AccessionIndex: TCD-SCSS-V.20171112.001
Accession Date: 12-Nov-2017
Accession By: Dr.Brian Coghlan
Object name: IBM PC DOS 2.10
Vintage: c.1984
Synopsis: IBM Personal Computer Disk Operating System Version 2.10 (PC DOS), with software for the Hercules graphics adapter, plus DOS supplemental programs Version 3.2 (including LINK.EXE).

Description:
IBM PC DOS, Microsoft MS-DOS, CP/M, CP/M-80, Q-DOS and 86-DOS have a convoluted history [1]. DOS primarily consists of Microsoft's MS-DOS and a related version, IBM PC DOS, both of which were first introduced in 1981, but then had a long history through multiple versions into the new millennium. Both were developed by Microsoft and IBM to execute on the *Intel i8088* of the original *IBM 5150 PC* and to behave in a similar way to Digital Research's CP/M.

IBM PC DOS 2.0, introduced in Mar-1983 for the *IBM PC/XT* [2], represented a watershed in the multiplicity of cross-licensing agreements. IBM PC DOS 2.0 included UNIX-like features such as tree-structured subdirectories for the first time, as well as support for hard disk drives, plus a BIOS with device drivers, and FDISK to create MBR boot records for disk partitioning (FAT12!). IBM's Version 2.1 was an incremental update targeted to their new IBM *PCjr* to allow programs to run from ROM cartridges [3]. Version 2.1 was introduced in Nov-1983.

The item in this collection is thus an early version of the PC DOS software and related documentation, dating from Jan-1984, and is preserved in its original packaging. It comprises an extensive user's manual for PC DOS 2.10, and includes PC DOS 2.10 on 5.25 inch floppy disks, along with supplemental programs Version 3.2 (including LINK.EXE) that date from 12-Mar-1987. Software for the Hercules graphics adapter from 1983 is also included. All the software is on 5.25" floppy disks, see elsewhere in the Software category of this catalog.

Many thanks to Brian Coghlan for donating this item.

The homepage for this catalog is at: https://www.scss.tcd.ie/SCSSTreasuresCatalog/
Click *'Accession Index'* (1st column listed) for related folder, or *'About'* for further guidance.
Some of the items below are more properly part of the other categories of this catalog, but are listed here for convenience.

Accession Index	Object with Identification
TCD-SCSS-V.20171112.001	IBM PC DOS 2.10, IBM Personal Computer Disk Operating System Version 2.10 (PC DOS), with software for the Hercules graphics adapter, plus DOS supplemental programs Version 3.2 (including LINK.EXE), c.1984.
TCD-SCSS-W.20171112.001	Microsoft MSDOS 2.10, IBM Personal Computer Disk Operating System Version 2.10 (DOS), 1983.
TCD-SCSS-V.20121208.001	IBM Disk Operating System, Software manual for IBM DOS in A5 ring binder, 19xx.
TCD-SCSS-W.20150306.601	Incomplete set of MSDOS 5.0, 5.02 and 5.2 floppy disks, Software distribution, Microsoft, in loose incomplete set: Disk1: 'MSDOS 5.0 Disk 1', Disk2: 'MSDOS 5.0 Startup/Support', Disk3: 'MSDOS 5.0 Basic/Edit/Utility Disk 3', Disk4: 'MSDOS 5.0 Install Disk 3', Disk5: 'MSDOS 5.0 Supplemental', Disk6: 'MSDOS 5.02 Backup Disk 01 Supplemental', Disk7: 'MSDOS 5.02 Startup', Disk8: 'MSDOS 5.02 Basic/Edit/Utility', Disk9: 'MSDOS 5.2 Install Disk 2 Shell/Help' (3.5-inch floppy disks in box), c.198x.
TCD-SCSS-W.20150306.602	Box of Miscellaneous Floppy Disks, Software distribution, Disk1: 'MSDOS Boot Disk Virus Directory', Disk2: 'Dell Dimension PowerEdge 2400 CDROM Boot Diskette', Disk3: 'Dell Dimension PowerEdge 2400 Flash BIOS Upgrade', Disk4: 'ACS 3.2 dB Backup 5-Aug-2003, 15-Jan-2004, 8-Mar-2004', Disk5: 'WRIGHT Emergency Repair Disk 2-Dec-1997' (3.5-inch floppy disks in box), 199x.

References:

1. Wikipedia, *MS-DOS*, see:
   https://en.wikipedia.org/wiki/MS-DOS
   Last browsed to on 20-Dec-2022.

1. Wikipedia, *Timeline of DOS operating systems*, see:
   https://en.wikipedia.org/wiki/Timeline_of_DOS_operating_systems
   Last browsed to on 20-Dec-2022.

2. Wikipedia, *IBM Personal Computer XT*, see:
   https://en.wikipedia.org/wiki/IBM_Personal_Computer_XT
   Last browsed to on 20-Dec-2022.

