENT 1250 operation. The command takes effect immediately.

Emulate Ansi (VT100) (now NO/YES) Y/N:

The "Emulate 1200" command causes the terminal to operate as if it were an AUGMENT 1200 terminal. Specifying NO resets the terminal to normal AUGMENT 1250 operation. The command takes effect immediately.

Emulate 1200 (Tymshare) (now NO/YES) Y/N:

NOTE: The initial setting for terminal type is determined by the program switch setting for terminal type at the rear of the terminal. See the section "HOW TO INSTALL THE TERMINAL" for information about setting that switch.

Transferring Control to Another Location in Memory

The "Goto (hex)" command transfers control to the location in memory specified by NUMBER; in response to the "T:" prompt, type a

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hexidecimal number and end with <OK>. It is useful for special-purpose terminal programs or down-loaded programs.

Goto (hex) T: NUMBER

Resetting Local Commands

The "Set All" command resets all local commands to their initial setting.

Set All (options to Power-up state) OK:

USING SAVED SCREENS

The AUGMENT 1250 terminal allows you to "save" one or more screen images for later viewing. A "saved image" is just that: it is a single screenful of information that has been saved in the terminal's memory for later viewing. A saved image is different from your "current view", which is the working view you have of the information displayed on your screen. When you save an image, the image of your current view is stored in the terminal's memory so you can "switch" to that image at any later time during a work session. A screen image will be saved until you replace it with another image or switch off the terminal.

You can save from one to five screen images if you are using an attached workstation printer, or up to six images if you are not using an attached printer. An area of the terminal's memory that is reserved for saving a screen image is called a "buffer". When you first switch the terminal on, one buffer is automatically reserved, so you can save one screen image. You can change the number of buffers, up to six, by giving the local command "Set SaveScreen Number", which is described in the section "LOCAL COMMANDS". Each buffer can contain one screen image.

Saving and Viewing a Single Screen Image

To save a single screen image, first display on your terminal the current view you want to save. Then press the SCREEN SAVE key once. The image is now available for later viewing.

To view the saved image, press the SCREEN SWITCH key once. When you press SCREEN SWITCH, your view switches from your current view to the saved image. When a saved image is showing on your terminal, the light on the SCREEN SWITCH key glows. To return to the current view, press the SCREEN SWITCH key again. When you return to your current view, the light on the SCREEN SWITCH key goes out. You can view the saved screen image any time before you turn the terminal off.

Every time you press SCREEN SAVE, the image of your current view is saved. If you have only one buffer reserved for saving screens, the old saved image will be replaced by a new one every time you press SCREEN SAVE.

NOTE: If you press SCREEN SWITCH before you have saved an image, your view will switch to an unused buffer, and a black-and-white pattern will appear on your terminal. To return to your current view,

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simply press SCREEN SWITCH. To use the buffer, press SCREEN SAVE, and an image of your current view will be stored in the buffer.

You can work in a file with a saved screen image showing on the display; that is, commands and text will still be sent to the host computer, just as when you are working with your current view, even though you cannot see the commands and text as you type them. It is important to remember that you are not working on the saved image. Any commands you give will work on your current view, regardless of whether a saved image is showing on your display. Also, if you give any commands that move, change, delete, or insert text, you will not be able to see the changes until you switch back to your current view.

Saving and Viewing Multiple Screen Images

You can save up to six screen images after giving the local command "Set SaveScreen Number". (After entering local command mode, type "ssn", a number between one and six, and <OK>, then leave local command mode.) Then, each time you press SCREEN SAVE, an image of your current view is stored in a buffer in the terminal's memory and is available for later viewing.

To view a saved image, press SCREEN SWITCH one or more times. Pressing SCREEN SWITCH once switches to the most recently saved image; pressing the key again switches to the image saved before that, and so on. Viewing saved screen images is like flipping through a stack of photographs one at a time, and it is helpful to think of saved screen images as existing within a stack of images. Eventually, you will switch through all the saved screens until you reach your current view. When you reach the current view, the light on the SCREEN SWITCH key goes out.

Pressing SCREEN SWITCH while holding down the SHIFT key switches through the stack of saved images in the reverse order, eventually returning you to your current view. This feature is especially useful when you have more than one saved screen image because it allows you to switch from your current view to a saved image and then back again without having to switch through the entire stack of saved images.

You can reserve only a finite number of buffers in the terminal's memory for saving screens. When the number of times you press SCREEN SAVE exceeds the number of reserved buffers, you will begin replacing old saved images. Here again, it is helpful to think of saved screens as being in a stack of images. When the number of times you

press SCREEN SAVE exceeds the number of reserved buffers, the first saved image in the stack is "pushed out" to make room for the newly saved image.

