Instruction Manual

ALPHA 430
Message Center
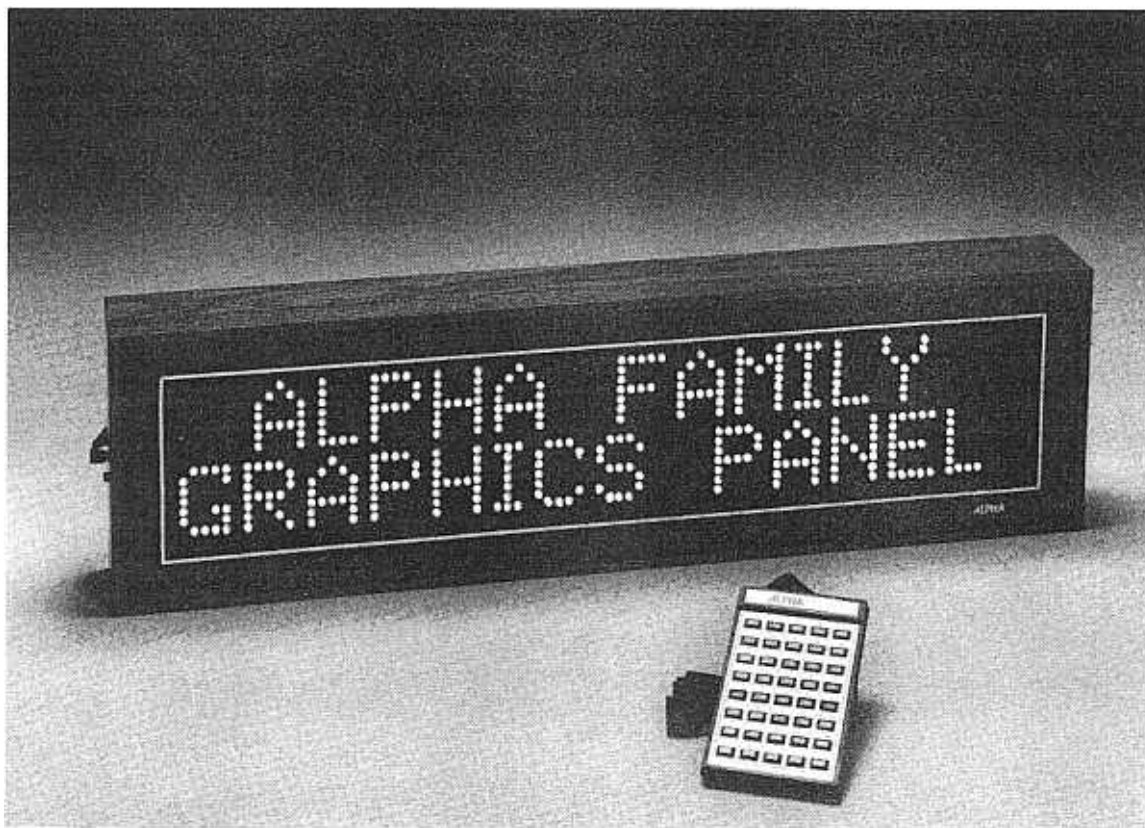
INTRODUCTION

Congratulations on your purchase of the **Alpha 430 Graphics Panel**. In our opinion the **Alpha** family of products are by far the best dollar value units available today.

You will find that your **Alpha** will be a versatile communications tool. Like any other tool, you must first learn how to properly use it in order to obtain its fullest benefits. This manual was put together to explain the operating features of the **Alpha**. Please first read over this manual to understand the operation of the unit, then experiment with your unit by combining the various operating modes to generate interesting visual effects. By using the optional Graphic Chips you can expand your **Alpha** into a creative, exciting display. You will find that your **Alpha** is fun to operate, and its only limitations are the creativity that you put into the unit.

Once you understand the operation of the **Alpha**, go ahead and put it to work for you. It will dramatically get your message across to your customers or employees in your own words.

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Section 1

UNPACKING

If you haven't already done so, carefully open the box and remove the content   e following items are included:

> Alpha 430 Graphics Panel Display
> Alpha 430 Keyboard
> Alpha 430 In Line Transformer
> 2 Alpha Mounting Clips
> 6 Alpha Mounting Feet
> Alpha 430 Instruction Manual
> Alpha Warranty Card

Please save all packaging material in the event that reshipment of the   is necessary. Also, please fill out the enclosed warranty card and return it to:

> Adaptive Micro Systems
> 13050 West Custer Avenue
> Butler, WI 53007

Section 2

INSTALLATION

Power Connection

The Alpha 430 is simple to power up. Just insert the 2 pin connector of the In Line Transformer into its mating connector located at the lower left hand side of the Alpha 430 case. The line cord coming out of the In Line Transformer can now be plugged into any 115 volt outlet. See Figure 1.
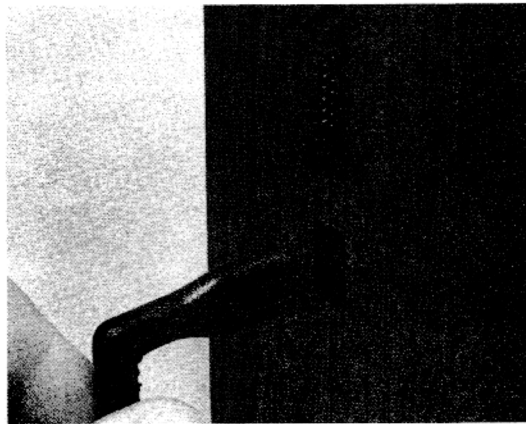
Figure 1

Keyboard Connection

To connect the keyboard, insert the keyboard connector into its mating connector which is located directly above the power connector on the left hand side of the Alpha 430 case. See Figure 2.