3. Wikipedia, *IBM PCjr*, see:
   https://en.wikipedia.org/wiki/IBM_PCjr
   Last browsed to on 20-Dec-2022.

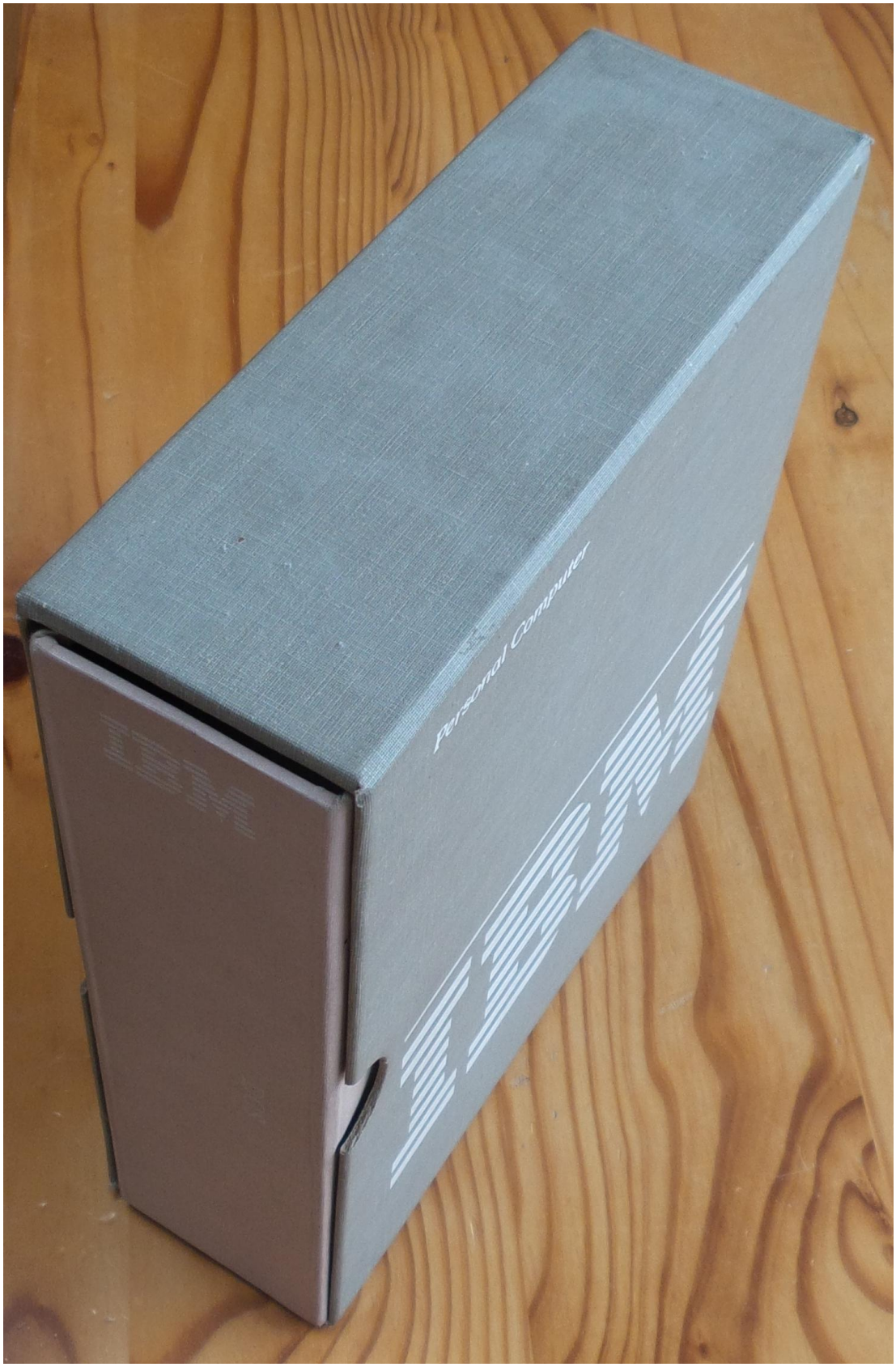


Figure 1: MSDOS 2.10 User's Manual and software

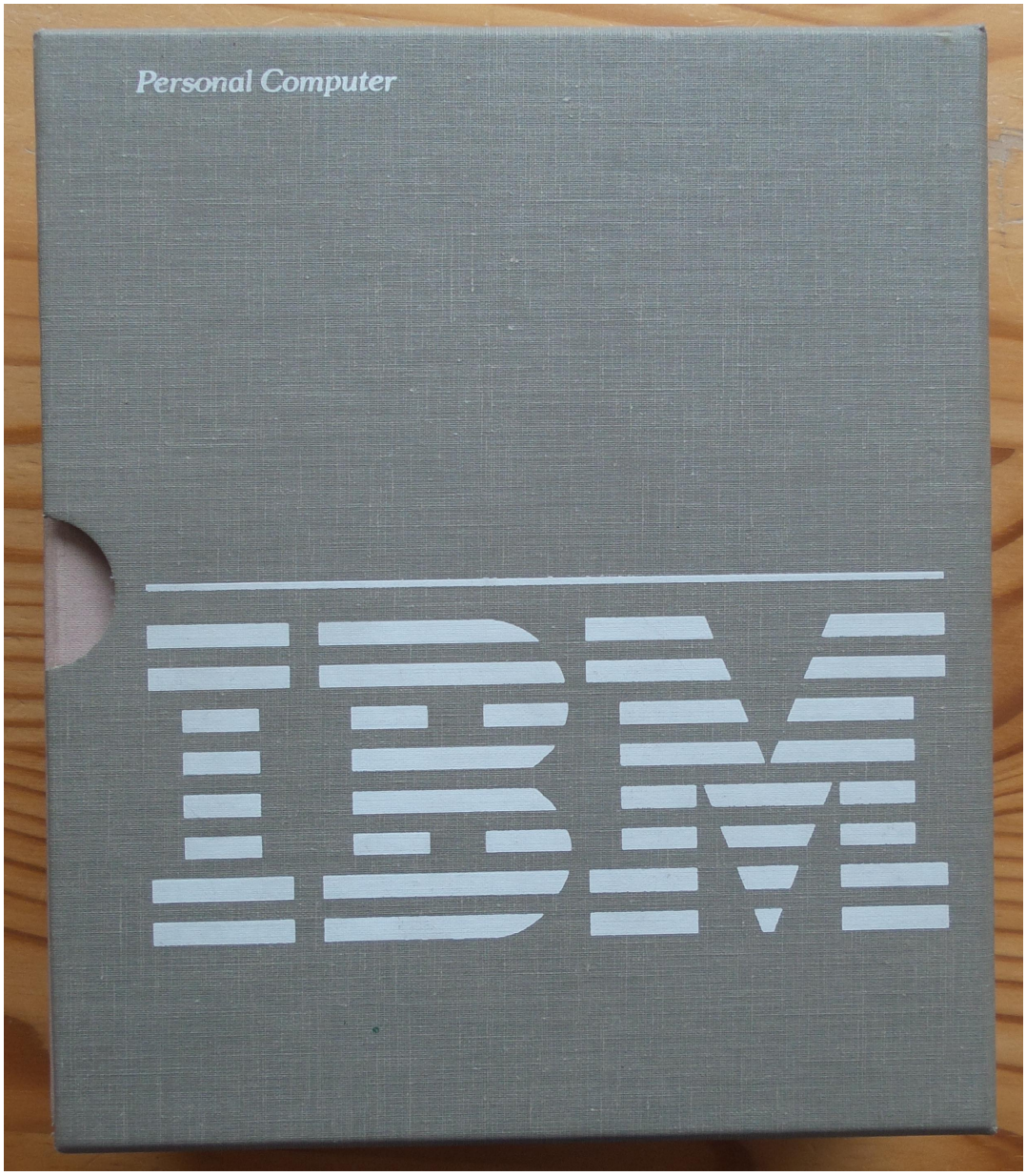


Figure 2: MSDOS 2.10 User's Manual and software

Figure 3: MSDOS 2.10 User's Manual and software

Figure 4: MSDOS 2.10 User's Manual and software

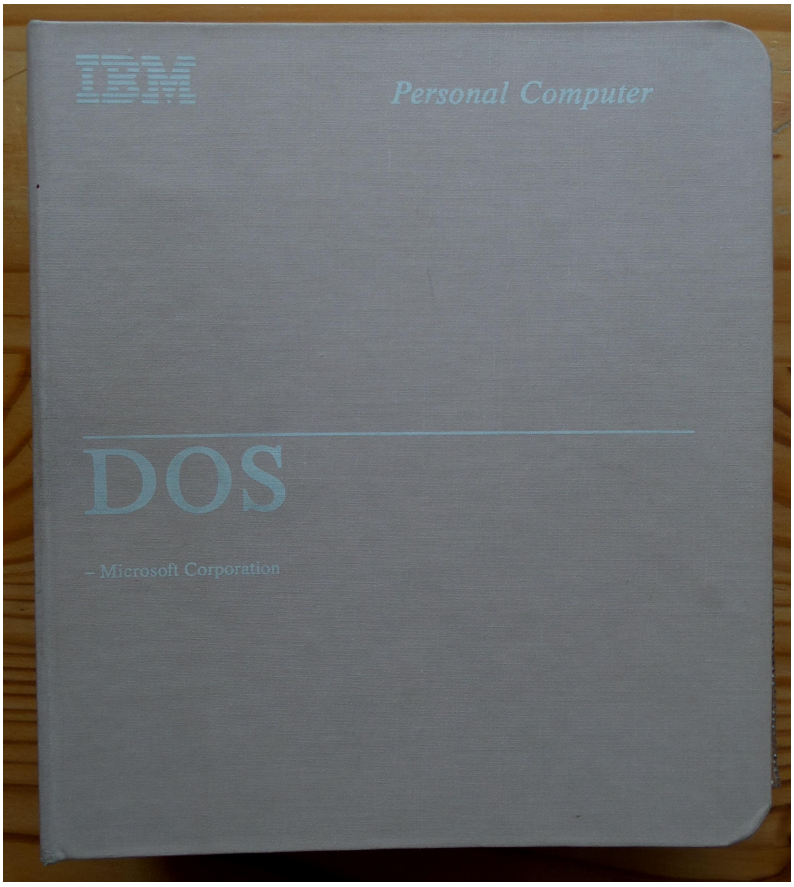
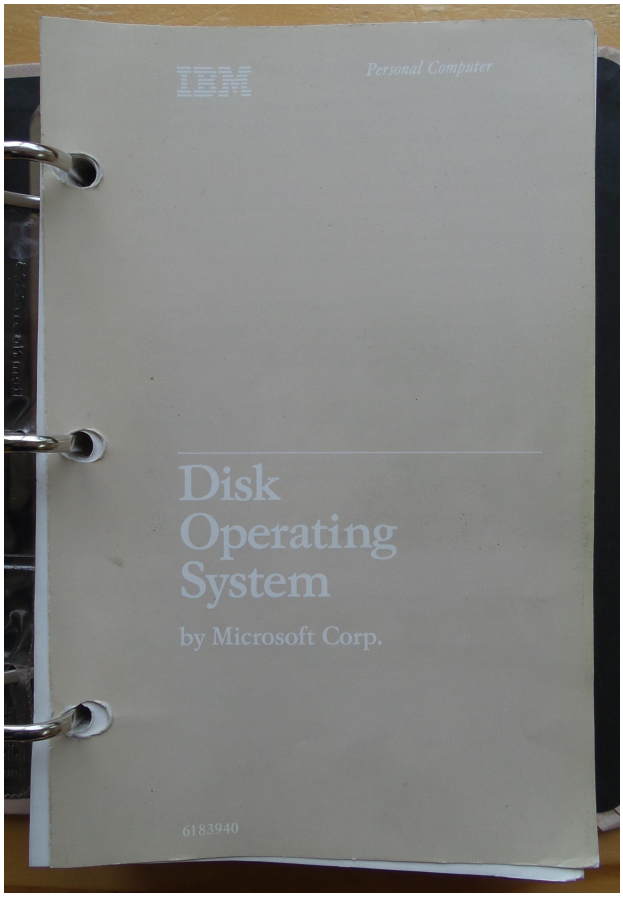