If you have a screen image that you want to save regardless of how often you press SCREEN SAVE, you can "freeze" the image so it will not be "pushed out" of the stack. To freeze an image, switch your screen to the image you want to freeze and give the local command "Set SaveScreen Freeze". Then, as you press SCREEN SAVE, other images in the stack may be replaced, but the one you froze will remain in the stack. The number of images you can freeze equals the total number of reserved buffers minus one.

A saved screen can be replaced by a new image. Simply switch to the saved screen you want to replace, and then press SCREEN SAVE, and the previously saved image will be replaced by an image of your current view. The image will be replaced regardless of whether it was frozen. To return to your current view, press SCREEN SWITCH one or more times until the light on the key goes out.

To replace a frozen image, simply switch to it and press SCREEN SAVE. A saved image of your current view will replace the previous image in that buffer. Any image saved in that buffer will be a frozen one. To release a frozen image, switch to the frozen image and give the local command "Set SaveScreen Release", and the image will no longer be frozen; that is, if you press SCREEN SAVE often enough, the image will eventually be pushed out of the stack of saved images.

Saving and Viewing Wide and/or Long Screens

When you are using the terminal's "wide screen" or "long screen" feature (described in the section "USING WIDE AND LONG SCREENS"), you can save up to two full images. The entire image, not only the portion showing on your screen, is saved. (For long screen, the saved image will be 80 characters wide and 44 lines long; for wide screen, it will be 160 characters wide and 24 lines long.) View the saved image by moving the cursor to the bottom or edge of the screen. When the cursor reaches an edge of the screen, continue moving the mouse, and the saved image will move across your screen, as though you were sliding the image across your field of view. You must have specified at least two buffers with the local command "Set SaveScreen Number" to save two long or wide screen images.

With wide and long screen simultaneously enabled, you can save one

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full image. The entire wide screen and most of the long screen image is saved for later viewing. (The saved image will be 160 characters wide and 30 lines long.) If you do not have an operating printer attached to your terminal, the buffer that is normally reserved for the workstation printer can be used to increase the amount of the long screen image that can be saved. Give the local command "Set SaveScreen Utilize" and answer YES. (The saved image will then be 160 characters wide and 42 lines long.)

USING WIDE AND LONG SCREENS

The "wide screen" feature allows you to double the width of your AUGMENT 1250 display screen. It is most useful for viewing and preparing tables that are more than 80 characters wide. The "long screen" feature allows you to double the length of your display screen. Long screen is useful anytime you want to view more than 24 lines of text.

With wide screen enabled, AUGMENT will work normally, except that more columns or characters are available beyond the edge of your screen. You may display them by moving your cursor toward the right and left edges of the display. It will feel like you are sliding or stretching your 80-column-wide screen back and forth to the right and left ends of 160-character lines. As long as you do not move the cursor to the edge of the screen, the window contents will not change.

With long screen enabled, AUGMENT will work in the usual way, except you can see more lines of your file window by moving your cursor toward its bottom edge. To see the top of your file window, move the cursor toward the top. It will feel like you are sliding your 20-line window up and down to the top or bottom of a 44-line file screen. As long as you do not move the cursor to the edge of the window, the contents will not change.

You can enable wide or long screen, or both simultaneously, at any time during a work session, although the procedure requires more steps if you have already entered AUGMENT. The two sets of procedures below describe how to enable long screen before and after entering AUGMENT.

NOTE: With wide or long screen enabled, you may inadvertently "hide" text from your view. If, after enabling wide or long screen, you see no text on your terminal but you think you should, move the cursor as far as possible to the upper-left corner of the display, and the "hidden" text will appear.

Setting Wide and/or Long Screen Before Entering AUGMENT

1. Move the cursor to the upper-left corner of the display.
2. Enter "local command mode" by pressing the LOCAL COMMAND key once.
3. At the "C:" prompt at the lower-left corner of your display,

Using Wide and Long Screens

give the appropriate local command. For wide screen, give the command "Set Display Width 160" (type "sdw1<OK>"). For long screen, give the command "Set Display Length 44" (type "sdl4<OK>").

4. Leave local command mode by giving the local command "Quit" or by pressing the LOCAL COMMAND key a second time.
5. After leaving local command mode, press the LOCAL RESET key once.

Setting Wide and/or Long Screen After Entering AUGMENT

1. At the "BASE C:" prompt, give the "Quit" command by typing "q<OK>". You will be returned to the August Executive, and the "@" prompt will appear in the upper-left corner of your display.
2. Follow steps 1 through 5 in the previous procedure.
3. Re-enter AUGMENT by typing "augment<RET>" at the "@" prompt.

