

# OMNIGRAPH™

**Graphics Printer Interface  
for your Apple II™ series computer**

OMNIGRAPH is an intelligent, easy to use Graphics Printer Interface for your Apple computer system. OMNIGRAPH gives your computer the capability to reproduce pictures, charts, and graphs on all popular dot matrix printers, including: Apple dot-matrix, C. Itoh, Gorilla, IDS, Mannesmann Talley, Okidata, Star Micronics and more.

OMNIGRAPH's on-board intelligence makes operation simple and convenient — no disks or programs required.

OMNIGRAPH meets your creative needs by offering a versatile selection of dazzling effects, including:

- High resolution screen dumps
- Dual split screen hi-res dumps
- Zoom graphics
- Inverse graphics
- Left and right margin controls
- Picture rotation
- And many more

OMNIGRAPH is built for years of reliable performance and is backed with a full ONE year warranty.



**MA SYSTEMS**

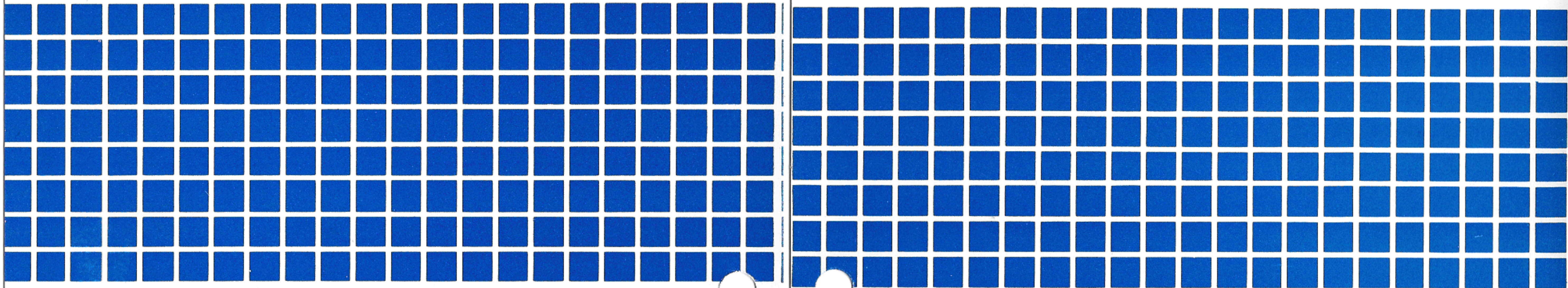
**MA SYSTEMS**  
I N C O R P O R A T E D

An Encon Company

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# Omnigraph™ User's Guide and Reference Manual



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**OMNIGRAPH™**  
**USER'S GUIDE AND**  
**REFERENCE MANUAL**

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Your OMNIGRAPH™ Graphics Printer Interface carton contains the following:

- Graphics Printer Interface
- Parallel printer cable
- User's Guide and Reference Manual
- Warranty and User Registration Form

If these items are missing or damaged, please contact your place of purchase.

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## INTRODUCTION

Thank you for purchasing your new OMNIGRAPH Graphics Printer Interface. OMNIGRAPH will provide you with years of reliable performance and satisfaction. You will find your new OMNIGRAPH easy to use and versatile to meet your growing needs.

### COMPANY PROFILE

MA SYSTEMS INC. is a leading manufacturer of enhancement products for Apple and IBM personal computers. Our commitment to state-of-the-art engineering has vaulted our products to the forefront of the personal computer industry. It is this commitment that provides our customers with maximum product satisfaction and unsurpassed reliability.

Our Research and Engineering departments are continuously developing new and innovative products to meet your growing needs. We look forward to providing you with our growing line of quality products for your computer.

MA SYSTEMS INC. is a subsidiary of ENCON INCORPORATED, a Research and Engineering conglomerate involved in Nuclear Engineering. Its subsidiaries are involved in the development, manufacturing and distribution of computer and electrical products for industry, business, home and education.

