

NCR

Supplement

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S-1 - S-2

INTRODUCTION

This supplement contains descriptions of some application and demonstration software featured with your NCR DECISION MATE V.

Follow these simple steps to start using any of the software:

1. Insert the diskette and wait for the system prompt (A>) to appear.
2. Enter the name of the application and press the ↵ key. (This key is also referred to as <CR>.)

For example, to play CATCHUM, type:

```
A> CATCHUM ↵
```

The game instructions appear on the screen.

LADDER

LADDER is a game for use on the NCR DECISION MATE V. To start the program, enter LADDER ↵. The main screen appears.

Enter "I" (Instructions) to obtain the description of the game. Read the explanations and then press ↵ to return to the main screen. There you will find the directions on how to play the game.

Let's now start the game by entering P. You can leave the program at any time by pressing ↑ C (hold down the CONTROL key and press C).

CATCHUM

CATCHUM is a game for one or two players. To start the program, enter CATCHUM ↵. The main screen appears.

Enter "I" (Instructions) to obtain the description of the game. Read the explanations and then press ↵ to return to the main

screen. There you will find the directions on how to play the game. Enter 1 if you are the first player, or 2 if you are the second player.

You can leave the program at any time by pressing ↑ C.

DEMO5

DEMO5 is a continuous running graphics demonstration showing the excellent resolution and speed of the NCR DECISION MATE V. To run the program, enter DEMO5 ↓ . The program can be aborted at any time with ↑ C (hold down the CONTROL key and press C).

CLOCK

CLOCK displays a running clock on the CRT screen. To run the program, enter CLOCK ↓ . The current date is then entered in the following format:

MM,DD,YY <CR> (e.g. 4,26,83)

Next, enter the current time using the following format:

HH,MM <CR> (e.g. 12,31)

The program can be aborted at any time with ↑ C (hold down the CONTROL key and press C).

MUSIC

MUSIC plays 11 different tunes on the NCR DECISION MATE V. To run the program, enter MUSIC ↓ . The music menu is displayed and you can choose song number 1-9, A, or B. Just type the number or letter of the selection you want to hear (do not press <CR>), and the song is played. When the tune is finished, the menu is redisplayed. Choose another song or press E to end. (This program cannot be aborted with ↑ C.)

VEGAS

VEGAS (Very Easy Graphic Application System) is a very useful program for displaying business graphics. This program allows you to create line, bar, and pie charts and then output them to a printer. NCR Business Graphics is written in MS-BASIC® with the NCR graphics extension. To run the program, enter VEGAS ↓ .

The main menu now appears and processing may begin.

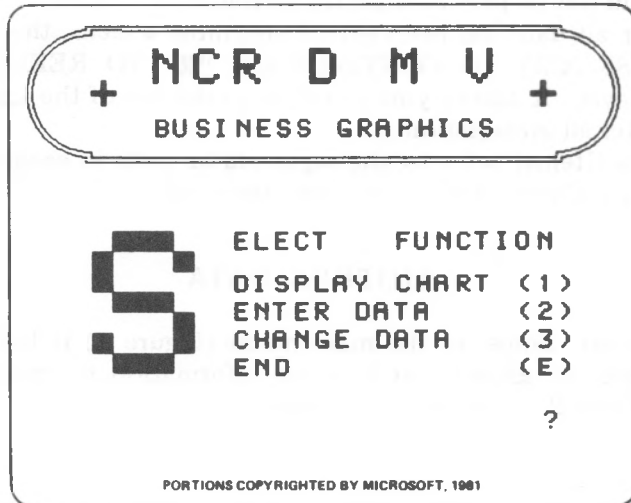


Figure 1 Main Menu

Each time VEGAS is called from the disk, the following screen is displayed after a selection (1-3) is made on the main menu. (This is the only time this screen appears during the VEGAS session.)

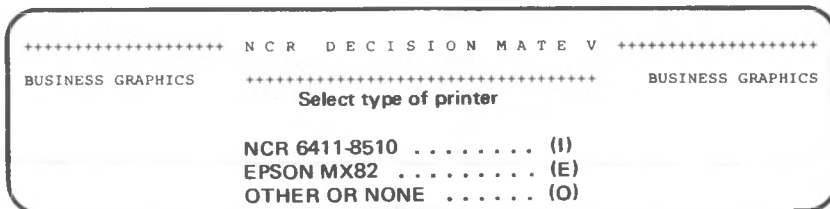



Figure 1a Printer Definition

Enter I if you are using an NCR 6411-8510 (ITOH M8510A) printer; E if you have an EPSON MX82; and O if you have another type of printer or no printer at all.

Before continuing with the next section, the following general information should be noted:

- (CR) is the ^{NEWLINE} Carriage Return key,  ^{NEWLINE}
- For questions that require only a 1-character response, (CR) should not be pressed after the character is entered.
- After all data has been entered on most screens, the message PRESS (CR) TO CONTINUE OR "R" TO REENTER? is displayed. R allows you to return to the top of the screen and reenter all information.
- Rows (Items) refer to the segments or parts in each column.
- Current Chart refers to the chart last used.