Figure 5: MSDOS 2.10 User's Manual and software

Figure 6: MSDOS 2.10 User's Manual and software

Figure 7: MSDOS 2.10 User's Manual and software



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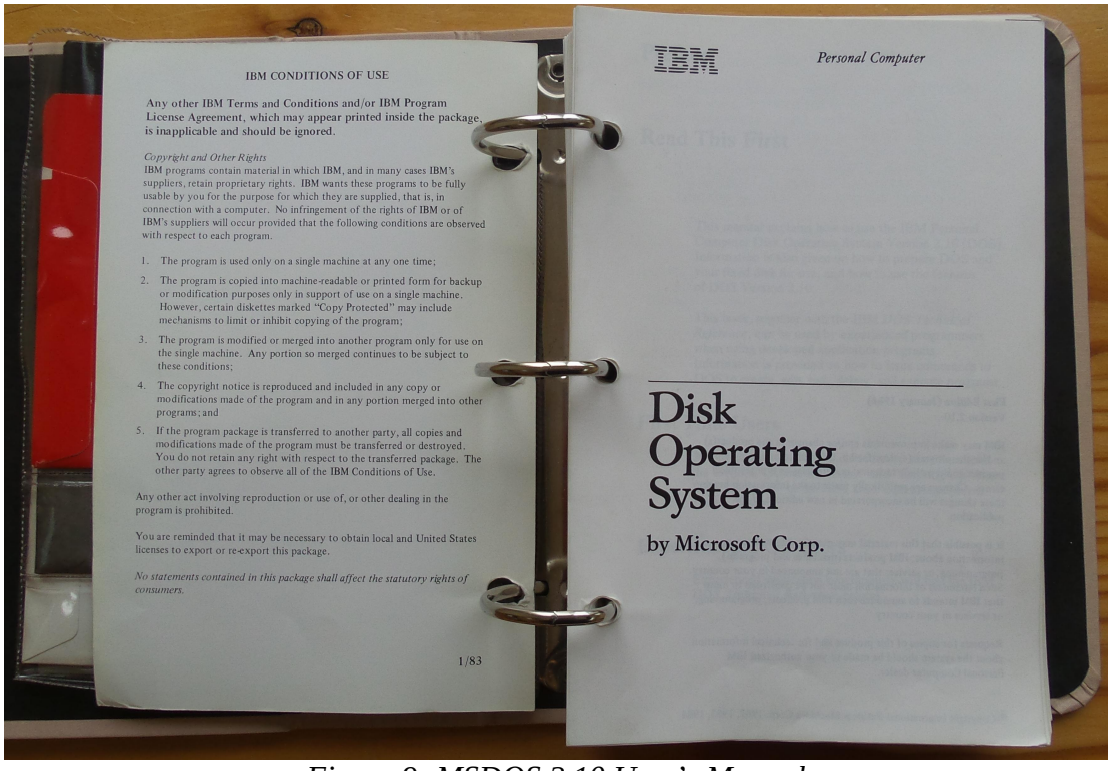

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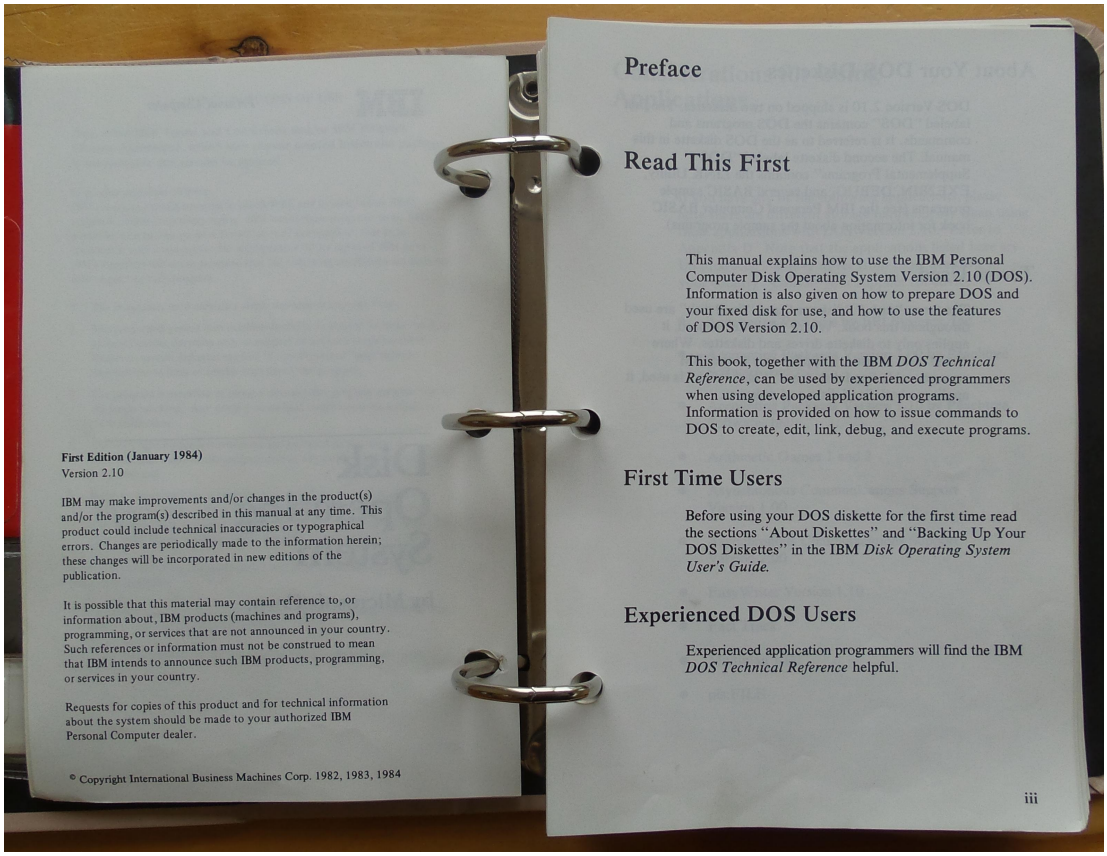

First Edition (January 1984)
Version 2.10

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It is possible that this material may contain reference to, or information about, IBM products (machines and programs), programming, or services that are not announced in your country. Such references or information must not be construed to mean that IBM intends to announce such IBM products, programming, or services in your country.

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Preface

Read This First

This manual explains how to use the IBM Personal Computer Disk Operating System Version 2.10 (DOS). Information is also given on how to prepare DOS and your fixed disk for use, and how to use the features of DOS Version 2.10.

This book, together with the IBM *DOS Technical Reference*, can be used by experienced programmers when using developed application programs. Information is provided on how to issue commands to DOS to create, edit, link, debug, and execute programs.

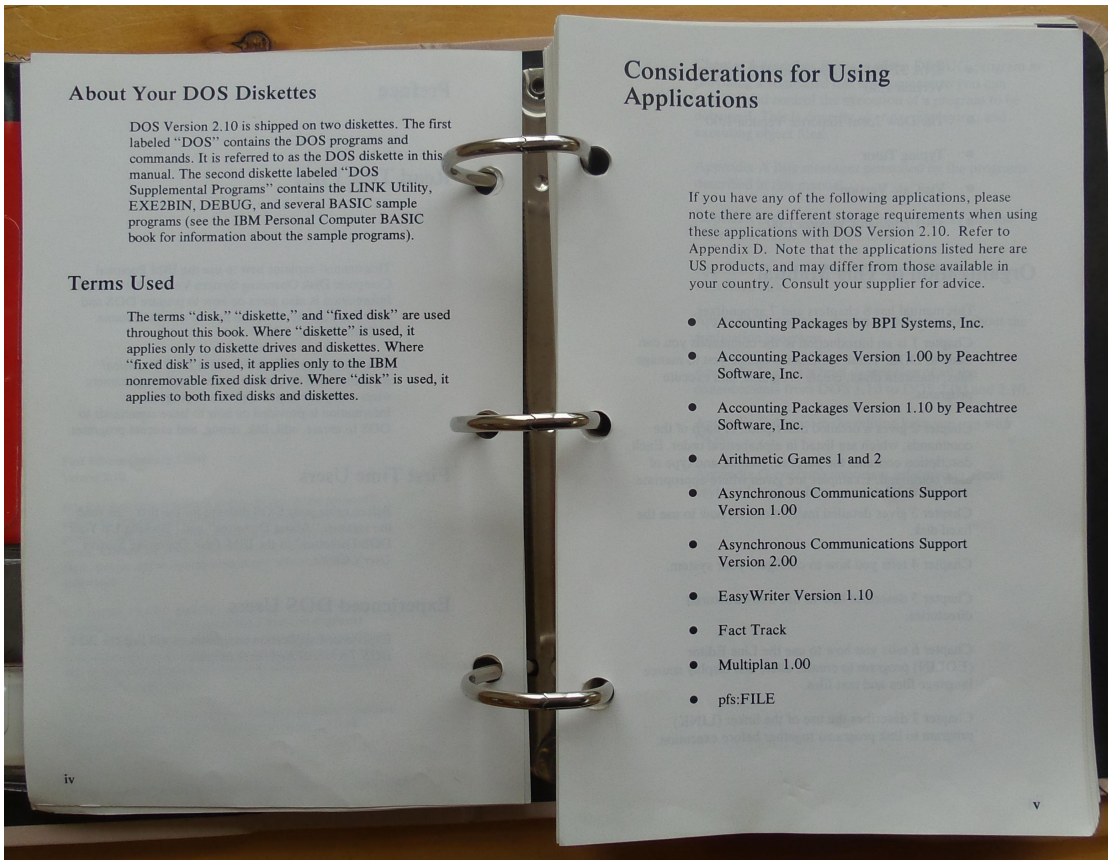
First Time Users

Before using your DOS diskette for the first time read the sections "About Diskettes" and "Backing Up Your DOS Diskettes" in the IBM *Disk Operating System User's Guide.*

Experienced DOS Users

Experienced application programmers will find the IBM *DOS Technical Reference* helpful.

Figure 10: MSDOS 2.10 User's Manual



About Your DOS Diskettes

DOS Version 2.10 is shipped on two diskettes. The first labeled "DOS" contains the DOS programs and commands. It is referred to as the DOS diskette in this manual. The second diskette labeled "DOS Supplemental Programs" contains the LINK Utility, EXE2BIN, DEBUG, and several BASIC sample programs (see the IBM Personal Computer BASIC book for information about the sample programs).