### A WORD BEFORE YOU BEGIN

Before you attempt to install your new OMNIGRAPH, please read through the User's Guide thoroughly.

This guide is intended to provide all necessary information for the installation and operation of your OMNIGRAPH Graphics Printer Interface. If you have any questions not addressed in this guide or you encounter difficulty installing or operating your OMNIGRAPH, please consult your local computer dealer.

### INTRODUCING OMNIGRAPH

The OMNIGRAPH Graphics Printer Interface is a plug-in circuit board which allows you to reproduce, design and manipulate graphics and text on any Centronics standard parallel printer. OMNIGRAPH provides these versatile printing capabilities and connects your Apple to all popular parallel printers including:

C. Itoh	Mannesmann Tally*	Star Gemini
Epson	NEC 8023	Transtar 315
IDS*	Okidata	

\*Requires optional OMNIGRAPH version.

Your OMNIGRAPH provides an exciting array of graphics and text capabilities including high resolution screen dumps, dual hi-res screen dumps, color graphics reproduction on color printers, zoom graphics, inverse graphics, 90° picture rotation, left and right margin controls, page and line length controls and more. OMNIGRAPH's on-board intelligence makes operation easy and convenient — no disks or programs required. OMNIGRAPH provides its versatile selection of dazzling effects by using simple control commands. And OMNIGRAPH is compatible with PASCAL and CP/M.

## INSTALLATION

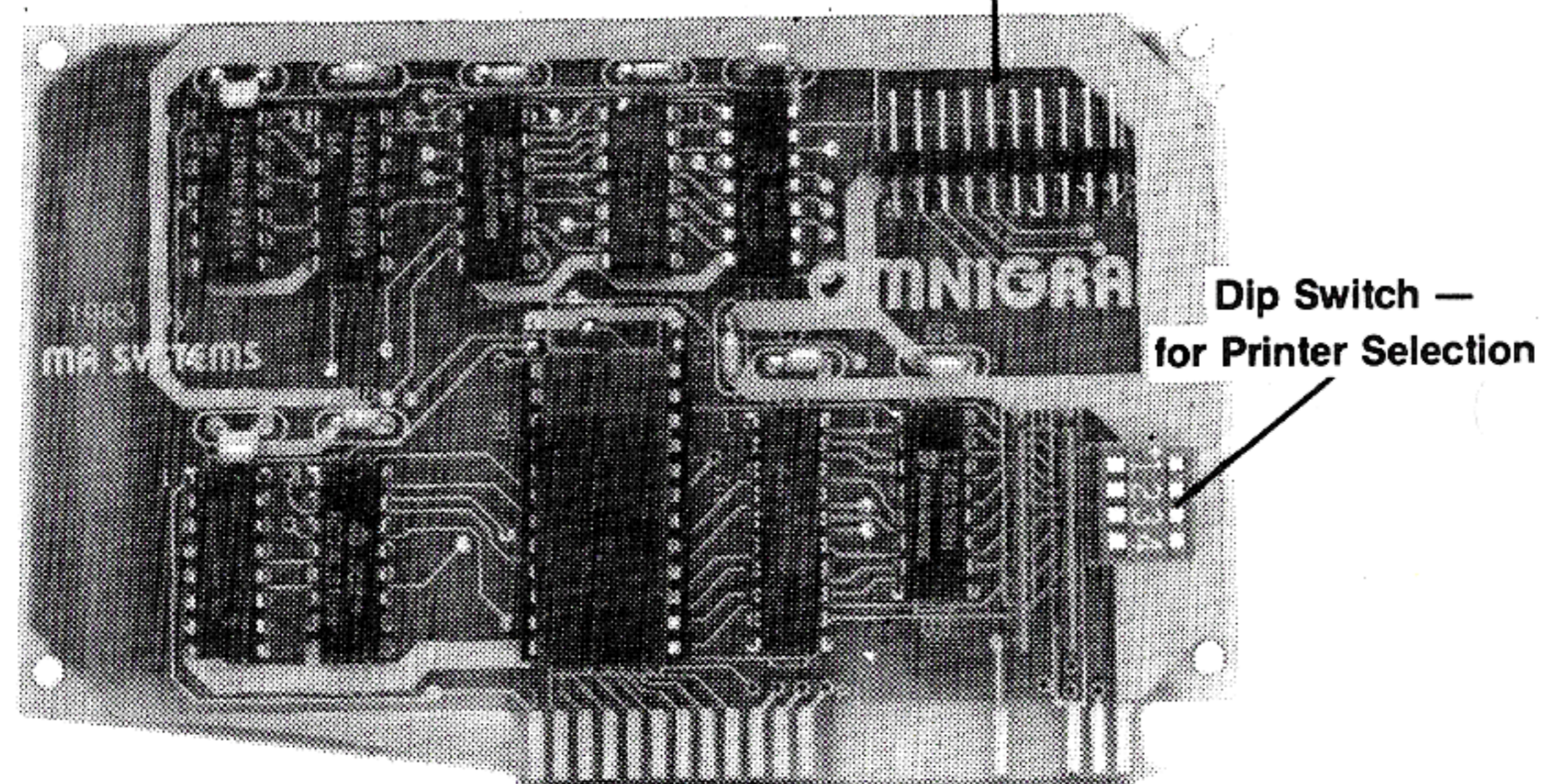
Installing OMNIGRAPH in your personal computer is easy and requires only a few minutes. To ensure simple, safe installation, please follow these instructions.

