Rainbow™ 100

Technical Documentation
Volume 1

digital

QV053–GZ

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digital equipment corporation

First Printing, March 1983

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Printed in U.S.A.

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Volume 1

Rainbow™ 100 Recommended Software Practices

Rainbow™ 100 An Introduction to Programming the Rainbow™ 100 Personal Computer

Rainbow™ 100 Terminal Emulation Manual

Rainbow™ 100 PC100 System Specification

Rainbow™ 100 PC100 System Module Specification

Rainbow™ 100 CP/M–86/80 Software Design and Maintenance Manual

Rainbow™ 100 CP/M–86/80 BIOS Listings

AV–V525A–TV

Rainbow™ 100

Recommended Software Practices

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DECwriter	RSTS	
DIBOL	RSX	

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7. All products should make use of the Rainbow keyboard and the special keys in the editing region of that keyboard. The use of the HELP and DO keys is particularly desired, but most menu operated programs can also make use of the Next Screen, Previous Screen, Select, and Find keys as well. Data entry sequences are often improved by the use of the Insert and Remove keys. It is most important that all programs are able to ignore the escape sequences generated by unsupported function keys. Otherwise, a user could inadvertantly crash or confuse your program by pressing an unimplemented key.

   As a matter of good practice, do not use the ctrl-S or ctrl-Q keys as command keys since these are ANSI flow control functions and will invariably cause difficulty if sent to ANSI compatible peripherals.

8. Products that generate information that would be desired in spread sheet format for further manipulation by the user should have an option that creates Microsoft SYLK compatible ASCII input files. Conversely, reading SYLK format will allow spread sheet data to be used by other programs as input.

9. Products that change printer or terminal or communications setting should reset them to their nominal values during a normal exit.

10. products should run on a basic Rainbow 100 configuration in a 48K TPA and still do useful work. If this is not practical, then the memory requirements should take in account the fact that Rainbow's expand in 64K or 192K increments.

11. Digital intends to implement Concurrent CP/M and GSX graphics in Rainbow products. Compatibility with these products will help to ensure the largest possible market for your software.

Rainbow 100 Recommended Software Practices

The following practices have been established to ensure a level of user convenience and consistency in the operation of the Rainbow 100 Applications Software.

Please adhere to these standards wherever applicable. Since these points reflect the general expectations that will have been set for the customer by DEC provided applications software, you should make it clear in your product literature whether your software conforms so that customers are given the proper expectations before they buy.

1. All products should have an introductory screen which gives the Rainbow name, the product name, and the Producer name in double height, double width lettering. The bottom line of the screen should show the copyright owner and date. This screen should appear at least 3 seconds during loading. It is most desirable to overlap the display of this screen with the loading of the main software, file opening, etc.

2. All products should be menu operated whenever that style of operation is appropriate. Menu selections should be spelled out on the screen or available in help screens. The best menu systems are mneumonic, but only if the mneumonics are well chosen. Another good form of menu operation is to point at the item by moving the cursor keys, then pressing the "Select" key on the editing keypad.

3. All products that generate printed reports should have the provision for selecting the printer pitch (horizontal and vertical), printer font, and printer speed using the DEC universal escape sequences. In addition, all reports that are generated for the printer should be able to be shown on the screen in 132 column mode. Also, all reports should be able to be directed to the disk using a standard CP/M file identification. Reports should not contain more than 131 character lines on disk output and should be compatible with the Select word processor in the character set.

4. All products should be coded using the DEC international character set which uses 8 bit characters for input and display.

5. All products should use both 80 and 132 column display modes, and have these modes selectable by the user or set according to the processing situation. Do not rely on the user using the SETUP facility to adjust the screen width since it will then be cumbersome to go from one program to another.

6. All products should use the Memory Mapped Video if they run on the 8088 side of the machine. The Video should be controlled by the "interface layer" firmware calls rather than direct manipulation of the hardware or display memory. This will ensure compatibility with future Rainbow series products and operating systems.