Note that the keyboard connector is keyed, and that it can fit only one way into the connector.

Figure 2

Mounting

The Alpha 430 was designed to mount in one of two ways. It can be wall mounted by using the mounting holes provided on the back of the case, or it can be suspended from the ceiling by using the enclosed Mounting Clips.

Wall Mounting

The Alpha 430 has 2 keyholes, one vertical and one horizontal, on the back of the unit which can be used to provide a security mounting means for the unit. See Figure 3. Make sure that the mounting anchors can withstand the weight of the Alpha 430. Once the anchors are in place and scre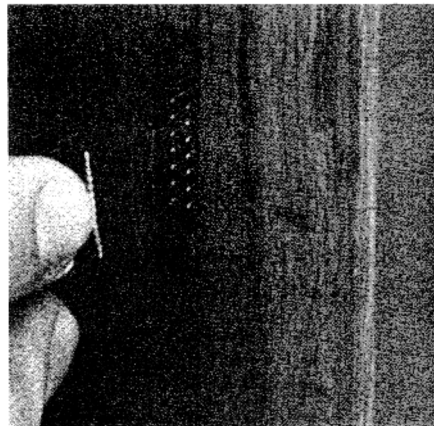ws are fastened in the anchors, place the left hand side keyhole of the Alpha 430 over the corresponding screw head. Once the screw head is in the keyhole, slide the Alpha 430 to the right until it stops. Then tilt the unit up slightly until the right hand screw head goes into the keyhole. Now the unit can be lowered slightly into place. The unit is now securely fastened.

19 ⅝"
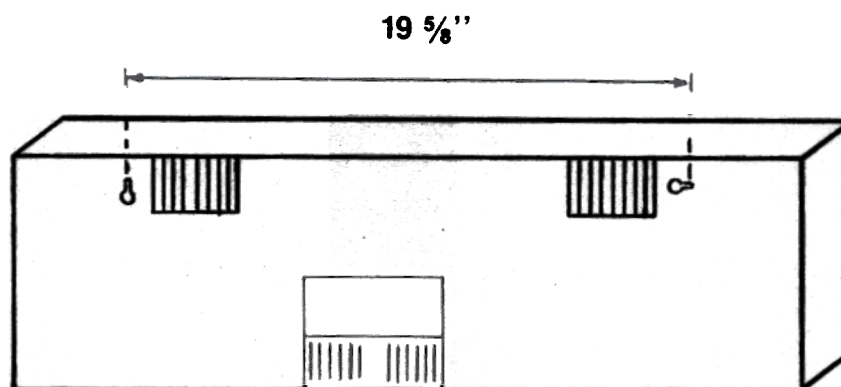
Figure 3

To remove the Alpha 430 from its wall mounting, reverse the above procedure. Lift the right hand side of the unit until the right screw head is removed from the keyhole. Now slide the unit to the left and remove the unit from the wall.

Ceiling Suspension

The Alpha 430 is provided with 2 Mounting Clips and 2 Spacer Bars which are used when the unit is suspended from the ceiling. When these clips are inserted in to the top of the case, they provide a convenient method to attach a chain which can be hung from the ceiling. Before inserting the Mounting Clip, slide one end of the clip through the hole in the Spacer Bar, leaving the other end free. To insert the clips into the case, first squeeze the arms of the clip together so that the clip fits into the slots on the top of the case. Once the clips are in the slot, release the pressure so that the arm goes into the case. See Figure 4. Make sure the clips snap into the case. Finally, hook the free end of the Spacer Bar to the Mounting Clip. This locks the Mounting Clip in place.

Figure 4

Once the clips are securely seated, the clips can be connected to a chain using "S" hooks which are available at any hardware store.

Table Top Use

Enclosed with the mounting clips are 6 adhesive backed feet. These feet can be placed on the bottom of the unit to prevent scratching of the bottom of the case. Simply peel the feet off the backing paper and place on the bottom of the unit, as shown in Figure 5.
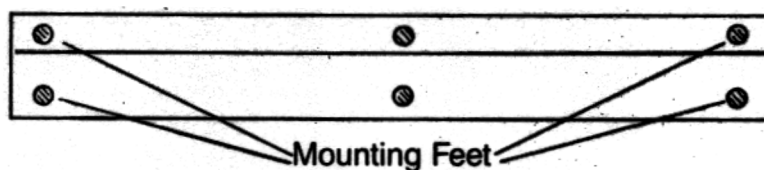
Figure 5

Section 3 _____

KEYBOARD OPERATION

Refer to Figure 6 to familiarize yourself with the key locations on the keyboard.

Keyboard

Figure 6

Please note that some keys have a character directly above them. These keys operate in a manner similar to typewriter keys. If the character directly above the key is desired, simply depress and hold down the SHIFT key which is located in the lower left hand corner of the keyboard, and then at the same time depress the key directly below the desired character. If the character on the key is desired, simply depress that key without depressing the SHIFT key.

The most commonly used characters are placed on the keys and the lesser used characters are located above the keys.

The keyboard is detachable from the unit. After all the desired messages have been entered into the unit and the messages are running, the keyboard can be detached and stored. Without the keyboard the message cannot be altered, thus providing you with message security.