Your OMNIGRAPH is designed with a switch set, commonly referred to as a "dip switch," which allows you to connect a wide selection of popular printers to your computer. Specific instructions for setting the appropriate switches for the desired printer are provided in this section.

Here is a picture of OMNIGRAPH. Connectors and switches are pointed out. Study this picture to familiarize yourself with this board.

OMNIGRAPH's Intelligence (EPROM)

Cable Connection



1. Turn the power OFF to your computer and all connected peripherals. **WARNING:** Never install or remove devices from your computer with the power ON as this will result in serious damage.
2. Most of the printers available use different methods and commands to accomplish their respective graphics capabilities. Because of this non-standardization, your OMNIGRAPH provides a set of switches which configures your computer system for the unique characteristics of your printer.

The OMNIGRAPH dip switch is located in the rear bottom section of the board as shown in the previous photograph. The dip switch has four switches labeled 1, 2, 3 and 4. The ON side of the dip switch is marked with either a plus (+) sign or the word "ON."

Make the appropriate switch settings on the dip switch. Use the table below to determine the required switch setting for your printer.

Printer	Switch #			
	1	2	3	4
Okidata 82, 83, 84, 92, 93	ON	OFF	OFF	OFF
Transtar 315	OFF	ON	OFF	OFF
C. Itoh 8510/NEC 8023	ON	ON	OFF	OFF
Epson series/Star Gemini	OFF	OFF	OFF	OFF

3. Now you are ready to install OMNIGRAPH into your computer. Remove the cover from the Apple. First, grasp the rear edge of the cover at its corners and gently pull UP just until the corner fasteners pop apart. Then slide the cover in the direction away from the keyboard until it is removed.
4. The internal circuitry of your computer is now visible. As you view this circuitry, looking from the keyboard (front) to the back panel (rear), you will notice a row of peripheral connectors, referred to as "slots" (the Apple IIe contains seven slots and the II+ contains eight). The leftmost slot is designated as slot #1 for the IIe and slot #0 for the II+. **NOTE: OMNIGRAPH MUST NOT BE INSTALLED IN SLOT #0.**

Though OMNIGRAPH is "slot independent," meaning that it can be installed in any available slot except 0, most programs look for the printer interface to be located in slot #1. We strongly recommend that you install your OMNIGRAPH in slot #1. **NOTE:** When using PASCAL and CP/M, OMNIGRAPH **MUST** be installed in slot #1.