Terms Used

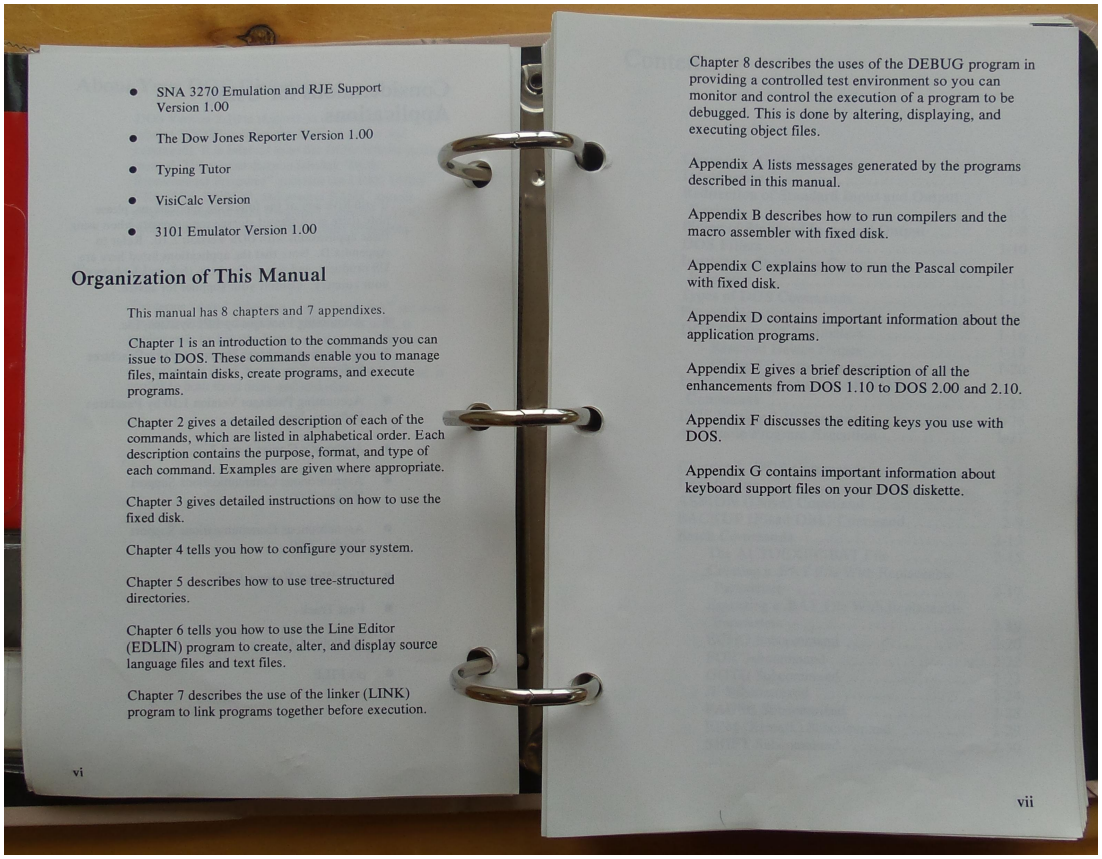
The terms "disk," "diskette," and "fixed disk" are used throughout this book. Where "diskette" is used, it applies only to diskette drives and diskettes. Where "fixed disk" is used, it applies only to the IBM nonremovable fixed disk drive. Where "disk" is used, it applies to both fixed disks and diskettes.

Considerations for Using Applications

If you have any of the following applications, please note there are different storage requirements when using these applications with DOS Version 2.10. Refer to Appendix D. Note that the applications listed here are US products, and may differ from those available in your country. Consult your supplier for advice.

- Accounting Packages by BPI Systems, Inc.
- Accounting Packages Version 1.00 by Peachtree Software, Inc.
- Accounting Packages Version 1.10 by Peachtree Software, Inc.
- Arithmetic Games 1 and 2
- Asynchronous Communications Support Version 1.00
- Asynchronous Communications Support Version 2.00
- EasyWriter Version 1.10
- Fact Track
- Multiplan 1.00
- pfs:FILE

Figure 11: MSDOS 2.10 User's Manual



- SNA 3270 Emulation and RJE Support Version 1.00
- The Dow Jones Reporter Version 1.00
- Typing Tutor
- VisiCalc Version
- 3101 Emulator Version 1.00

Organization of This Manual

This manual has 8 chapters and 7 appendixes.

Chapter 1 is an introduction to the commands you can issue to DOS. These commands enable you to manage files, maintain disks, create programs, and execute programs.

Chapter 2 gives a detailed description of each of the commands, which are listed in alphabetical order. Each description contains the purpose, format, and type of each command. Examples are given where appropriate.

Chapter 3 gives detailed instructions on how to use the fixed disk.

Chapter 4 tells you how to configure your system.

Chapter 5 describes how to use tree-structured directories.

Chapter 6 tells you how to use the Line Editor (EDLIN) program to create, alter, and display source language files and text files.

Chapter 7 describes the use of the linker (LINK) program to link programs together before execution.

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Chapter 8 describes the uses of the DEBUG program in providing a controlled test environment so you can monitor and control the execution of a program to be debugged. This is done by altering, displaying, and executing object files.

Appendix A lists messages generated by the programs described in this manual.

Appendix B describes how to run compilers and the macro assembler with fixed disk.

Appendix C explains how to run the Pascal compiler with fixed disk.

Appendix D contains important information about the application programs.

Appendix E gives a brief description of all the enhancements from DOS 1.10 to DOS 2.00 and 2.10.

Appendix F discusses the editing keys you use with DOS.

Appendix G contains important information about keyboard support files on your DOS diskette.

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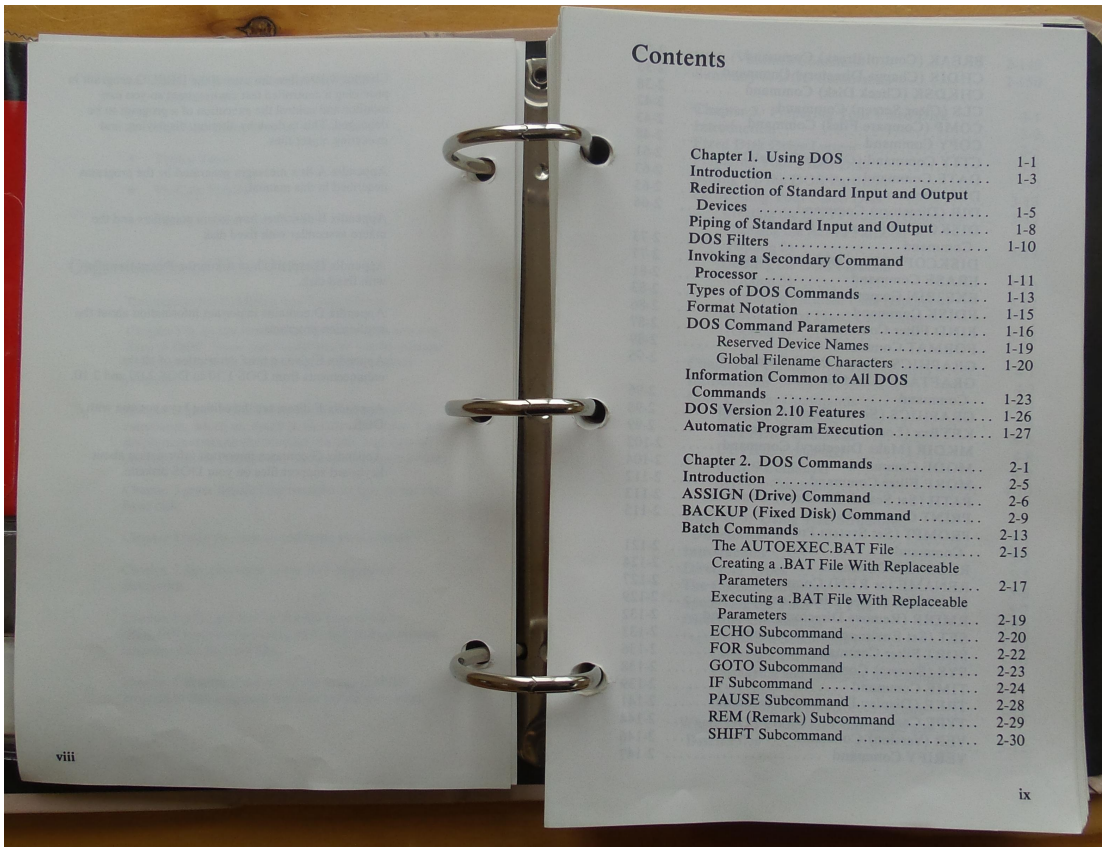