ENTERING DATA

The second choice on the main menu (Figure 1) is Enter Data. This selection allows you to enter information to create a new graph. Enter 2 to choose this function.

```

+++++ NCR DECISION MATE V +++++
BUSINESS GRAPHICS ***** BUSINESS GRAPHICS

Enter two title lines for the chart, the value for units,
the name of the units and the number of columns and rows(items)
(Default = points for strings, one for numbers)

First title, uppercase only
.....
Second title, uppercase only
.....

Unit of measure ? Name of units, uppercase only .....

Number of columns ** Max length of column title _
Number of rows(items) **
Press (CR) to continue or 'R' to reenter ?
  
```

Figure 2

To begin, each question on the screen is displayed one at a time and the following information must be entered.

- First Title: uppercase only, 36 chars. max, no comma
- Second Title: uppercase only, 72 chars. max, no comma
- Unit of Measure: 0-9, default = 0
(0 = units, 1 = tens, 2 = hundreds, 3 = thousands, etc.)
- Name of Units: uppercase only, 12 chars. max
(e.g. DOLLARS, MACHINES, etc.)
- Number of Columns: 48 maximum, default = 1
- Number of Rows (Items): 12 maximum, default = 1

A response of (CR) only to the above questions enters the default value. For questions that require a string response the default is points (. . . .). When all information on the screen is completed, press (CR) to continue.

NEWLINE

The next type of data that must be entered is column titles: uppercase only, 59 characters maximum, default = points, see Figure 3. (The maximum number of characters for the titles may decrease, depending on the number of columns in your graph.) After each title is entered, press (CR).

NEWLINE

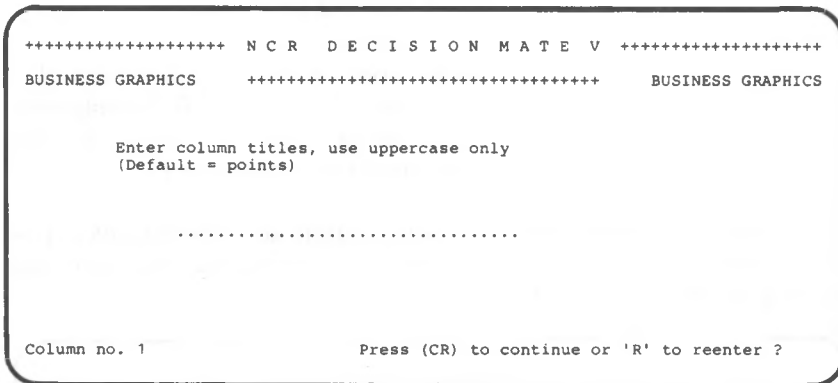


Figure 3

Next, information about the rows is entered (see Figure 4).

```

+++++ N C R   D E C I S I O N   M A T E   V   +++++
BUSINESS GRAPHICS   +++++ BUSINESS GRAPHICS

      Enter row(item) titles, use uppercase only
      (Default = points)

.....
Shade c.   **
Color      *

row(item) no.: 1                               Press (CR) to continue or 'R' to reenter ?

```

Figure 4

Row Titles: uppercase only, 12 chars. maximum
The maximum number may decrease, depending on the number of rows.

Shade: 0-15, default = 0
(Refer to the end of this section for the shading patterns.)

Color: 1-7, default = 7
(1 = red, 2 = green, 3 = blue, 4 = yellow, 5 = cyan, 6 = magenta, 7 = white. Use the default for the monochrome machine.)

The values for every item in each column are entered next. The item title, shade and color codes are displayed and asterisks appear where you enter the value. See Figure 5.

```

                                ENTRY OF CHART VALUES

ITEM TITLE/CD/CO                COL 1
(item title, shade, color displayed) *****

                                Press (CR) to continue or 'R' to reenter ?

```

Figure 5

Values: The value for each row is entered, integers only. No integer larger than 32760 may be entered.

When all of the above information is entered the end of data entry menu is displayed. At this point you have the chance to save the data, reenter all of the information once again, print a listing of the data or return to the main menu. See Figure 6.

```

+++++++ N C R   D E C I S I O N   M A T E   V   ++++++
BUSINESS GRAPHICS   ++++++   BUSINESS GRAPHICS

                                END   OF   DATA ENTRY
                                Save Date           (1)
                                Repeat Entry        (2)
                                List Data           (3)
                                Goto Main Menu      (G)           ?