5. You will notice an extended lip with gold "fingers" on the bottom of your OMNIGRAPH. Install the OMNIGRAPH by holding the top of the board and gently inserting these fingers into one of the available slots (preferably slot #1). Press the board firmly into place making sure that it is securely seated.
6. Next, slide the cable through one of the openings in the Apple's rear panel.
7. Replace the Apple's cover. Slide the cover towards the keyboard until it goes no further, then press down on the rear corners until they fasten into place.
8. Connect the universal OMNIGRAPH cable to your printer. **WARNING:** Make sure that the printer is OFF when connecting and disconnecting the cable.
9. Turn your Apple and printer ON. You will see the prompt "]" in APPLESOFT or ">" in INTEGER displayed. To test the OMNIGRAPH, type: PR#S (where S = the slot # of the OMNIGRAPH). Press the RETURN key a few times. The printer should now be operating and printing a prompt character each time you press the RETURN key.

If this does not occur, make sure that the printer power is ON, that the printer is on-line to the computer and check to ensure that OMNIGRAPH has been installed properly.

---

## OPERATION

With installation completed, you are now ready to use your OMNIGRAPH. The following section provides you with all of the necessary information for operating your OMNIGRAPH.

### TURNING ON OMNIGRAPH

To turn your OMNIGRAPH ON, you must:

When using APPLESOFT or INTEGER, type:

PR#S (RETURN) (where S = the slot # of OMNIGRAPH)

When using PASCAL and CP/M, simply follow their standard printing commands.

### TURNING OFF OMNIGRAPH

To turn your OMNIGRAPH OFF, you must:

When using APPLESOFT or INTEGER, type:

PR#0 (RETURN)

When using PASCAL or CP/M, simply follow their standard printing commands.

### OMNIGRAPH'S "WAKE UP" STATE

When OMNIGRAPH is turned ON, it is pre-set for the following printing functions:

1. To send an Automatic Line Feed to the printer when it receives a carriage return command (RETURN key) in BASIC. Automatic line feed is OFF in PASCAL and CP/M.
2. For 255 characters per line.
3. Left margin = 0.
4. Right margin = 255.
5. Paging feature is turned OFF.
6. Video Echo: ON in BASIC. OFF in PASCAL and CP/M.
7. BELL: OFF.
8. Current command character: CTRL-I.
9. Most Significant Bit (MSB): Masked to 0 (set low).

Instructions for changing these options are given in the following sections.

### ISSUING OMNIGRAPH COMMANDS

OMNIGRAPH uses one of Apple's special keys to activate its functions. This key is the CONTROL key, marked "CTRL." The CTRL key is located on the left, center section of the Apple keyboard. We will frequently refer to the use of the CTRL key throughout this guide.

To activate OMNIGRAPH functions, you will use the command sequence: **CTRL** (key) **I** (key).

*NOTE:* Remember, before selecting OMNIGRAPH functions, make sure that OMNIGRAPH has been turned on using the "PR#S" command (where S = the slot # of OMNIGRAPH).

To activate an OMNIGRAPH command from the keyboard, press the CTRL and "I" keys SIMULTANEOUSLY. Then, release these keys and press the key or keys corresponding to the OMNIGRAPH function you want to use. Do not enter spaces or punctuation marks.

As an example, let's see how you would turn OFF OMNIGRAPH's Automatic Line Feed function, CTRL-I K.

Assuming OMNIGRAPH has been turned ON, you would:

1. Press the CTRL and "I" keys simultaneously.
2. Release the "I" key, then the CTRL key.
3. Press the "K" key.

Following these steps, your OMNIGRAPH will be instructed not to generate an automatic line feed to your printer when it receives a carriage return command.

You can also activate OMNIGRAPH functions from within programs. BASIC "PRINT" statements are used to activate these functions.