Section 4 _____

MESSAGE MODES AND CHARACTER SIZES

The Alpha 430 has 2 character sizes and several different ways (modes) of displaying information. The different modes and sizes can be used to create special effects. The 7 basic modes are as follows:

SCROLL: When used in the Bottom position, it will take a line of small characters and scroll it up to the bottom line while scrolling the bottom line to the top line and the top line off the display. In any other position, acts like the "UP" mode.

UP: Scrolls up a new line onto the desired line while scrolling off the current line.

DOWN: Scrolls down a new line onto the desired line while scrolling off the current line.

TIME   In the Big position the time of day will be shown with hours, minutes, and seconds. In the Top or Bottom position the time of day will be shown with only hours and minutes

ROTATE: Rotates a message from right to left on the desired line.

FLASH: Flashes the desired line of information at approximately half second intervals.

HOLD: Holds the line of information on the display.

WHERE: Top implies top line of small characters, Bottom implies bottom line of small characters, and Big implies full size characters.

Section 5 _____

MESSAGE ENTRY

After making sure the unit is powered and the keyboard is inserted into the keyboard sockets (see INSTALLATION), you will be ready to enter a message. The following steps are the basic steps that need to be followed to enter a message. They are:

STEP 1. Depress the [PROG] key.

> This will cause the unit to go into the program mode and resets the Alpha to the beginning of your message. A 5 Dot cursor will appear in the center position indicating that Big characters have been selected.

STEP 2. Depress one of the cursor position select keys (BIG, TOP, BOTTOM) to select the desired position of the characters that are going to be entered.

> A cursor position select key need only be pressed when you are selecting a mode in a position different from the previous mode.

STEP 3. Depress one of the mode keys described in Section 4.

> Depressing one of these keys tells the unit what type of action to perform on the message that you will enter. When one of these keys is depressed, the display will show a lower case letter which indicates the mode. These lower case letters will only appear during message entry and will not appear during normal running of the message. For example, when the [HOLD] key is depressed, a lower case "h" appears indicating hold mode.

STEP 4. Enter the message that is to be displayed in that mode.

STEP 5. Repeat Steps 2, 3, and 4 until all the desired messages have been entered.

STEP 6. Depress the [RUN] key and the message will run in the same order you entered it.

> **NOTE 1** The information on the display will not change until either the message has completely cycled through or a new mode uses that position of the display. This fact can be used to create interesting combinations of modes such as FLASH the Top and ROTATE a sentence on the Bottom!

> **NOTE 2:** The message entered for all the modes except ROTATE will be centered on the display automatically. You may use spaces to right or left justify.

Section 6 (continued) _____

CHARACTERS SETS

The [TOP], [BOTTOM] and [BIG] keys select the position your message will appear on the display. BIG refers to the middle line of the display where TALL or SHORT characters can be used. TOP and BOTTOM refer to the top and bottom lines respectively, where SHORT characters can be used. Pressing the [TOP] , [BOTTOM] or [BIG] key places a cursor on the right hand side of the display on the appropriate line.

Whenever a cursor is on the display (waiting for a display mode to be entered) you can select a new character set by pressing the [C] or [W] keys. The available character sets are; TALL SLIM, TALL WIDE, SHORT SLIM, and SHORT WIDE — of both upper and lower case characters.

TO CHANGE THE SIZE

W — Width

The [W] key can be pressed with the cursor in any position. It selects slim or wide character styles. If the bottom 2 dots in the cursor column are on, then the wide character set is selected, otherwise the slim characters are selected. Pressing [W] switches between slim and wide characters as long as the cursor is still on the display.

C — Character Height

The [C] key can only be pressed if you have selected the BIG cursor position. It switches between SHORT and TALL character sets. If the cursor is five dots high, then the TALL character set is selected. If the cursor is 3 dots high then the SHORT character set is selected. Pressing [C] switches between TALL and SHORT character sets as long as the cursor is on the display.

> NOTE: Since the cursor must be on the display to select a character size only one size can appear in any one display mode.

SELECTING UPPER/lower CASE CHARACTERS

You can switch between upper and lower case characters at any time in your message by pressing [SPECIAL] and then pressing [L]. This key sequence is analogous to the CAPS LOCK key on a typewriter.

> NOTE: When the [SPECIAL] key is pressed the word "special" will appear on the lower left-hand side of the display. To return the display to its original state just press the [SPECIAL] key again.

PROGRAMMING AIDS

[SPECIAL] + [H] = Help

Pressing [SPECIAL] and then [H] will show you which character set is currently selected. You can request this information at any time without altering any message data that has been typed into the sign. Pressing the [SPECIAL] key again will remove the "HELP" information from the display and return the display to its original state.

[SPECIAL] + [M] = Display memory used and memory left

Pressing [SPECIAL] and then [M] will show you how much memory has been used and how much is left. You can request this information at any time without altering any message data that has been typed into the sign. Pressing the [SPECIAL] key again will remove the "MEMORY" information from the display and return the display to its original state.

Section 6 _____

MESSAGE REVIEWING

After you have entered your messages, you may want to review what you have entered.

Note that in order to review your message, you must have first depressed the [RUN] key after your last word has been entered.

The following procedure allows you to review your message:

STEP 1. Depress the [PROG] key. Your message will stop moving. The unit is now at the beginning of your first message.

STEP 2. Depress and release the [ADV] key. Note that the first character you entered in the unit will now be displayed. In most cases this character will be a lower case letter signifying the mode. Each time the [ADV] key is depressed, the next sequential character that you had entered will be displayed. If you continuously hold down the [ADV] key, the unit will automatically scan through the messages you entered. The longer you hold down the key, the faster the unit will scan. To stop the scan, simply release the key.