```

Figure 6

It is a good idea to list the data first so that it can be checked. If you choose to do this, the following screen is displayed.

```

+++++++ N C R   D E C I S I O N   M A T E   V   ++++++
BUSINESS GRAPHICS   ++++++   BUSINESS GRAPHICS

                                Listing data on printer

```

Figure 7

When the listing is finished, the end of data entry menu is re-displayed. Now, save the data or, if mistakes were made, reenter the information. (If you choose to reenter the data, all of the information must be repeated. If only 1 or 2 fields must be changed, it is better to save the data and then select Function 3 on the main menu, Change Data. Refer to the section on changing data for the fields that can be changed with that function.)

As the data is saved on the disk, the following question is displayed: REPLACE(R) LAST RECORD IN FILE OR WRITE NEW(N) RECORDS? To delete the last record in the file and replace it with the current information, enter R. To add a new record to the file, enter N. The message: PRESS (CR) TO CONTINUE OR "R" TO REENTER? is displayed next. If you made a mistake, press R, otherwise, press (CR) to continue. The program now assigns a number to this record and displays it on the screen. See Figure 8.

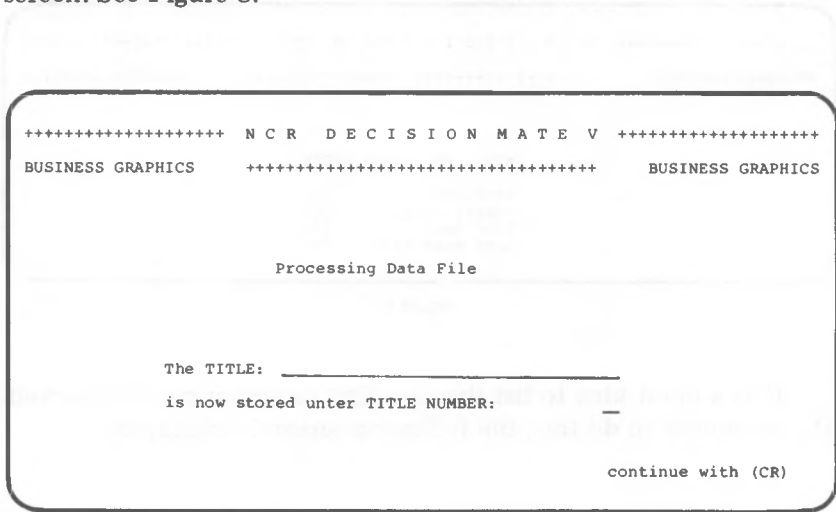


Figure 8

Note this number and press (CR) to continue. The end of data entry menu is redisplayed. You are now ready to select G and return to the main menu to choose another function.

DISPLAYING CHARTS

The first choice on the main menu is Display Chart (refer to Figure 1). This selection allows you to display and print line, bar, and pie charts. Enter 1 to choose this function. Either the question USE CURRENT CHART ? (Y/N) or the following screen is displayed.

```

+++++++ N C R   D E C I S I O N   M A T E   V   ++++++
BUSINESS GRAPHICS      ++++++      BUSINESS GRAPHICS

Enter number of title in chart file
or enter 'R' to review all listed titles      ***

```

Figure 9

If you are not going to use the current chart, you must enter the number assigned to the one you want to use. To obtain a listing of all titles and numbers, enter R and press (CR). (For this version of VEGAS, a demonstration chart, number 2, is saved on the disk.) When you have found the number of your chart press (CR) to continue and the main menu is redisplayed. Then select Function 1 once again and enter the title number.

Once the title number is entered, a short menu appears and you choose the type of graph you want to see. Refer to Figure 10.

```

+++++++ N C R   D E C I S I O N   M A T E   V   ++++++
BUSINESS GRAPHICS      ++++++      BUSINESS GRAPHICS

                SELECT TYPE OF CHART

                LINE CHART      (1)
                BAR CHART      (2)
                PIE CHART      (3)
                Goto Main Menu (G)  ?

```

Figure 10

Before a line graph is displayed, certain parameters must be entered. See Figure 11.

```
+++++ N C R   D E C I S I O N   M A T E   V   +++++
BUSINESS GRAPHICS      +++++ BUSINESS GRAPHICS

                          Select Parameters for Display

Enter column no. for begin /end
Default = (CR) selects all          ** / **

Enter row no.(item) for begin / end
Default = (CR) allows mixed selection  ** / **
Mixed selection
Default = (CR) selects all          ** * * * * *
                                     ** * * * * *

Number of columns      _
Number of rows(items) _          Press (CR) to continue or 'R' to reenter ?
```

Figure 11

First, enter the number of the columns you want to display. For example, if your chart has 4 columns, you may want to see only columns 3 and 4 on the graph. Pressing (CR) only in response to this question selects all columns. *NEWLINE*

Next, enter the row numbers to appear on the chart. For example, if each column has 3 different parts to it, you can choose to display 1, 2, or all of them. A response of (CR) selects all rows and also allows you to change the order in which the rows are displayed (mixed selection). For example, you can display row 3 first, row 2, and then row 1. The default response of (CR) displays the rows in the order in which they were originally entered. When all information has been entered, press (CR) to continue and the chart is displayed. *NEWLINE*
NEWLINE