For our previous example, here is how you would activate the command from a BASIC program:

In APPLESOFT: 10 PRINT CHR\$(9);"K"

In INTEGER: 10 PRINT "CTRL key\* I";"K"

**NOTE:** CHR\$(9) is the BASIC programming value for CTRL-I. Control commands do NOT appear on your display when entered from the keyboard.\* Press the "CTRL" key.

OMNIGRAPH does not activate special printer functions nor alter printer command codes. Each printer's command codes operate independently of OMNIGRAPH. To activate a printer's special modes, such as correspondence quality or condensed print, enter the appropriate printer commands as detailed in the printer's manual BEFORE you turn OMNIGRAPH ON.

## TEXT COMMANDS

The following is a list of the commands used to activate OMNIGRAPH text functions. An example of activating these commands within an APPLESOFT BASIC program is provided for each command.

Command Sequence Entered from the Keyboard	Description
CTRL-I A	Turns ON the Automatic Line Feed function. A line feed will be sent to the printer when OMNIGRAPH receives a carriage return command. PRINT CHR\$(9);"A"
CTRL-I B	Turn ON bell. This allows the CTRL-G bell character to be sent to the printer. PRINT CHR\$(9);"B"
CTRL-I C	Turn OFF bell. This prevents the bell character from being sent to the printer. PRINT CHR\$(9);"C"
CTRL-I H	The Most Significant Bit (MSB), the 8th bit, is sent to the printer. This function has no effect on many printers. However, with some printers, this command allows the printing of graphics or special characters. PRINT CHR\$(9);"H"
CTRL-I I	Sends characters to both the video display and the printer. This is known as "video echo." PRINT CHR\$(9);"I"
CTRL-I K	Turns OFF the automatic line feed function. OMNIGRAPH will not generate a line feed to the printer when it receives a carriage return command. <b>NOTE:</b> This overrides the CTRL-I A command. PRINT CHR\$(9);"K"
CTRL-I nL	Sets the left margin to "n," where "n" is between 0 and 255. The printer will begin printing after the "nth" column position. PRINT CHR\$(9);"nL"



**CTRL-I nN** Sets the characters per line length to "n" characters. "n" can range from 0 to 255. After this function has been activated, characters will NOT be sent to the display. (To re-activate the video display, use the CTRL-I I command).

The printer will generate an automatic carriage return command after "n" characters have been printed.

*NOTE:* When listing BASIC programs, printing will be formatted for 40 columns unless the format has been changed using this command.

```
PRINT CHR$(9);"nN"
```

**CTRL-I nP** Set number of lines per page to "n." The printer will generate six line feeds after "n" lines have been printed. To turn off this page length function, type CTRL-I OP.

Typical page length is 66 lines. Therefore, for most uses, set the page length to 60, so that your printer will issue six line feeds to skip over the form perforation.

```
PRINT CHR$(9);"nP"
```

**CTRL-I nR** Sets the right margin to the "nth" column. "n" can range from 0 to 255. This function will end the line at the first space that occurs after the "nth" column.

```
PRINT CHR$(9);"nR"
```

**CTRL-I S** Duplicates the current 40 column text display on your printer. The text display will be printed 20 spaces from the left edge of the paper. Text display will only be printed in 40 columns. This function may be incompatible with some 80 column video boards.

```
PRINT CHR$(9);"S"
```

**CTRL-I 2S** Duplicates the text screen memory located in pages 1 and 2. These pages are printed side by side for 80 column output. *NOTE:* This function may not be compatible with some 80 column video boards.

```
PRINT CHR$(9);"2S"
```

**CTRL-I X** Disables the output of the Most Significant Bit (MSB) to the printer. Sets the value of MSB to 0.

```
PRINT CHR$(9);"X"
```

## CHANGING THE COMMAND CHARACTER

The standard OMNIGRAPH command character which activates selected functions is CTRL-I. If you wish, you may redefine the control command character to any other letter.