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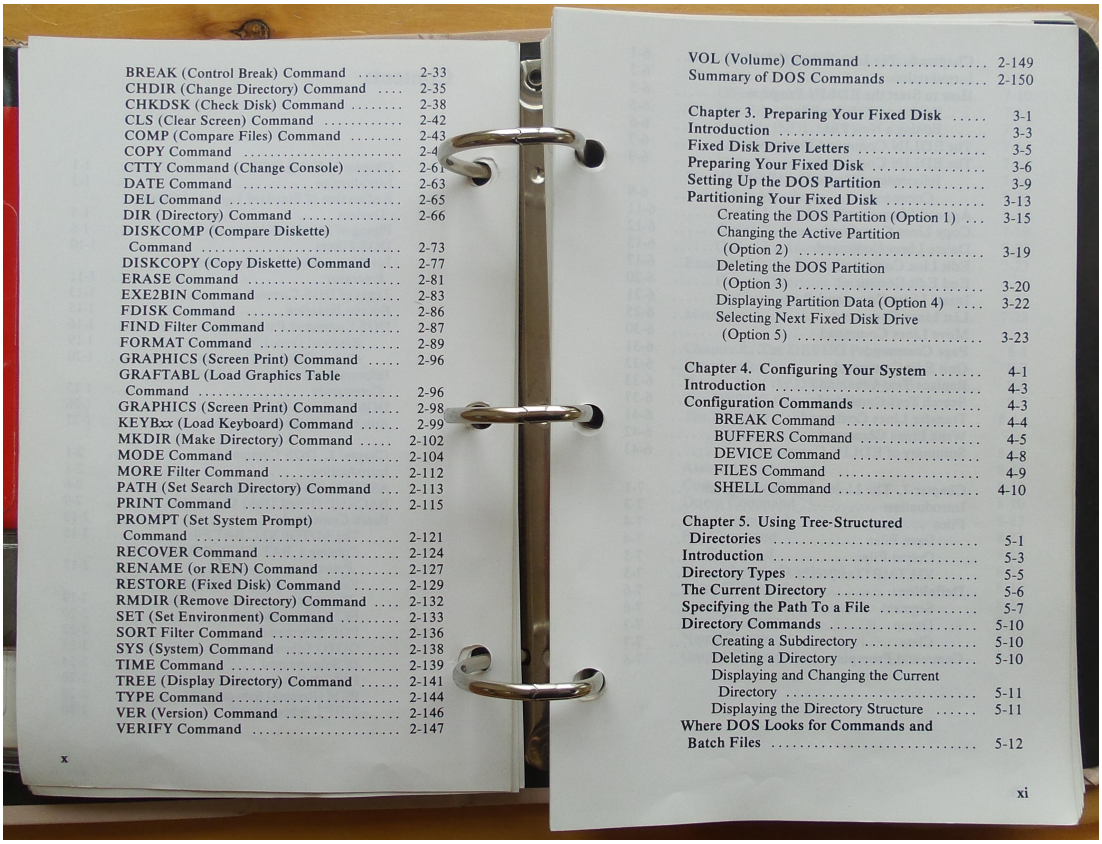

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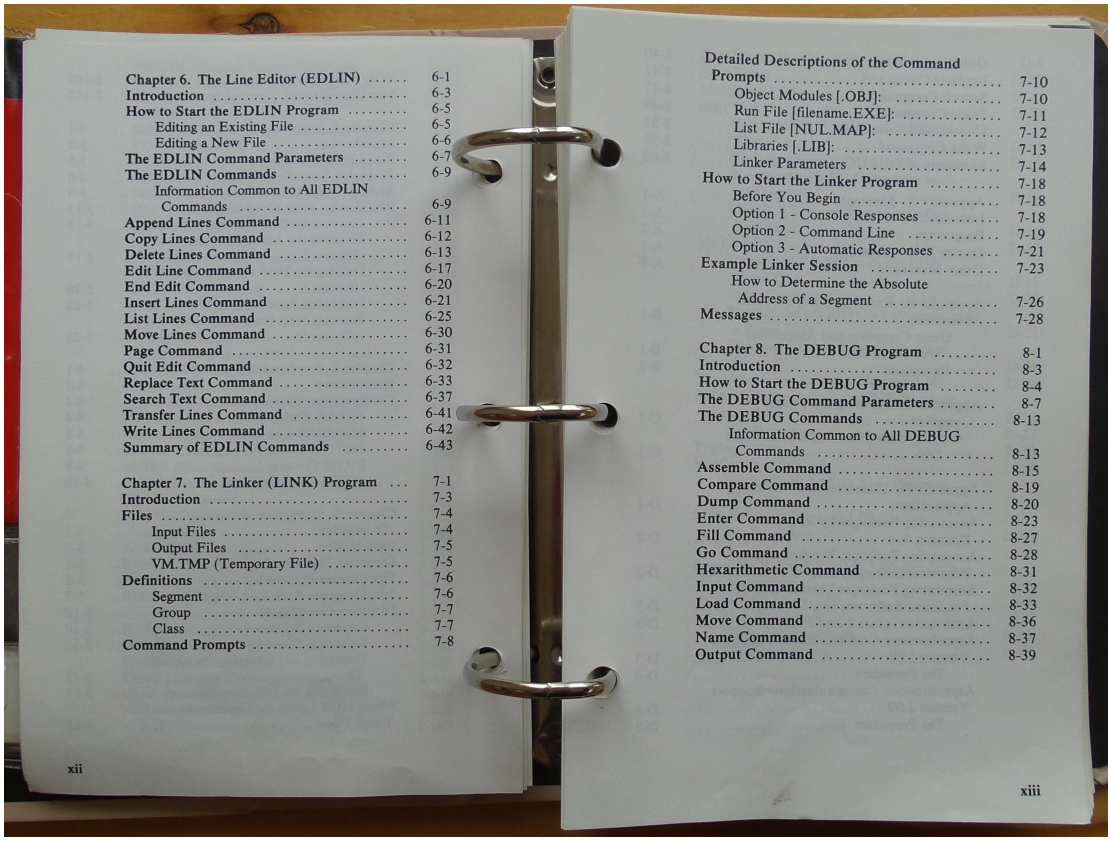

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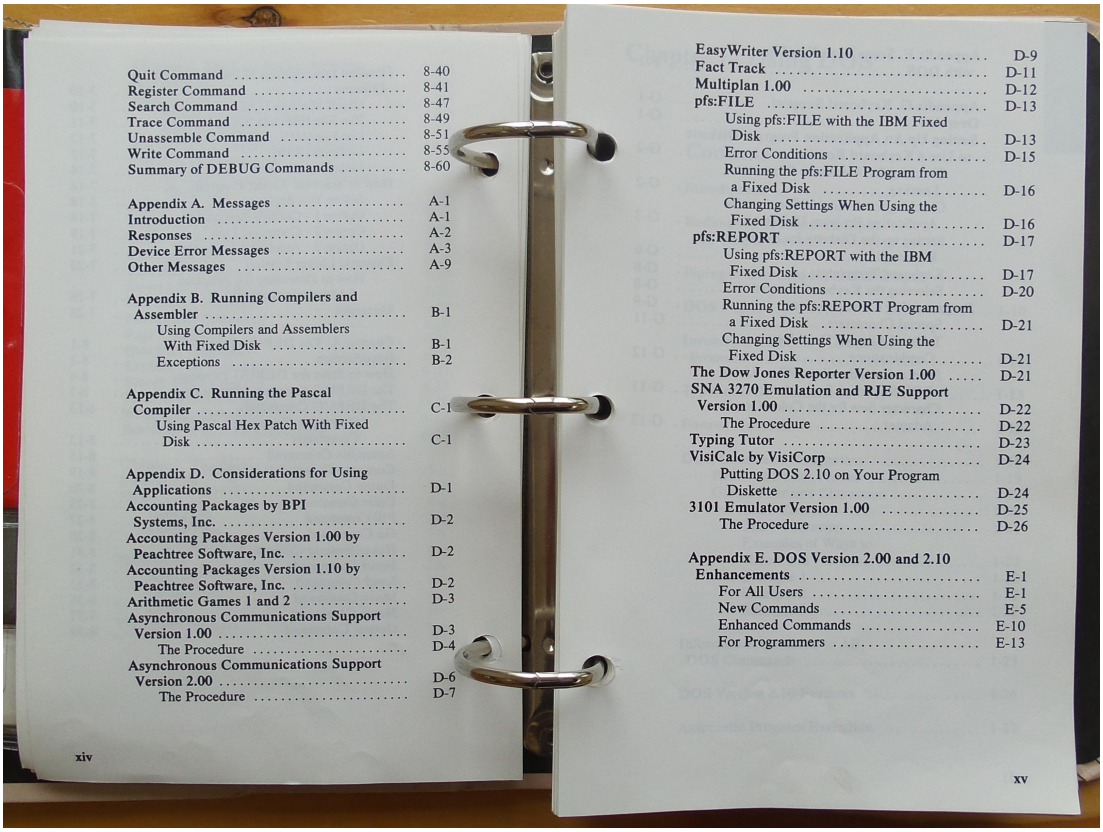