Before displaying a bar chart, select the type of chart you want – bars stacked, or side by side. Then enter the columns and rows to be displayed. See Figure 12.

```

+++++++ N C R   D E C I S I O N   M A T E   V   ++++++
BUSINESS GRAPHICS  ++++++                               BUSINESS GRAPHICS

                Select Parameters for Display

                Rows(Item) stacked           (1)
                Rows(Item) side by side      (2)  ?

                Enter column no. for begin / end
                Default = (CR) selects all           ** / **

                Enter row no.(item) for begin / end
                Default = (CR) allows mixed selection ** / **
                Mixed Selection
                Default = (CR) selects all           ** * * * * *
                                                         * * * * *

Number of columns      =
Number of rows(items) =      Press (CR) to continue or 'R' to reenter ?

```

Figure 12

When all information has been entered, press **(CR)** to continue and the chart is displayed.

A pie chart can be divided into a maximum of 12 pieces. To begin, choose what to display – one column or one row covering several columns. If you select one column, you must enter the column number and how many rows within the column should be displayed. See Figure 13.

```

+++++++ N C R   D E C I S I O N   M A T E   V   ++++++
BUSINESS GRAPHICS  ++++++                               BUSINESS GRAPHICS

                SELECT PARAMETERS FOR P I E   C H A R T   D I S P L A Y

                Several rows(items) for one column? (1)
                Several columns for one row?        (2)

                Enter COLUMN NO. (Default = 1)

                Enter ROW NO.(item) for begin / end
                Default = (CR) allows mixed selection ** / **

                Mixed selection
                Default = (CR) selects all           ** * * * * *
                                                         * * * * *

Number of columns      =
Number of rows(items) =      Press (CR) to continue or 'R' to reenter ?

```

Figure 13

If you choose to display one row covering several columns, enter the row number and column numbers. As with the line and bar charts, you may display the column or the rows in any order (mixed selection). See Figure 14.

```

+++++++ N C R   D E C I S I O N   M A T E   V   ++++++
BUSINESS GRAPHICS      ++++++      BUSINESS GRAPHICS

      SELECT PARAMETERS FOR P I E   C H A R T   D I S P L A Y

Several rows(items) for one column?   (1)
Several columns for one row?          (2)

Enter ROW NO.(item)   (Default = 1)

Enter COLUMN NO. for begin / end
Default = (CR) allows mixed selection   ** / **

Mixed selection
Default = (CR) selects all               * * * * *
                                         * * * * *

Number of columns      =
Number of rows(items) =   Press (CR) to continue or 'R' to reenter ?

```

Figure 14

The pie chart displays a legend to the right of the pie. This legend tells you the title of the row or column, the value, and the percent of the pie for each value. When pieces of the pie are less than 1.5%, they are collected and displayed as one piece labeled MISC. However, the legend lists each individual value separately.

In the lower left corner of the CRT a few additional features are listed when the chart is displayed. E ends the display and returns to the chart menu. C switches the screen between inverse video (dark on green background) and the normal mode (green on dark background). P or D prints the chart on your printer. (D prints in double density mode; the characters are printed twice so that it comes out darker.)

To print charts with black printing on a white background, change to the normal mode and then plot it.

In addition, with pie charts you can choose to "slice" the pie. This is done by making sure the chart is in the inverse video mode, then select the number of the slice and press that key. All slices can be separated, but cannot be brought back together again while the chart is displayed on the screen.

CHANGING DATA

The third choice on the main menu is Change Data (refer to Figure 1). This selection allows you to update the information for a chart that is already saved on the disk. Enter 3 to choose this function. Either the question USE CURRENT CHART ? (Y/N) or the following screen is displayed.

```

+++++++ N C R   D E C I S I O N   M A T E   V   ++++++
BUSINESS GRAPHICS      ++++++                BUSINESS GRAPHICS

Enter number of title in chart file
or enter 'R' to review all listed titles      ***
  
```

Figure 15

If you are not going to use the current chart, you must enter the number assigned to the one you want to use. To obtain a listing of all titles and numbers, enter R and press (CR). When you have found the number of your chart, press (CR) to continue and the main menu is redisplayed. Then select function 3 once again and enter the title number.

The data for your chart is displayed one field at a time and you now have the option of changing it. If no change is necessary, press (CR) and the cursor moves to the next field. The only information that cannot be changed is the number of columns and rows and, if the unit of measure is changed, all values must be altered to match it. Refer to the following screens for the order in which the information is displayed.

```

+++++++ N C R   D E C I S I O N   M A T E   V   ++++++
BUSINESS GRAPHICS  ++++++                               BUSINESS GRAPHICS

The process for changing parameters and/or values is started.
It is impossible to change the number of columns and rows.
To change enter data / (CR) = no change

First Title
_____

Second Title
_____

Unit of measure  _
Name of unit    _

Press (CR) to continue or 'R' to reenter ?