To redefine the control character, issue the command:

```
CTRL-X CTRL-Y (where X is the current CTRL character and  
Y is the desired CTRL character)
```

For example, we want to change the command character to CTRL-W. To do this, we would issue the command:

```
CTRL-I CTRL-W
```

---

## GRAPHICS FUNCTIONS AND COMMANDS

OMNIGRAPH offers a versatile array of graphics functions. These graphics functions are initiated by using the simple command:

```
CTRL-I "G"
```

This command is then followed by the command character of the listed graphics functions and activated by pressing the RETURN key. OMNIGRAPH allows you to reproduce images on your printer from either page 1 or 2 of HIRES (high resolution) graphics.

*PROGRAMMING NOTE:* To activate OMNIGRAPH's graphics functions from within a program, use the same BASIC format as previously described. Example:

```
PRINT CHR$(9);"Gx" (where "x" is the command character of  
the selected function)
```

*NOTE:* We will refer to pages 1 and 2 in this section. Page 1 and 2 graphics are the image displayed on the Apple screen. BEFORE you print graphics, make sure that OMNIGRAPH's switches have been properly set for your printer.

The OMNIGRAPH graphics functions are:

<b>Command Sequence</b>	<b>Description</b>
CTRL-I G	Prints page 1 of HIRES graphics.
CTRL-I G2	Prints page 2 of HIRES graphics.

- CTRL-I GI Prints the inverse image of graphics page 1. Normally, a white dot on the display is reproduced as a black dot on the printer paper. This command will print the background portions of the display as black on the printer paper, thus reproducing the displayed image as it appears on the screen. This function is particularly useful for pictures and portraits.
- CTRL-I GR Rotates graphics image (page 1) 90° in a clockwise direction. *NOTE:* Some printers may require this function when printing a double size (zoom) image (see CTRL-I GD).
- CTRL-I GD Zoom graphics. Prints a double size graphics image from the screen. Some printers, such as the Epson MX-80, FX-80 and Okidata 82A, 92 do not have enough character positions to print a double size image horizontally. Therefore, to print the double size image properly, the image must be rotated 90° using the CTRL-I GR command.
- CTRL-I GC Images will be printed in color with color printer. You can use this function if you have either monochrome (single color) or color display. The colors of the image are determined by the software package you are using. When you activate this command, the software package will send the color values of each text or graphics character to the printer. If you wish to change the printed colors, refer to the software and printer manuals. **THIS FUNCTION IS VERY USEFUL WITH THE TRANSTAR 315 PRINTER.**
- CTRL-I GE Prints an "emphasized" image of the screen. "Emphasized" means adding more dots to the characters, creating a more fully-formed, clearer character. The printer will print two closely spaced dots for every one it would normally print.
- NOTE:* The Transtar 315 does not support the "R" or "E" graphics functions when printing color graphics.

## COMBINING GRAPHICS COMMANDS

OMNIGRAPH allows you the flexibility of combining more than one graphic function in your graphics command. For example, if you want to print the inverse of page 2 graphics, double size and rotated 90°, you would enter:

CTRL-I GI2DR (RETURN)

The order in which you enter "I2DR" does not effect the activation of the function. All functions will be activated. But note: 1) the CTRL-I G command characters must precede the selected function characters; 2) the entire command must be activated by pressing the RETURN key.

*PROGRAMMING NOTE:* When you are using APPLESOFT BASIC, you will get a SYNTAX ERROR message when entering commands from the keyboard. This occurs because BASIC attempts to interpret these commands as BASIC program statements — which the CTRL commands are not. This occurrence is merely a nuisance and has no effect on the activation or operation of the selected function. If the SYNTAX ERROR message is too bothersome, issue commands from PRINT statements as described in this section.

## PASCAL AND CP/M COMPATIBILITY

Your OMNIGRAPH is compatible with both PASCAL and CP/M. Both require the OMNIGRAPH to be installed in slot #1.

Since the command character, CTRL-I, is used in PASCAL and CP/M for tabbing, OMNIGRAPH automatically changes the command character to CTRL-Y (internal to the board) to avoid any incompatibilities. Use the CTRL-Y command to activate functions.

