Operator's Manual

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General Description

Word processing and data processing share the same technology in that both use a computer to process information. The difference between them lies in the type of information processed and the way in which the computer is instructed to handle it. A word processing system is designed to store, retrieve and edit sentences, paragraphs and pages of text. A data processing system sorts and recombines related pieces of information from structured files. These two tasks are quite different and require different program disks. The CPT 8000, with the proper program and application disks, will process both words and data.

The CPT data processing program disk, CompuPak, prepares the computer in the CPT 8000 to receive an operating system which, in turn, directs data processing activities. The operating system, also called a control program, is located on a second disk that is copied into the system after the CPT data processing program disk is removed. CPT uses an operating system called CP/M,™ produced by Digital Research Corporation. †CP/M was chosen because it is widely used and easy to work with. Because it is well known and simple, many application programs already exist that will run on the CPT 8000. The manuals received with each application program will explain how to implement them.

Once the instructions from these two disks have been copied into the CPT 8000, specific data processing application programs may be used. This manual will explain how to prepare the CPT 8000 for data processing and how to copy information back and forth between word processing and data processing disks.

† CP/M is the registered trademark of Digital Research, Inc. Pacific Grove, CA.

Preparing the CPT 8000 for Data Processing

Preparing the CPT 8000 for data processing requires two disks. The first is the CompuPak data processing program disk and the second is the CP/M disk.

Follow the steps below to program the CPT 8000 for data processing.

- Turn on the CPT 8000 or press the reset button if the system is already running.

- Insert the CompuPak program disk into Station 1.

Upon closing the disk drive door, the programmed instructions are automatically copied into the system. Then, the data screen appears with the words "Data Processing" printed on the line above it. System messages may also appear on this same line. (See the Appendix, System Messages.)

Next, a message appears on the data screen itself. The message tells you what to do next.

Please insert a CP/M disk into Station A and press RETURN

Notice that the message refers to Station A, instead of Station 1 as in word processing. When processing data, the left-hand disk drive is called Station A and the right-hand disk drive is called Station B.

- Remove the program disk from Station A.

- Now, insert the CP/M disk. (Make sure that the CP/M disk has an adhesive tab over the large notch on the bottom edge of the disk.)

- Press the RETURN key. (RETURN)

When the information from the CP/M disk has been copied into the system, the message shown below will appear on the screen.

Do you have any information you would like to copy between word and data processing disks? Type y if you do. Type n if you do not.

- For now, type the letter n. You do not need to RETURN.

The figure, A>, will then appear on the screen. It signals that the CP/M operating system has been copied into the system, making it ready to run data processing application programs. The manual you receive with each application program will explain what to do next.

Transferring Information Between
Word Processing and Data Processing Disks

The disks used to store data processing information are different from word processing filing disks. The disks provided by your CPT dealer are clearly marked either "Word Processing Format" or "Data Processing Format." Information stored on either type of disk, however, may be copied from one type to the other by using an information transfer program called Copy.

Copy is available at the beginning of each data processing session right after the CP/M disk has been inserted. In the last exercise, you typed an n and the information transfer program was skipped. In the exercise below, you will type the letter y. This will let you use Copy to transfer information from one type of disk to the other.

Copying Word Processing Pages to a Data Processing Disk

In this exercise, you will transfer word processing pages to the CP/M data processing disk.

■ Choose a short range of pages from one of your word processing filing disks and write down the page labels. Then proceed with the instructions below.

■ Remove any disks from Station 1 or 2 and press the reset button on the back of the console.

■ Insert the CompuPak program disk into Station 1.

■ Remove the program disk, then insert the CP/M disk and **RETURN**.

■ This time, when the copy message appears, type the letter **y**. You do not need to press **RETURN**.

The message shown below will appear on the screen.

Please insert a word processing filing disk into station B and press RETURN

■ Insert the word processing disk containing the pages you have selected into Station B.

■ **RETURN**.

A list of three choices now appears on the screen:

Thank You
Which direction would you like to copy?
    1. Word processing pages to CP/M file.
    2. CP/M file to word processing pages.
    3. Stop the program.
Type 1, 2, or 3.

■   Type the number **1**.

This choice prepares the system for copying from the word processing disk to the CP/M data processing disk. Copy may be used to transfer either a single page or a range of pages. The message that now appears on the screen asks for the first page in the range of pages to be transferred.

What is the starting word processing page label?

■   Type the first label in the range of pages you selected and **RETURN**.

The system now asks for the label of the last page in the range you want to copy.

What is the ending word processing page label?

■   Type the label of the last page in the range of pages you want to copy and **RETURN**; if only one page is to be transferred, just **RETURN**.

You have just directed the system where to find the information to be copied from the word processing disk. Now you must tell it where to store the information as it is copied onto the data processing disk. This is done by typing a data processing file label for the transferred information.