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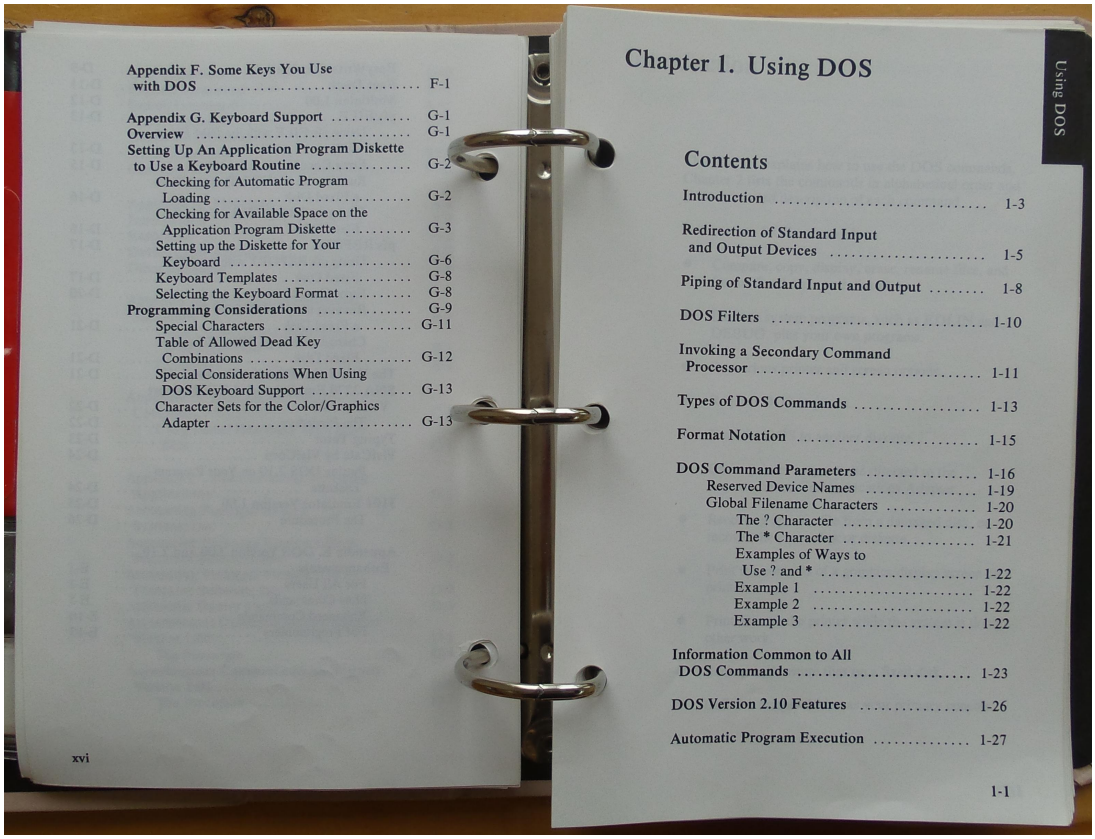

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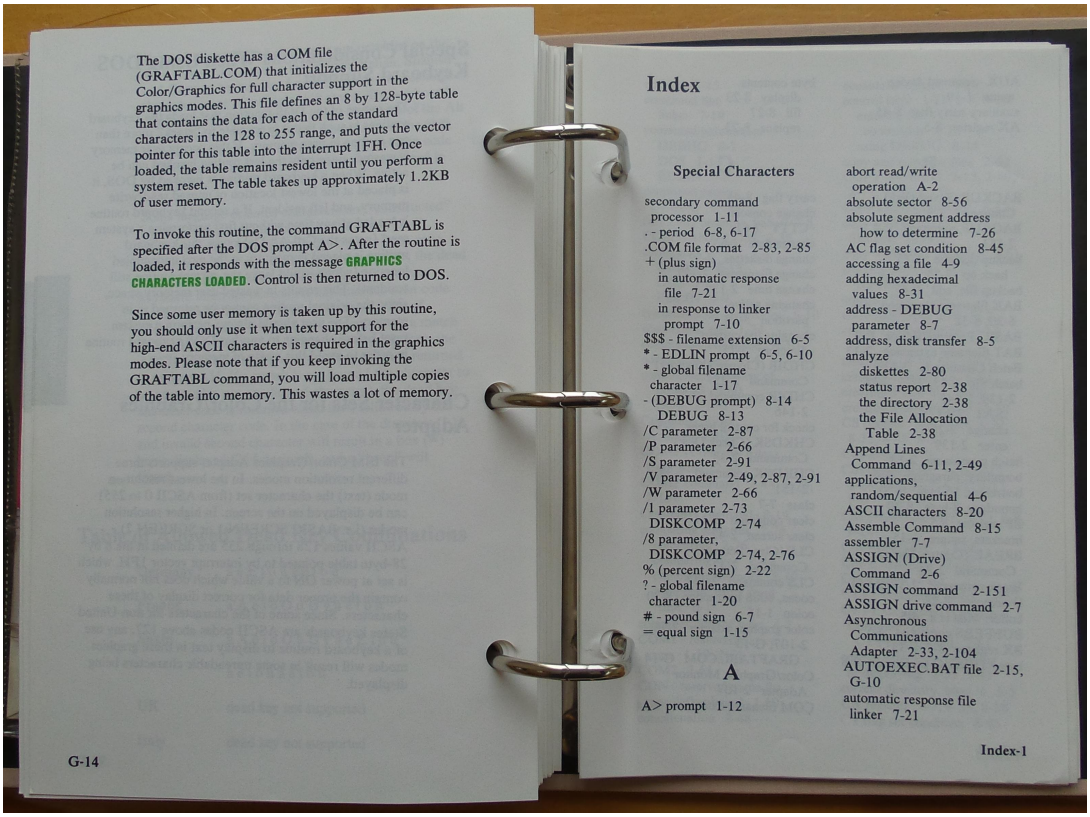

The DOS diskette has a COM file (GRAFTABL.COM) that initializes the Color/Graphics for full character support in the graphics modes. This file defines an 8 by 128-byte table that contains the data for each of the standard characters in the 128 to 255 range, and puts the vector pointer for this table into the interrupt 1FH. Once loaded, the table remains resident until you perform a system reset. The table takes up approximately 1.2KB of user memory.

To invoke this routine, the command GRAFTABL is specified after the DOS prompt A>. After the routine is loaded, it responds with the message **GRAPHICS CHARACTERS LOADED**. Control is then returned to DOS.

Since some user memory is taken up by this routine, you should only use it when text support for the high-end ASCII characters is required in the graphics modes. Please note that if you keep invoking the GRAFTABL command, you will load multiple copies of the table into memory. This wastes a lot of memory.

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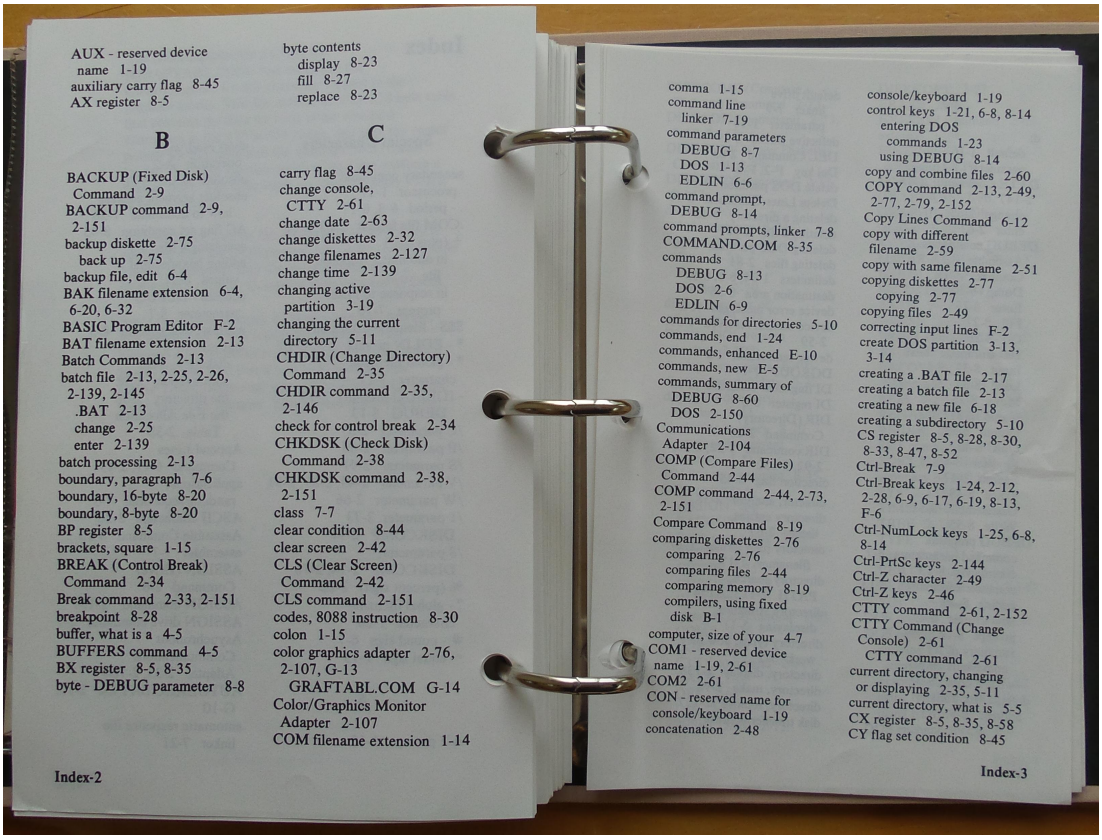