```

Figure 16

```

+++++++ N C R   D E C I S I O N   M A T E   V   ++++++
BUSINESS GRAPHICS  ++++++                               BUSINESS GRAPHICS

To change column titles enter column no. / (CR) = no change

Column No.      Text
**

```

Figure 17

```

+++++++ N C R   D E C I S I O N   M A T E   V   ++++++
BUSINESS GRAPHICS  ++++++                               BUSINESS GRAPHICS

To change rows(items) enter row no. / (CR) = no change

ROW NO.      TEXT      SHADE CODE      COLOR
**

```

Figure 18

```

+++++++ N C R   D E C I S I O N   M A T E   V   ++++++
BUSINESS GRAPHICS  ++++++                               BUSINESS GRAPHICS

To change the value of a row(item) within a column enter
the column no. and the row no. / (CR) = no change

Column No. Row No. Value
**

```

Figure 19

When you have finished with all data, the end of change menu (Figure 20) is displayed. List the changes to make sure that everything was input correctly, and if errors are detected, repeat the process.

```

+++++++ N C R   D E C I S I O N   M A T E   V   ++++++
BUSINESS GRAPHICS   ++++++                               BUSINESS GRAPHICS

                                End of Change
                                Save Changes      (1)
                                Repeat Changes     (2)
                                List Changes       (3)
                                Goto Main Menu    (G)  ?
  
```

Figure 20

When you are satisfied that everything is correct, save the changes by selecting function 1. The following screen is displayed when the data is saved (Figure 21).

```

+++++++ N C R   D E C I S I O N   M A T E   V   ++++++
BUSINESS GRAPHICS   ++++++                               BUSINESS GRAPHICS

                                Processing Data File
                                Record is replaced

                                                                continue with (CR)
  
```

Figure 21

Press ^{NEWLINE}(CR) to continue; the end of change menu is redisplayed (see Figure 20). You are now ready to return to the main menu and select another function.

GRAPHICS SAMPLES

LIST OF VALUES FOR GRAPHIC-CHART

Title : PERSONAL COMPUTER SALES

Second Title : FIRST QUARTER 1983

Value : 2

Name of Units : MACHINES

Number of COLUMNS / ROWS : 3 / 2

COLUMN / COLUMN-NO :