Both PASCAL 1.0 and CP/M use the same Input/Output memory location that OMNIGRAPH uses to activate the right margin function. To eliminate any incompatibility, the right margin function is disabled when using PASCAL 1.0 and CP/M. The right margin function remains active when using PASCAL 1.1.

## USING PASCAL TO PRINT GRAPHICS

The following program demonstrates how to print graphics from PASCAL. To stop the program, hit any key on the Apple keyboard.

This program uses PASCAL turtlegraphics.

```
PROCEDURE CRAWL;  
BEGIN  
  
MOVE (2*DISTANCE)  
TURN (ANGLE);  
END;  
  
BEGIN  
REWRITE (OUT,'PRINTER');  
ANGLE:=30;  
REPEAT  
  INITTURTLE  
  PENCOLOR(WHITE);  
  FOR DISTANCE:= 1 TO 50  
  DO CRAWL;  
  
  ANGLE:=ANGLE + 10  
  WRITELN(OUT,CHR(25),'G');  
  WRITELN(OUT,CHR(25),'GR');  
  UNTIL KEYPRESS  
END.
```

*PROGRAMMING NOTE:* When you are setting the right margin and line length you should turn the automatic line feed ON. This is necessary, because OMNIGRAPH sends a carriage return to the printer when printing reaches the right margin or defined line length. If you do not have an automatic line feed enabled, the printer will overwrite on the same line.

## PROGRAMMING TUTORIAL

This section will guide you through the use of OMNIGRAPH functions and how to activate these functions from within a program. Specific examples are provided to guide you and demonstrate the procedures.

Here is a short tutorial on outputting to the printer from APPLE-SOFT BASIC using PRINT statements. This program will demonstrate the use of the BASIC TAB function and the "L" command.

*NOTE:* When "PR#S" is shown, S= the slot # of OMNIGRAPH.

If you are not using Apple DOS, you do not need to enter the "CHR\$(4)" command.

```
10 PRINT CHR$(4);"PR#S"  
20 PRINT CHR$(9);"20L"  
30 PRINT "HAVE A GOOD DAY"  
40 PRINT TAB(20);"HAVE A GOOD DAY"  
50 PRINT CHR$(4);"PR#0":REM TURNS OFF PRINTER  
60 END  
RUN
```

This program demonstrates the use of CTRL-I nN, setting the line length. In this case, 10 characters per line.

```
10 PRINT CHR$(4);"PR#S"  
20 PRINT CHR$(9);"10N"  
30 PRINT "1234567890123456"  
40 PRINT CHR$(4);"PR#0"  
50 END  
RUN
```

This program demonstrates the use of CTRL-I nR, setting the right margin. In this case, we are setting the right margin at the 40th column.

```
10 PRINT CHR$(4);"PR#S"  
20 PRINT CHR$(9);"40R":REM SETS RIGHT MARGIN TO 40.  
30 PRINT "WE HOPE THAT YOU ARE PLEASED WITH YOUR  
  NEW OMNIGRAPH, AND THAT THIS MANUAL IS HELPFUL"  
40 PRINT CHR$(4);"PR#0"  
50 END
```

Notice that the right margin function did not end the line with a separated word. Now try the same program but with the right margin set to the 30th column.

This program demonstrates the use of CTRL-I B, turning the bell ON (If your printer has an operable BELL).

```
10 PRINT CHR$(4);"PR#S"  
20 PRINT CHR$(9);"B":REM TURNS BELL ON  
30 PRINT CHR$(7)  
40 PRINT CHR$(4);"PR#0"  
50 END
```

This program demonstrates the use of CTRL-I C, turning the bell OFF.

```
10 PRINT CHR$(4);"PR#S"  
20 PRINT CHR$(9);"C":REM TURNS BELL OFF  
30 PRINT CHR$(7)  
40 PRINT CHR$(4);"PR#0"  
50 END
```

*NOTE:* If video echo is ON, you will hear the BELL from the computer.