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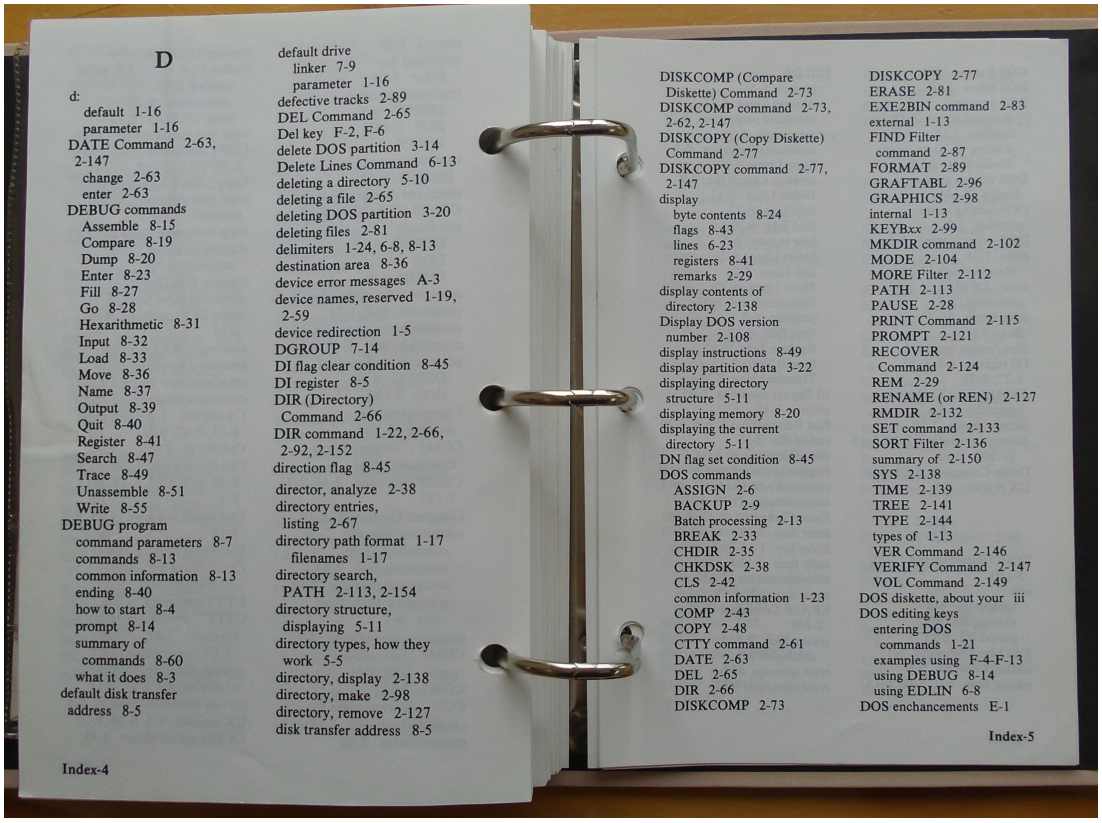

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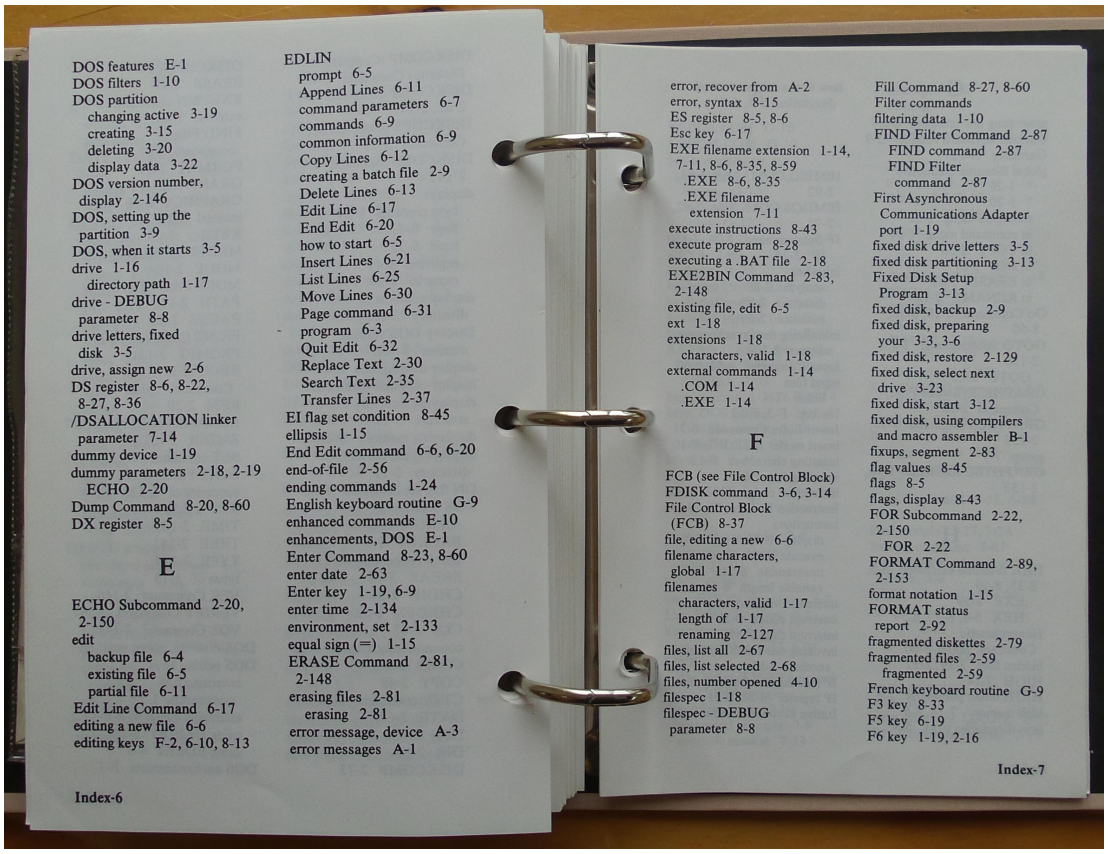

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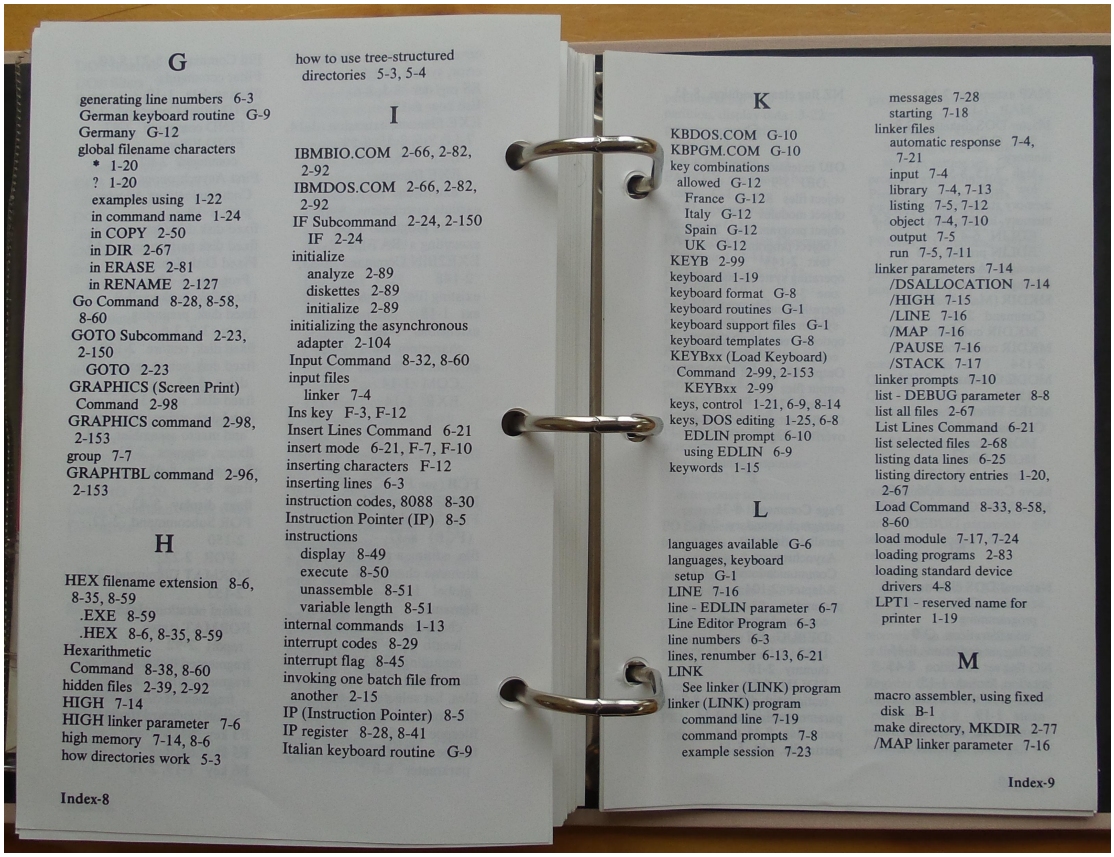