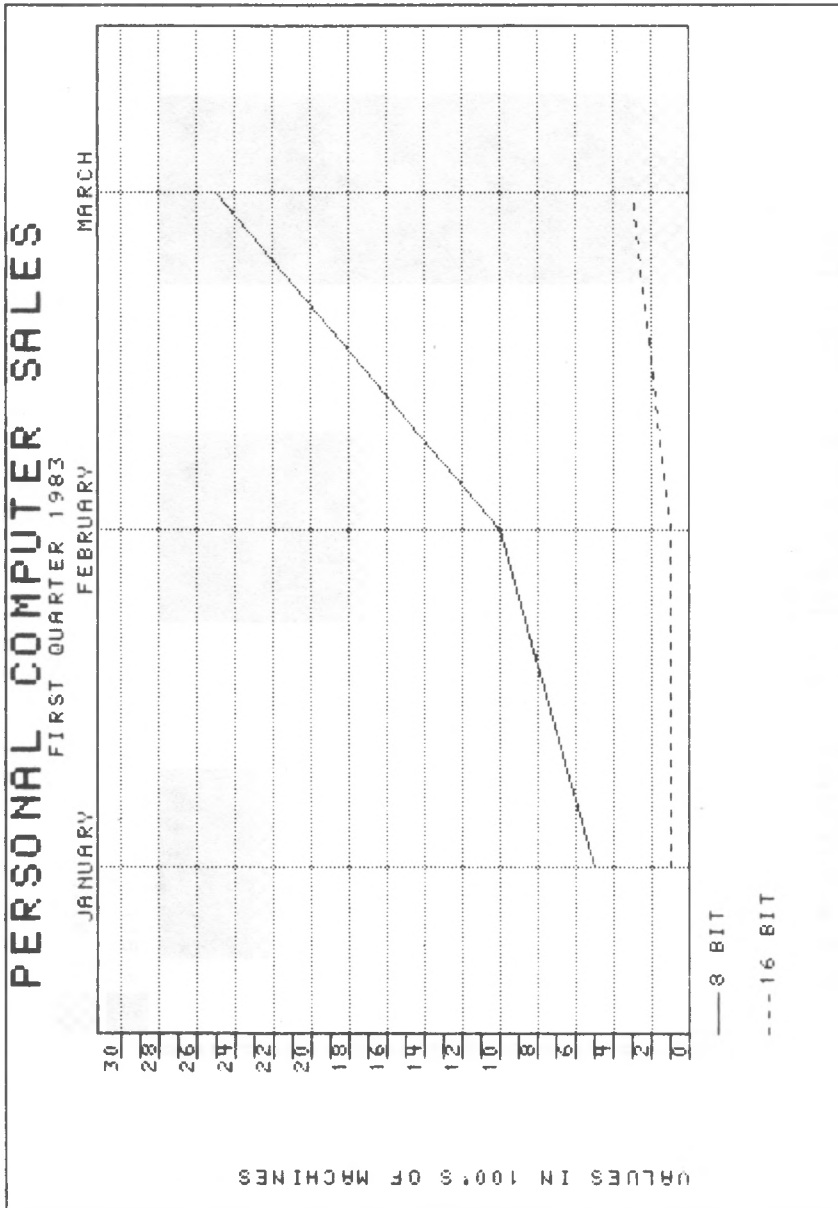
1/8 BIT

2/16 BIT

ROW - NO / ROW

JANUARY	1	5	1
FEBRUARY	2	10	1
MARCH	3	25	3

Listing of Values



Line Chart

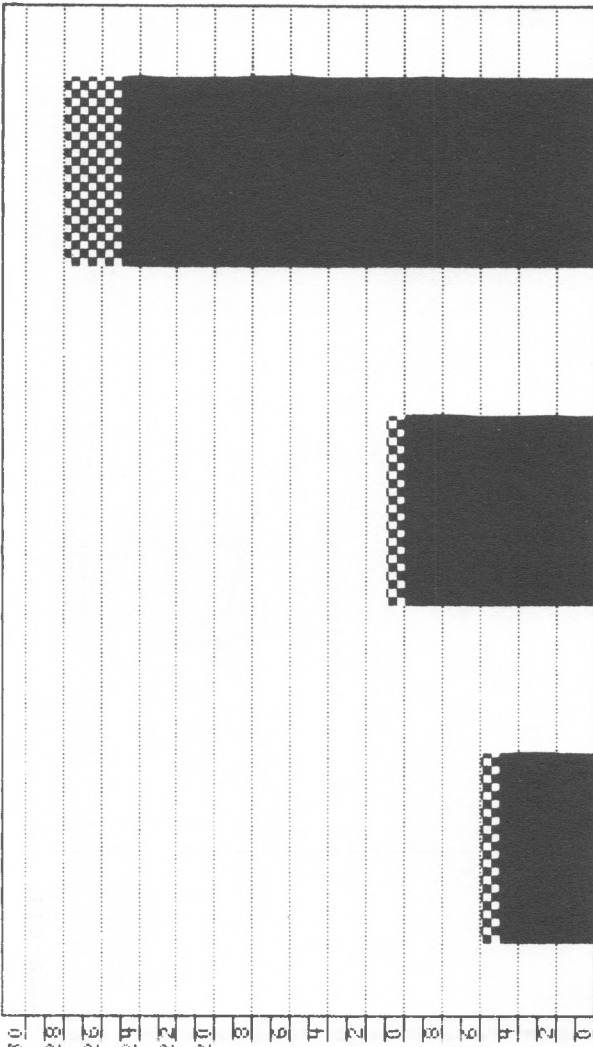
PERSONAL COMPUTER SALES