STEP 3. Once you have started reviewing a message, you must always advance through all your messages before depressing the [RUN] key. The Alpha will automatically stop once you reach the end of your message. _Always advance to the end of your message before depressing the [RUN] key,_ otherwise you will wipe out the last part of your message that was not reviewed.

STEP 4. After the Alpha stops at the end of your message, depress the [RUN] key to activate operation of the Alpha.

Note that when you are reviewing your messages and you encounter an error or wish to alter the message, please refer to the MESSAGE EDITING section.

Section 7 _____

MESSAGE EDITING

There are 6 editing keys which can be used to simplify the task of modifying or correcting your message. They are:

DELETE: If you are in the middle of your message and you hit ⌈DELETE⌉ key, the rightmost character or mode of the current position (Big, Top, or Bottom) will be deleted and the rest of the message will be moved in. Hitting the ⌈DELETE⌉ key requires that there be an end to the message, so make sure that your message had been in the run mode before deleting any character.

INSERT: By hitting the ⌈INSERT⌉ key, you create a "hole" in your message. Two dots will be turned on in the upper right hand corner. You must then enter a character or mode before advancing.

BACK   This key is used to backspace through your message without altering it.

ADVANCE   This key is used to advance through your message without altering it

APPEND: This key is used when you wish to jump to the end of your message. Before pressing this key, you must have entered a complete message and that message must have been in the run mode.

PROG   Depressing this key will cause the unit to reset to the beginning of the message with the cursor in the Big position.

Section 8 _____

TIME SETTING

When the time mode is entered for the first time, the clock must be set to the correct time. Setting the time on the Alpha 430 is similar to setting the time on any digital clock. First you must be in the time mode. This is accomplished by depressing and holding the ⌈SHIFT⌉ and the ⌈ROTATE⌉ keys. The display will now show the time. Change the time by depressing the ⌈H⌉ key to change the hour or the ⌈M⌉ key to change the minutes.

Once the clock has been set, it will maintain the correct time unless the power is removed from the unit. Should power be removed, the clock will no longer display the correct time. To reset the clock to the correct time following a power loss, follow the procedures outlined in the MESSAGE EDITING section. Advance through your message to the point where the time is displayed, then set the time by following the procedures outlined above.

Section 9 _____

MESSAGE CAPACITY

Your Alpha 430 has the capacity to display messages totaling 1532 characters. A character is defined as any letter, number symbol, space, or mode. This translates into several minutes of information being displayed before the message repeats. If you try to enter more than 1532 characters, the unit will not accept the characters.

Section 10 _____

MESSAGE EXAMPLES

Now that you have become familiar with the basic entry techniques, you can begin entering sample messages by following these step-by-step examples. When you have entered all of the examples, you should be capable of programming your own message.

Example 1   Small Characters   Hold, Rotate, Flash

STEP 1   Depress [PROG] key. A 5 dot cursor will appear in the center of the rightmost column each time you depress the [PROG] key and will place you at the beginning of your current message.

STEP 2.   While holding down the [SHIFT] key, depress [TOP] key. The cursor will be positioned on the top row. This indicates that the message you are about to enter will appear on the top row.

STEP 3.   Depress [HOLD] key. A "h" will now be displayed on the top row indicating that you are in the HOLD mode.

STEP 4.   Depress [H], [E], [L], [L] [O] keys. The display will be showing h HELLO.

STEP 5.   While holding down the [SHIFT] key, depress [BOTTOM] key. The cursor will be positioned on the bottom row. This indicates that the message you are about to enter will appear on the bottom row.

STEP 6.   Depress the [ROTATE] key. A "r" will now be displayed on the bottom row indicating that you are now in the ROTATE mode.

STEP 7.   Depress [I], [SPACE], [A], [M], [SPACE], [Y], [O], [U], [R], and depress [SPACE] key until this message is rotated off the screen to the left.

Section 10 _____

STEP 8. Depress and hold the [SHIFT] key and then depress the [FLASH] key. A   will now be displayed indicating that you are in the FLASH mode.

STEP 9. Depress [A]   [L] , [P]   [H] , [A]   [SPACE]

STEP 10. Now depress and hold the [SHIFT] key and then depress [4] [3] [0].

STEP 11 Depress [RUN] key. The top line of the display will hold the word HELLO, and AM YOUR will rotate on the bottom line followed by ALPHA 430 being flashed.

Example 2 – Small Characters   Scroll, Up, and Down Modes

STEP 1 Depress the [PROG] key. The unit will stop displaying your message and will go to

STEP 2. Depress the [SCROLL] key. An up arrow will appear on the screen indicating that you are in the SCROLL mode.

STEP 3. Depress [M]   E   [S]   [S]   [A]   E   [SPACE] keys.

STEP 4. While holding down the [SHIF] key, depress the [1] key.

STEP 5. Depress the [SCROLL] key.

STEP 6. Depress [M]   [E]   ____   [A]   [G] , [E]   [SPACE] , [SHIFT]   [2] keys.

STEP 7. Depress the [SCROLL] key.

STEP 8. Depress [M]   [E] , [S]   [S] , [A] , [G]   [E]   [SPACE]   [SHIFT]   [3] keys.

STEP 9. Depress and hold the [SHIFT] key. While holding the [SHIFT] key, depress the [TOP] key. The cursor will appear on the top row.

STEP 10. While holding the [SHIFT] key, depress the [UP] key. A "u" will appear on the top line of the display.