This program demonstrates the command which redefines the command character. In this case, we will change the command character from CTRL-I to CTRL-Y.

```
10 PRINT CHR$(4);"PR#S"  
20 PRINT CHR$(9);CHR$(25)  
30 PRINT CHR$(25);"K"  
50 PRINT "HAVE A GOOD DAY"  
60 PRINT "BE HAPPY"  
70 PRINT CHR$(4);"PR#0"  
80 END
```

This program demonstrates the method for sending graphics to the printer. In this program, replace "FILENAME" with any actual filename that contains a graphic image.

```
10 PRINT CHR$(4);"PR#S"  
20 PRINT CHR$(4);"BLOAD FILENAME,A$2000"  
30 PRINT CHR$(9);"G"  
40 PRINT CHR$(9);"G2R"  
50 PRINT CHR$(4);"PR#0"
```

## TECHNICAL REFERENCE

### MEMORY I/O LOCATIONS USED BY OMNIGRAPH

OMNIGRAPH uses I/O memory locations pertaining to the slot in which it is installed and "scratchpad" memory locations. The OMNIGRAPH entry points and various memory locations are:

(NOTE: S = slot # of OMNIGRAPH)

COLD START-UP:	\$CS00
WARM START-UP:	\$CS06
LINE LENGTH:	\$478+0S
PAGE LENGTH:	\$4F8+0S
LINE COUNTER:	\$5F8+0S
RIGHT MARGIN:	\$678+0S
LEFT MARGIN:	\$6F8+0S
COMMAND CHARACTER:	\$778+0S
CHARACTER COUNTER:	\$578+0S
TEXT FLAGS:	\$7F8+0S

### TEXT FLAG SETTINGS

Bits 0,2-4:	Reserved
Bit 1:	Line feed ON
Bit 5:	Turn bell ON
Bit 6:	Output to screen
Bit 7:	Output MSB

### PRINTING LARGE AND CONTINUOUS IMAGES

You can print large and continuous graphic images on your printer with OMNIGRAPH. This can be done by loading portions of the graphics images to the display and then sending them to your printer.

The following program demonstrates how to print the entire image of two graphics pages so that the images appear continuous.

```
10 PRINT CHR$(4);"BLOAD PIC1,A$2000"  
20 PRINT CHR$(4);"BLOAD PIC2,A$4000"  
30 PRINT CHR$(4);"PR#1"  
40 PRINT CHR$(9);"GR"  
50 PRINT CHR$(9);"G2R"  
60 END
```

You can accomplish the same continuous printing using another method. Simply, load a portion of the image into graphics memory and then send it to the printer. You send one portion at a time, one after the other, until the entire image is printed.

(Note that you are using the picture rotation function, CTRL-I GR, to make the image appear continuous.)

# COMMAND REFERENCE TABLE

## TEXT COMMANDS

COMMAND	FUNCTION
CTRL-I A	Automatic Line Feed ON.
CTRL-I B	Bell ON.
CTRL-I C	Bell OFF.
CTRL-I H	MSB's present value is sent to printer.
CTRL-I I	Video echo ON.
CTRL-I K	Automatic Line Feed OFF.
CTRL-I nL	Set left margin to "n"
CTRL-I nN	Set line length to "n"
CTRL-I nP	Set page length to "n"
CTRL-I nR	Set right margin to "n"
CTRL-I S	Print page 1 of text.
CTRL-I 2s	Print pages 1 & 2 of text memory side by side.
CTRL-I X	Sets MSB to 0 value.

## GRAPHICS COMMANDS

CTRL-I G	Print page 1 of graphics.
CTRL-I G2	Print page 2 of graphics.
CTRL-I GI	Print inverse of graphics.
CTRL-I GR	Rotate picture 90°
CTRL-I GD	Zoom graphics (double size)
CTRL-I GC	Print image in color on color printer
CTRL-I GE	Print "emphasized" image