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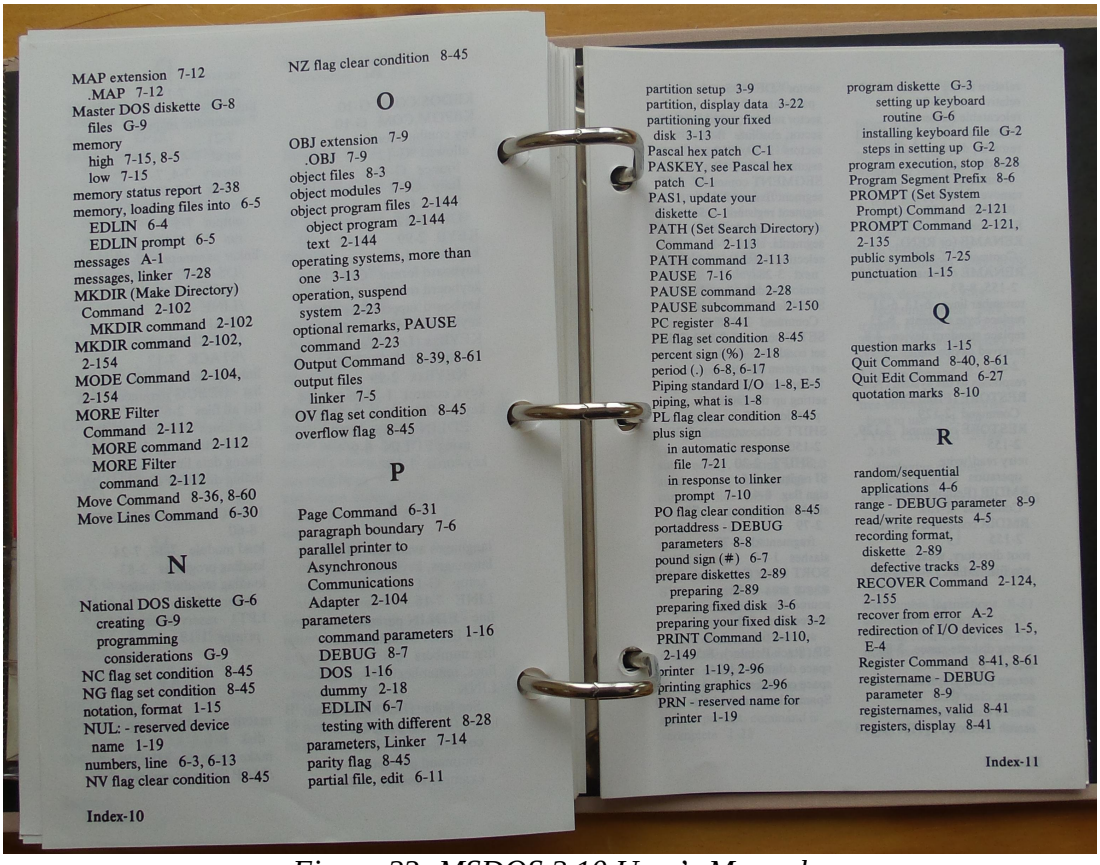

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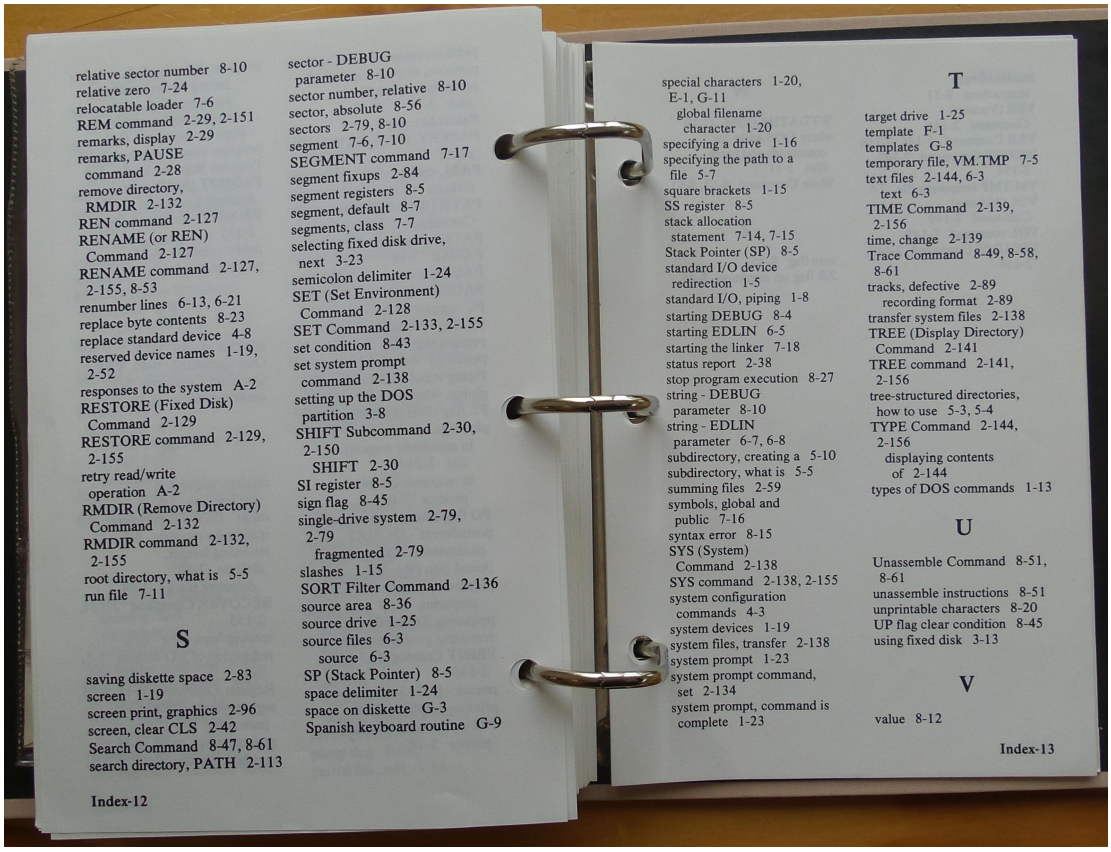

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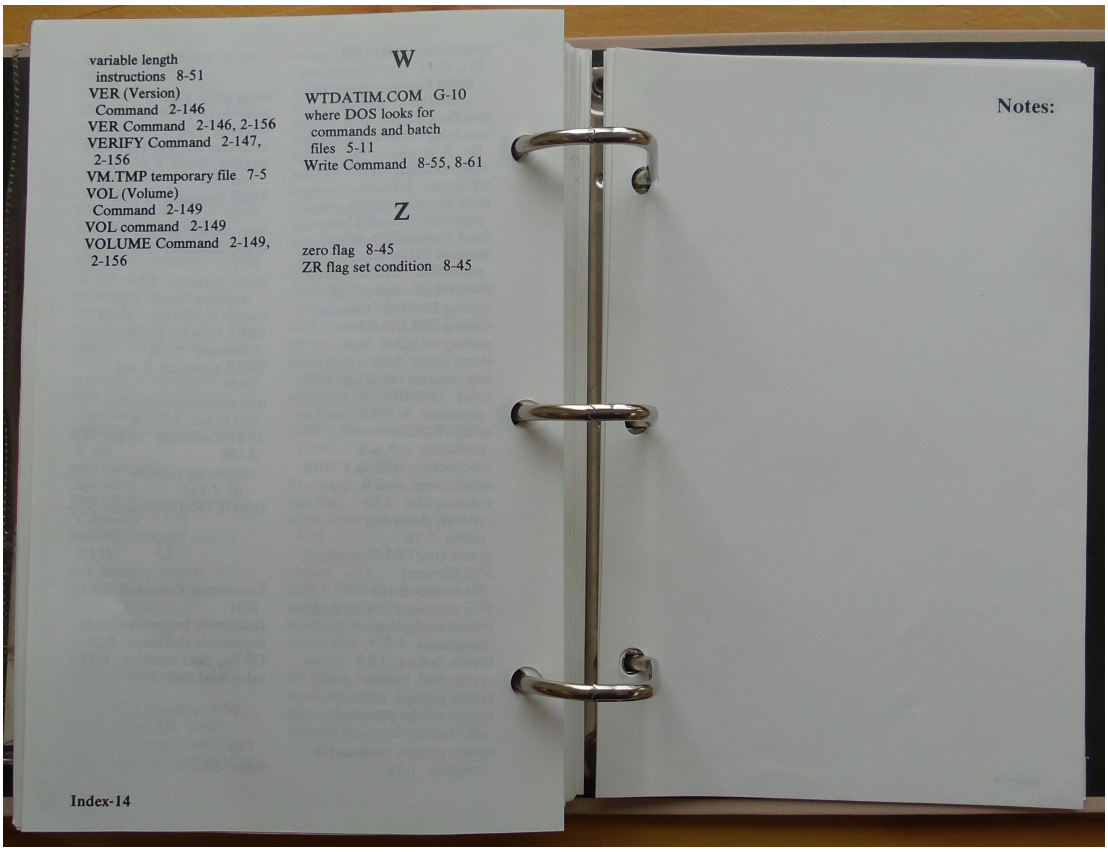

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Figure 26: MSDOS 2.10 software

Figure 27: Hercules Graphics Card software for MSDOS 2.10

Figure 28: MSDOS 2.10 software Supplemental Programs

Figure 29: MSDOS 2.10 Operating System

Figure 30: MSDOS 2.10 software Supplemental Programs version 3.2, 12-Mar-1987