STEP 11 Depress [M]   [E] , [S]   [S]   [A]   [G]   [E]   [SPACE] , [SHIFT] , [4] keys.

STEP 12. While holding down the [SHIFT] key, depress the [BOTTOM] key. A cursor will appear on the bottom row.

STEP 13. Depress the [DOWN] key. A "d" will appear on the bottom line of the display.

STEP 14. Depress [M] , [E] , [S] , [S] , [A] , [G] , [E] , [SPACE], [SHIFT] , [5] keys.

STEP 15. Depress the [RUN] key. The messages, MESSAGE 1, MESSAGE 2, and MESSAGE 3 will scroll up from the bottom of the display. MESSAGE 4 will move up on the top line, and MESSAGE 5 will move down on the bottom line.

Example 3 — Big Characters — Hold, Rotate, Flash, Up and Down Modes.

STEP 1. Depress the [PROG] key. The unit changes to the big character mode with the cursor being located in the middle of the rightmost column indicating this. Also, remember that we are now at the beginning of our current message. Now we will enter a new message and write over, wiping out the current message.

STEP 2. Depress [HOLD] key. A "h" will appear on the display indicating HOLD mode.

STEP 3. Depress [H] , [I]

STEP 4. Depress the [ROTATE] key. A "r" will appear indicating ROTATE mode.

STEP 5. Depress [I] , [SPACE] , [A] , [M] , [SPACE] , [Y] , [O] , [U] [R] keys.

STEP 6. Depress the [SPACE] key to move the message off the screen to the left.

STEP 7. While holding down the [SHIFT] key, depress the [FLASH] key. A "f" will appear indicating FLASH mode.

STEP 8. Depress [A] , [L] , [P] , [H] , [A] keys.

STEP 9. While holding down the [SHIFT] key, depress the [UP] key. A "u" will appear indicating UP mode.

STEP 10. While holding down the [SHIFT] key, depress [4] , [3] , [0]

STEP 11. Depress the [DOWN] key. A "d" will appear on the display indicating the DOWN mode.

STEP 12. Depress [D] , [I] , [S] , [P] , [L] , [A] , [Y]

STEP 13. Depress the [RUN] key to activate the unit. The unit will hold "HI", then rotate "I AM YOUR". The word "ALPHA" will the flash followed by the word "DISPLAY" rolling down.

Section 10 (continued) _____

Example 4 — Message Alteration — Advance, Delete, Insert, and Back Editing Modes.

STEP 1. Depress the ⌷ PROG ⌷ key. We are now at the beginning of the current message.

STEP 2. Depress the ⌷ ADV ⌷ key only 3 times so that hHI appears at the right hand side of the display.

STEP 3. While holding down the ⌷ SHIFT ⌷ key, depress the ⌷ DELETE ⌷ key. This removes the letter I. The display now reads hH.

STEP 4. Depress the ⌷ INSERT ⌷ key. The upper right hand corner two dots will be illuminated on the display indicating that the INSERT mode has been entered.

STEP 5. Depress the ⌷ E ⌷ key. An E has now been inserted and will appear at the right-most position.

STEP 6. Depress the ⌷ INSERT ⌷ key then the ⌷ L ⌷ key. Repeat this procedure by first depressing the ⌷ INSERT ⌷ key then ⌷ L ⌷ and finally ⌷ O ⌷ .

STEP 7. HI has now been replaced by HELLO. The rest of the message has not been changed.

STEP 8. Depress and hold down the ⌷ ADV ⌷ key. The unit will now advance to the end of all your messages and stop.

Note that it is important to remember that in any alteration procedure you must depress the ⌷ ADV ⌷ key and scan through all your messages before depressing the ⌷ RUN ⌷ key. The ⌷ RUN ⌷ key tells the Alpha that you have completed your message, and it will display only the messages entered up to that point.

STEP 9. Depress the ⌷ RUN ⌷ key. The word HI has been replaced with HELLO and the rest of your message has not been altered.

Section 10 (continued) _____

Example 5   Selecting character sets   "C "W", SPECIAL "L"

STEP 1.   Depress the [PROG] key. We are now at the beginning of the current message. Depressing the [PROG] key will always reset you to the same character set — TALL, SLIM, UPPER CASE.

STEP 2.   Since the cursor is on the display and in the BIG position, you may depress the [C] key to select SHORT characters. The cursor is now 3 dots high.

STEP 3.   Depress [ROTATE] key. A "r" will appear on the display.

STEP 4.   Depress [I], [SPACE] keys.

STEP 5.   Depress [SPECIAL] then the [L] key. You have now selected lower case characters.

STEP 6.   Depress [A] , [M] , [SPACE] , [Y] , [O] , [U] , [R] , then [SPACE] until the display is cleared.

STEP 7.   Select the TOP position by depressing the [SHIFT] and [B] keys. There is now a 3 dot high cursor on the display. You are presently selecting SHORT, SLIM, LOWER CASE characters

STEP 8.   Since the cursor is on the display, you may depress the [W] key. The 2 bottom rightmost dots of the display are now lit. You have just selected WIDE characters.

STEP 9.   Depress the [SPECIAL] and [L] keys to return to upper case. You are now selecting SHORT, WIDE, UPPER CASE characters.

STEP 10.   Depress the [DOWN] key, followed by the [A] key. The display should read dA.

STEP 11   Depress the [SPECIAL] and [L] keys to select lower case. Depress the [L] , [P] , [H] , [A] , [SPACE] , [4] , [3] , [0] keys. The display now reads dAlpha 430 with WIDE characters.