FIRST QUARTER 1983

MARCH

FEBRUARY

JANUARY

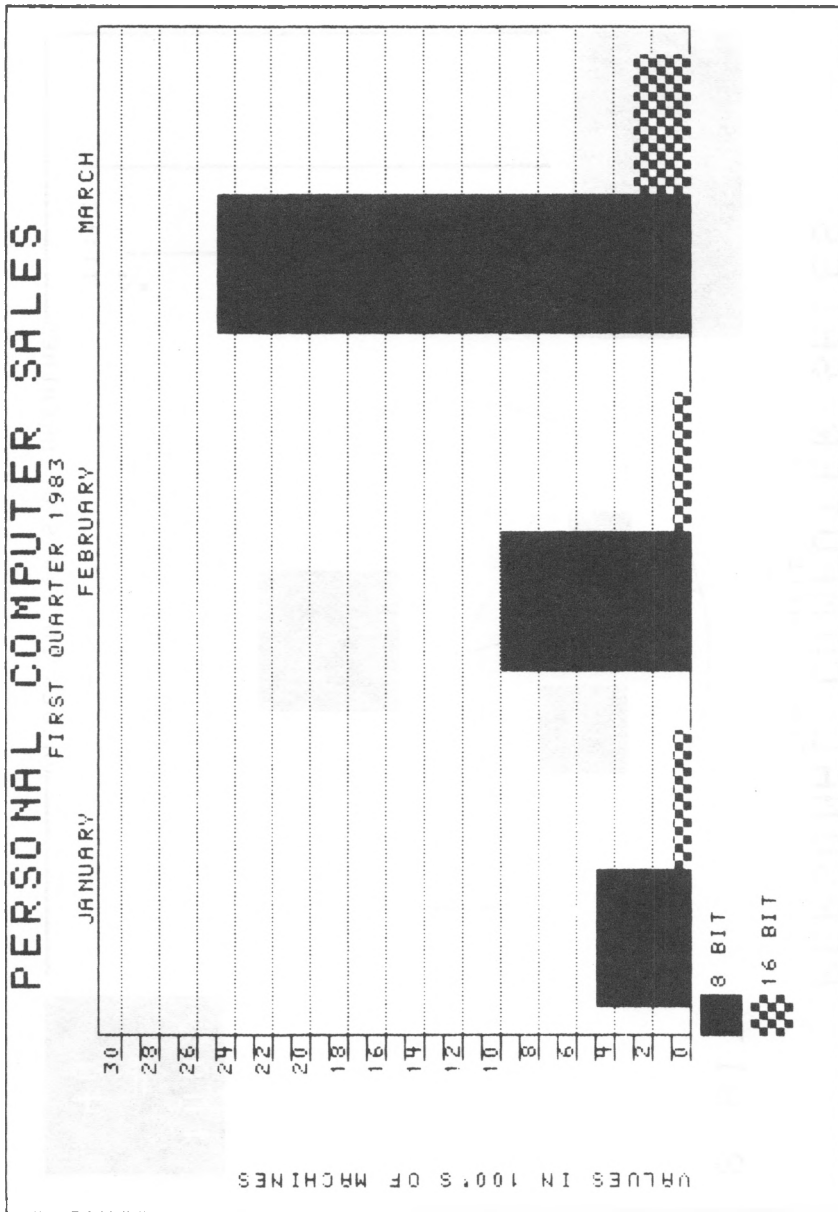


8 BIT

16 BIT

VALUES IN 100'S OF MACHINES

Bar Chart (stacked)



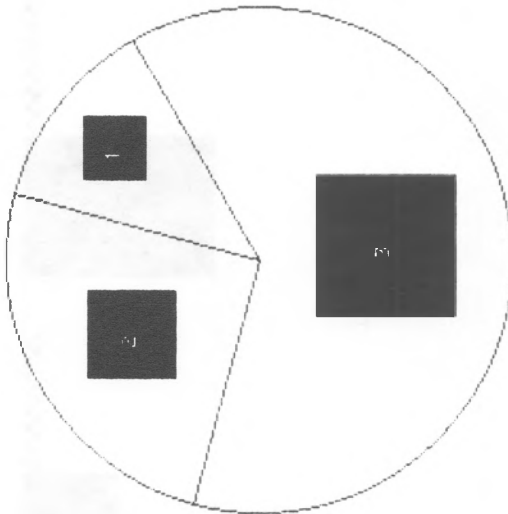
Bar Chart (side by side)