Resetting the Display

To reset the display to the normal 80-character and 24-line dimensions, follow the steps above, except when you give the local commands (step 3 of the first procedure), specify "24" for the length and "80" for the width.

Saving a Wide and/or Long Screen

When you use the SCREEN SAVE feature with wide and/or long screen enabled, the entire screen, not just the visible portion, is saved. To view the entire saved wide screen, press the SCREEN SWITCH key once and move the cursor to the right or left edge of your display. To view an entire saved long screen, move the cursor to the top or bottom of the display.

TROUBLESHOOTING

The AUGMENT 1250 terminal is extremely reliable and should provide years of trouble-free service. If, however, you do encounter problems, scan the conditions listed here for the symptom that best fits your situation.

Problem 1: Unwanted characters appear on the terminal when you switch it on.

Sometimes an unusual pattern of characters appears on the screen when you first switch on the terminal. If this happens, try typing LOCAL RESET. You should then be able to proceed normally. If the problem persists, simply switch the terminal off, wait for a moment, and switch it back on again. If that fails to solve the problem, then the terminal may be defective. If this is the case, contact your Tymshare representative.

Problem 2: Nothing happens when you type.

If the characters do not appear on the screen, there may be a problem with the terminal. Double-check to see that the keyboard is plugged in properly and then press the LOCAL RESET key. If characters still do not appear when you type, try adjusting the contrast and brightness knobs at the rear of the terminal. If this fails, the terminal may be defective. Seek technical assistance from your Tymshare representative. If characters suddenly stop appearing after you have entered the Executive or AUGMENT, the HOLD key may have been pressed accidentally. Press the HELP/RESUME key once. If this fails, you may have broken your network connection by accidentally pressing the BREAK key. Type LOCAL RESET; if your network or host computer identification message appears, then you must attach back to the job. If all these measures fail, seek technical assistance from your Tymshare representative.

Problem 3: The cursor does not move.

First, check to see whether the rest of the terminal is working properly; it is if you can type commands or text from the keyboard or keyset. If there is no response from the keyboard, try pressing the LOCAL RESET key. If there is still no response from the keyboard, see Problem 2.

If you can enter commands or text from the keyboard but the cursor does not move, make sure that the mouse is plugged into the proper connector labeled "MOUSE" on the back of the display. If you have

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accidentally pressed the GRAPHICS key, the cursor will not move on your screen when you roll the mouse. If the red indicator light on the GRAPHICS key is glowing, press it once, and the light should go out. Then roll the mouse again and look for normal cursor movement. If that does not work, then the mouse may be defective. The best way to see whether the mouse is defective is to try plugging a second mouse into the terminal. If the second mouse works, you should request a replacement for the defective mouse from your Tymshare representative. If the second mouse does not work, the terminal may be defective. If the terminal seems defective, seek technical assistance from your Tymshare representative.

If there is nothing wrong with the mouse, check that the terminal is not set to emulate a DEC VT100 terminal. Make sure the first switch from the left in the lower-left bank of switches at the rear of the terminal is set to the "down" position, and give the local command "Emulate Ansi" and specify NO (first enter local command mode, type "ean", then leave local command mode). Then type LOCAL RESET. If it still does not work, seek technical assistance from your Tymshare representative.

Problem 4: The cursor does not reach the edge of the screen.

If the cursor stops travelling before it reaches the edge of the screen when you move the mouse, simply move it to the opposite edge as far as it will go, and then back to the other edge. Note that the whole display screen consists of 24 lines and 80 character positions to which the cursor can point. That should correct the problem. If the problem persists, seek technical assistance from your Tymshare representative.

Problem 5: The keyset does not enter commands or text.

First, check to see if the rest of the terminal is working properly; if it is, you can type commands or text from the keyboard. If there is no response from the keyboard, press the LOCAL RESET key. If there is still no response from the keyboard, see Problem 2.

If you can enter commands or text from the keyboard but not from the keyset, make sure that the keyset is plugged into the connector labeled "KEYSET" on the back of the display. The best way to see whether the keyset is defective is to try plugging a second keyset into the terminal. If the second keyset does not work, the terminal may be defective. If the terminal seems defective, seek technical assistance from your Tymshare representative.

If the second keyset works, the first keyset may be defective. Check to see if any of the keys are stuck. Press each key, one by one, and listen for a little click. If one of the keys does not click, check to see if there is paper, cardboard, gum, or anything else underneath the key. You should also make sure that the keyset is clean; cola or coffee with sugar in it can make the keys stick. If you cannot fix the keyset, you should request a replacement from your Tymshare representative.



Corporate Offices Cupertino, California

Tymshare Nederland, Amsterdam

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