STEP 12.   Select the BOTTOM position by depressing the [SHIFT] and [G] keys. The cursor will now return to the screen. The WIDE character indicator dots are still lit.

STEP 13.   Since the cursor is on the display, you may depress the [W] key. The 2 bottom rightmost dots of the display are now off. You have just returned to SLIM characters.

STEP 14   Depress the [SPECIAL] and [L] keys to select upper case. You are now selecting SHORT, SLIM, UPPER CASE characters.

STEP 15.   Depress the [UP] key followed by the [M] , [E] , [S] [↓] , [A] , [G] , [E] , [SPACE] , [C] , [E] , [N] [↑] , [E] , [R] keys.

STEP 16.   Depress the [RUN] key.

Section 11 _____

MESSAGE RETENTION

As long as the Alpha is plugged into a powered A.C. outlet, the messages you entered will remain in the unit. However, if there is a power failure, or you unplug the Alpha, the messages you entered will remain in the unit for a minimum of 96 hours. When power is returned to the unit, it will automatically begin running the messages you entered. The Alpha must be powered at least 8 hours to ensure sufficient charging time prior to unplugging for 96 hours. The shorter the amount of time the unit is powered results in a shorter message retention time.

Since the Alpha is completely solid state, there are no batteries in the unit; thus, no batteries to wear out and replace.

Section 12 _____

MESSAGE HINTS

The following are a few hints on how to make your Alpha 430 more versatile and interesting

To emphasize a word or phrase you may want to lengthen the time it is held on the display. To do so, enter the same word or phrase twice in the HOLD mode. The same thing can be done for the FLASH and TIME mode.

2   To put a break between messages, simply enter the FLASH or HOLD mode and don't enter a message. This will cause a 2 or 3 second blank period on the display.

3   Arrows can be generated by using the " < " or " > " in conjunction with   to display " <--" or   >'

4   You may want to make the top line HOLD while the bottom line ROTATES a message or visa versa

5) Place several periods at the end of your rotating message, and then space it off the screen to avoid losing your customer's attention.

6   To make the ROTATE mode appear slower, place extra spaces between words.

7   Plan your message ahead of time by writing it down in a two line format prior to entering it into the unit.

8   Place the unit towards the greatest traffic flow or at strategic locations within your facility. Keep the messages short and to the point — based upon the specific application. Change the messages frequently to best utilize the capabilities of the Alpha 430.

9   Combine the Big characters with the small characters to draw attention to the message.

Section 13_____

SPECIAL MODES

There are five special modes in addition to the 7 basic modes. These 5 modes will not necessarily be included in the optional Graphic Chips.

To program these modes, depress the [SPECIAL] key. The word "special" will appear on the right side of the display. Depress and hold down the [SHIFT] key and at the same time depress the corresponding number (1 - 5) of the desired mode. Then key in your desired message into that special mode.

1) **Wipe Up Mode** — Big or short characters entered on the display will appear starting from the bottom row, and wipe up and over the previous message, row by row.

2 **Wipe Down Mode** — Big or short characters entered on the display will appear starting from the top row, and wipe down and over the previous message, row by row.

3 **Swarm Across** — Big characters entered on the display will be written over by the information entered in this mode with a large interesting mass of dot clusters that move from left to right across the screen.

4 **Beep Mode** — A short tone will be generated by the unit. For this tone to be generated, the speaker must have been enabled prior to running the unit. See Section 14.

5) **Tune Mode** — A short tune will be generated by the unit. For this tune to be generated, the speaker must have been enabled prior to running the unit. See Section 14.

Section 14_____

SOUND CONTROL

Key Tone/Speaker Enable
The Alpha 430 has the capability of generating a tone when any key except the [SHIFT] key is depressed. The unit will power up with the key tone enabled. If the tone is not desired, depress and hold the [SHIFT] key and at the same time depress the [RUN] key. This turns off the tone. To turn the tone back on, depress [SHIFT] and [RUN] keys again. This can be done any time you are keying in your message.

Section 14 (continued) _____

Volume Control

The Alpha 430 has 2 volume settings for the generated tones. To adjust the volume, follow this procedure:

    STEP 1. Remove the Access Cover from the back of the Alpha 430. This is accomplished by slightly depressing the Access Cover at the arrow and at the same time sliding the cover down. See Figure 7.

> Note: The circuitry inside the case may be affected by static electricity. Do not touch any circuitry other than the Volume Switch. To ensure that you don't harm the unit, discharge any static electricity on yourself by touching a grounded metal object just prior to changing the switch setting.
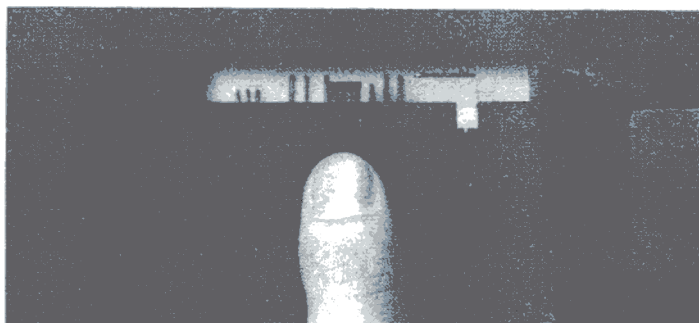