PERSONAL COMPUTER SALES

FIRST QUARTER 1983

8 BIT

	LEGEND
1	JANUARY 5
2	FEBRUARY 10
3	MARCH 25

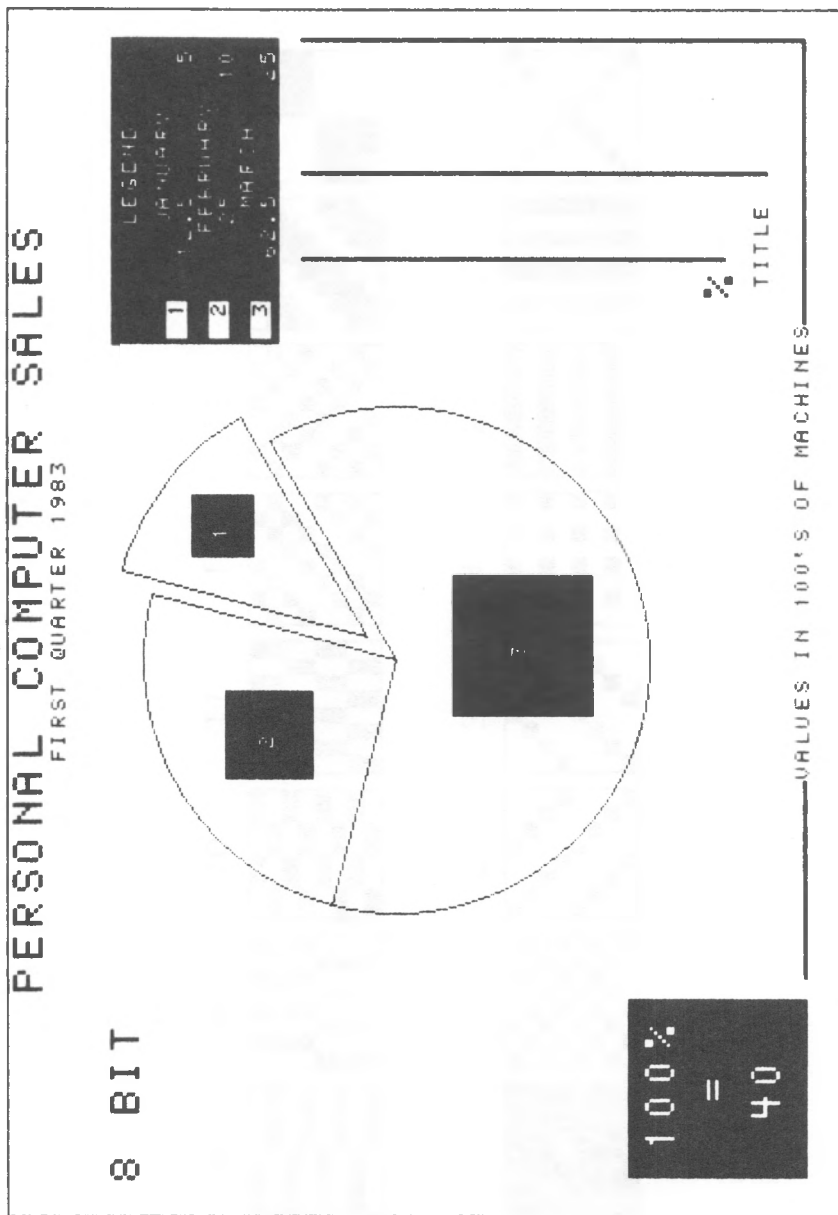


100%
=
40

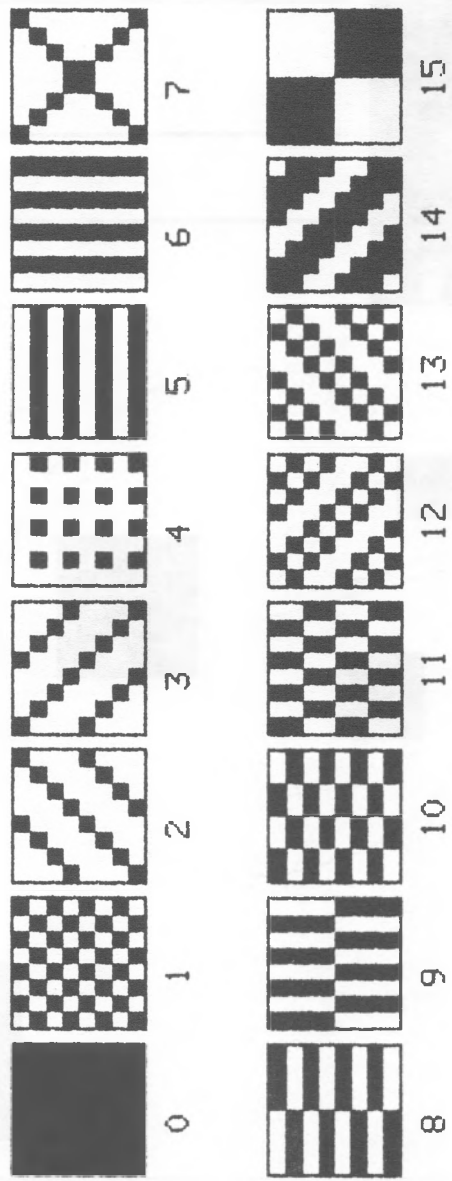
VALUES IN 100'S OF MACHINES

%
TITLE

Pie Chart



Pie Chart (sliced)



Shade Codes

ERROR CONDITIONS

When invalid information (for example, alphabetic characters in a numeric field) is entered into a field, VEGAS erases the information typed in and prompts for a new input. No error message is displayed.

A system error message can occur when you are saving information for a new chart. VEGAS has 2 files in which it stores all values for your charts: TITLE-F and VALUE-F. When there is no more room on the disk to expand these files with new information, the following message is displayed.

Disk Full at address xxxx

The NCR DECISION MATE V returns to the system level prompt and you choose one of 3 actions.

1. Delete the files TITLE-F and VALUE-F from your disk. (All previous charts are erased.)
2. Move the files TITLE-F and VALUE-F to another disk. (The previous information is not lost.)
3. Move all VEGAS files to another disk and use this new disk for future processing. (The previous information is not lost.)

The VEGAS files are all files on your disk that begin with the letters VE and end with the extension COM. The file BRUN.COM must also be moved. So, for example, if you are moving the VEGAS files from drive A to drive B, the PIP commands are as follows:

```
PIP B: = A:VE*.COM  
PIP B: = A:BRUN.COM
```

NOTE: In this case, do not move TITLE-F and VALUE-F to the new disk. These files are automatically created by VEGAS.

ERROR CORRECTION

From a line of reasoning (the ...), it follows that ... (which is ...).

... the ... of ... (which is ...).

... the ... of ... (which is ...).

... the ... of ... (which is ...).

... the ... of ... (which is ...).

THE ... OF ...

... the ... of ... (which is ...).