Figure 7

When the cover has been removed, you will see the location of the Volume Switch. See Figure 8.
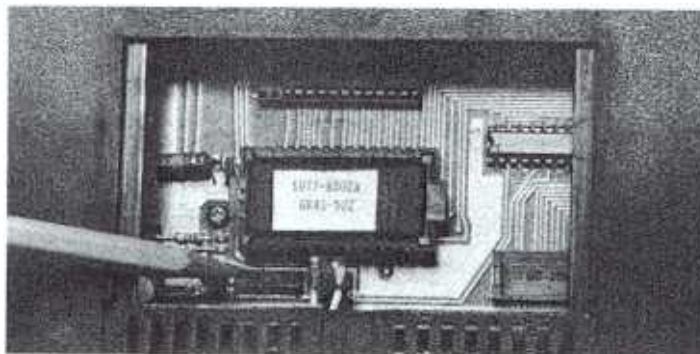

Figure 8

    STEP 2. To increase the volume, move the switch to the right. To decrease the volume, move the switch to the left.

    STEP 3. Replace the Access Cover.

OPTIONAL GRAPHICS CHIPS INSERTION AND REMOVAL

Graphic routines and additional modes of operation may be added to any standard message by using Graphics Chips. These optional Graphics Chips are changeable, so you can easily add these features to your Alpha 430. The following procedure allows you to insert and remove chips.

Note: The chip and the circuitry inside the case may be affected by static electricity. Do not touch the metal portion of the chip or the internal parts of the Alpha. To ensure that you don't harm the unit, discharge any static electricity on yourself by touching a grounded metal object just prior to handling the Graphic Chip.

STEP 1. Remove power from the Alpha 430 by unplugging the unit.

STEP 2 Remove the Access Cover from the back of the Alpha 430. This is accomplished by slightly depressing the Access Cover at the arrow and at the same time sliding the cover down. See Figure 9.
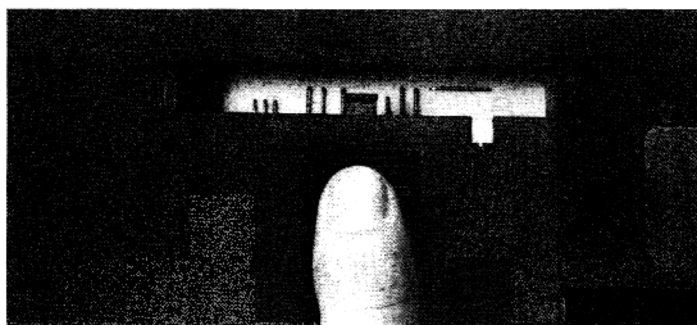

Figure 9

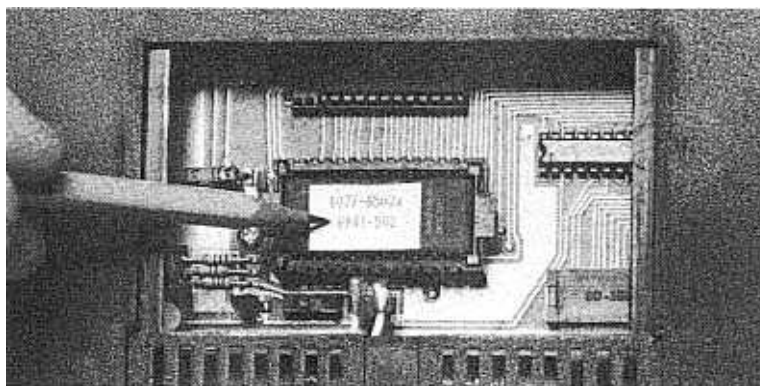When the cover has been removed, you will see the location of the chip. See Figure 10.

Figure 10

Section 15 (continued) _____

STEP 3. The chip may now be removed. Using thumb and forefinger, grasp the tabs at both ends of the chip and pull the chip straight out. The chip fits securely in its socket, and you may have to use a slight rocking motion to remove the chip. See Figure 11.
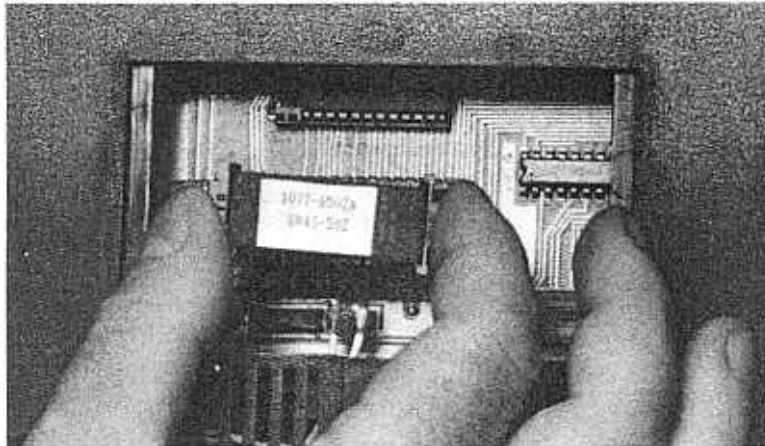

Figure 11

STEP 4. The new chip may now be inserted into its socket. The chip assembly is keyed so that it can fit into the socket only one way. The chip assembly should be oriented so that the tab with 2 holes in it is towards the left. See Figure 12.
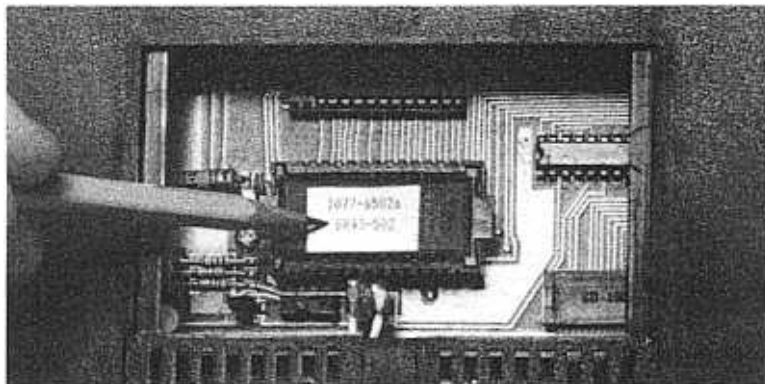

Figure 12

When the chip has been properly oriented, simply push it into the socket. The chip assembly will be flush with the socket when it is seated properly, and will snap into place.

STEP 5. Replace the Access Cover.

STEP 6. Reapply power. The unit is now ready for message entry.

Section 16_____

OPTIONAL GRAPHICS ENTRY

By using the optional Graphics Chips, graphic scenes may be made to appear anywhere throughout your message. The graphic scenes can draw attention to your message and add interest to the display. In order to display these scenes, you must first remove your current chip and replace it with a new Graphic Chip. See Section 15 on changing a chip.

A graphic scene may be made to appear as many times and wherever in your message that you desire.

Remember that each time a graphic scene is entered, it uses up two characters of the available message capacity.

To enter graphic scenes or additional modes, follow this procedure:

STEP 1   Depress the ⌷SPECIAL⌷ key. The word "special" will appear on the display indicating the SPECIAL mode.

STEP 2.   Depress and hold down the ⌷SHIFT⌷ key and at the same time depress the number (0-9) of the desired graphic scene. (Refer to the Instruction Sheet included with the Graphic Chip to determine which graphic scenes pertain to the numbers.) Then key in your desired message in that particular graphic scene.

Please contact your local Adaptive Micro Systems dealer for more information and availability of the various Graphics Chips.

Section 17_____

TROUBLESHOOTING

Occasionally a problem may occur in the operation of your Alpha. If a problem does occur, the following lists of symptoms and corrective actions will help resolve the problem:

Section 17 (continued) _____

SYMPTOM	CORRECTIVE ACTION
Nothing appears on display	1. Check to see that the Alpha is plugged into a live outlet.
	2. Check to see that the AC Adaptor connector is properly inserted into the left hand side of the Alpha 430. (See Section 2.)
	3. Check to see that the Graphic Chip or the Standard Chip is securely seated in its socket. (See Section 15.)
	4. In case of power failure, especially during electrical storms, unplug the unit and let it sit for a few seconds. Then reapply the power to the Alpha.
	5. Contact your local AMS dealer for further help.
Information displayed appears erratic or incorrect	1. Check to see that the Graphic Chip or the Standard Chip is securely seated in its socket. (See Section 13.)
	2. Contact your local AMS dealer for further help.
Keyboard does not operate properly	1. Check to see that the keyboard connector is properly inserted into the left hand side of the Alpha 430.
	2. Make sure that the ☐ PROG ☐ key has been depressed prior to entering any information into the unit.

Section 18 _____

SPECIFICATIONS

Weight:	1 lbs.
Dimensions —	
Length:	29.0"
Width:	3.0"
Height:	8.4"
Display Area:	4.5" x 25.2'
Display Array:	15 x 84
Character Array —	
2 inch:	5 x 7 dot matrix
4.5 inch:	10 x 15 dot matrix
Characters Displayed	
2 inch (Short):	28 minimum
4.5 inch (Big):	7 minimum
Character Sets:	Slim and Wide, Upper and lower case.
Operating Modes:	Rotate, Flash, Hold, Scroll, Up, Down, Time, Wipe Up, Wipe Down, Swarm Across, Beep Sound Mode, Tune Sound Mode
Editing:	Insert, Delete, Append, Backspace, Advance
Graphic Chips: (optional)	Additional operating modes and graphic scenes
Memory:	1532 characters — standard
Memory Retention:	96 hours minimum — solid state
Power:	40 watts
Power Cord Length:	10 feet
Keyboard:	Hand-held detachable — standard
Keyboard Cable Length:	6 feet
Operating Temperature:	0°C to 49°C 32°F to 120°F
Limited Warranty:	One year parts and labor. Return to factory for repair or replacement.
Computer Interface:	RS485 standard hardware interface included. Optional RS232 converter box is available. Computer interface software is available in optional Alpha Graphics Chips.

Also available are Alpha 210 (10 characters) and Alpha 221 (20 characters) models.

Section 19 _____

WARRANTY INFORMATION

Adaptive Micro Systems, Inc. warrants to the original purchaser that the Alpha product will be free from defects in workmanship and materials for a period of one year from the date of purchase.

Adaptive Micro Systems, Inc., will, without charge, repair or replace, at its option, defective product or component parts upon delivery to the factory service department accompanied by proof of the date purchased in the form of a sales receipt.

To obtain warranty coverage, this product must be registered by completing and mailing the enclosed warranty registration card to:

> Adaptive Micro Systems, Inc.
> 13050 West Custer Avenue
> Butler, WI 53007

within fifteen days from the date of purchase.

Exclusions: This warranty does not apply in the event of any misuse or abuse of the products, or as a result of any unauthorized repairs or alterations. This warranty does not apply if the serial number is altered, defaced, or removed.

Should your Alpha unit need any servicing, it must be returned to AMS. Please call your local dealer to receive a return merchandise number before sending your Alpha unit back for servicing.