The labels used for data processing files are slightly different from those used for word processing. The data processing file name may be up to eight characters long and composed of numbers or letters. Following the name, a suffix may be added. This suffix is separated from the name by a period and may be up to three characters long. The suffix usually designates the type of file being stored. The illustration below shows the format for data processing file names used with CP/M.

DPFILE1.DOC
File Name   **Suffix**

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■ Type a file name for the information being transferred and **RETURN**.

The red indicator lights on both disk drives blink as the information is copied from one disk to the other. When the transfer is complete, the system asks if you want to copy another file.

Would you like to copy another file? (y/n)

■ Type the letter **n**.

If you type the letter **y**, the system will once again display the list of three copying choices. By typing the letter **n**, you exit from the information transfer program and prepare the system to accept a data processing application program.

Copying Data Processing Information to a Word Processing Disk

You may also transfer information the other way, from data processing to word processing disks. The procedure is the same, only the order for entering the labels is reversed.

■ Turn on or reset the CPT 8000.

■ Load the data processing program disk and the CP/M disk.

■ Type the letter **y** to select Copy.

■ Insert a word processing disk into Station B. Make sure that the disk has enough space remaining to hold all of the information you want to transfer, and that there is an adhesive tab over the large notch on the edge of the disk.

The list of copying choices appears on the screen. The second choice is selected in order to copy from data processing to word processing disks.

■ Type the number **2**.

A question appears on the screen asking you to type the label of the data file you want to transfer onto a word processing disk.

What is the name of the CP/M file?
Use the format   FILENAME.TYPE

■ Type the data file label and **RETURN**.

The next question asks for the starting word processing label.

What is the starting word processing page label?

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■ Type a word processing page label and **RETURN**.

Information will begin to transfer as soon as **RETURN** is pressed.

Make sure that the labels chosen for the transferred information do not already exist. If a page or file with the same name is already recorded on the disk receiving the information, the transfer will not be completed. (See the Appendix, System Messages, for a list of the messages that will appear on the screen if you try to copy over existing pages or files.)

The information transfer program will transfer approximately three thousand characters onto one word processing page. This is about equal to the number of characters on one single-spaced page of typewritten information. When the first word processing page is filled, the system will automatically add the number one to the starting word processing page label. After another three thousand characters are transferred, the label will be increased by one again. The system will continue to increment the page labels in this manner until all of the information has been transferred.

Stopping the Program

The last of the three choices stops the program. If when you load the CP/M disk you inadvertently select Copy, type the number 3. The transfer program will be skipped over and you may proceed directly to a data processing application program.

Starting Over

If you make a mistake or get lost while using Copy, just press the **SKIP** key and **RETURN**. This will return you to the beginning of the program and the question, "Would you like to copy another file?" will appear on the screen.

Appendix—System Messages

Two types of messages may appear on the screen when you are using CPT data processing. The first type is a status line message. These messages scroll across the status line and are similar to the messages seen when you are processing words. The other type of message appears on the data processing area of the screen. These are called data screen messages. "What is the name of the CP/M file?" and "Would you like to copy another file?" are examples of this type. Most of these data screen message are simply instructive, telling you what to do next or giving a list of options. Some, however, inform you that something has gone wrong with an attempted operation.

This appendix contains two message lists. The first list explains the status line messages and the second explains the messages that might appear on the data screen when using Copy.

The CP/M operating system and each application program have their own lists of messages that may appear on the data screen. This makes it impossible to list here all the messages that you might see. The CP/M manual and each application manual will explain these.

Status Line Messages

5.1 THE DISK IS NOT PROPERLY IN PLACE.

Make sure that the disks are inserted properly in the disk drives.

5.2 PLEASE PLACE A TAB ON THE DISK.

Place an adhesive tab over the largest notch on the bottom edge of the disk before trying to record information.

5.4 THE DISK DRIVE IS NOT WORKING PROPERLY.

First, reinsert the disk. If that does not work, reset the system and try another disk. If the problem persists, contact your service representative.

5.5 THE DISK SEEMS TO BE FAULTY.

The system is having difficulty reading the disk. It may be damaged. If it is a word processing disk, try running it through the disk reconstruction operation. (Refer to the **CPT 8000 Operator's Manual** for instructions.)

8.51 THE PRINTER SEEMS TO BE SWITCHED OFF.

Check to see that the printer power cord is plugged in and that the ribbon cable connecting the console to the printer is secure. Then, press the **RESUME** button on the printer. If the problem persists, call your service representative.

8.53 THE PRINTER NEEDS A NEW RIBBON.

Replace the ribbon. Press the **RESUME** button on the printer to continue printing.

8.54 THE PRINTER IS REPORTING PROBLEMS.

You may have tried to print a form that was too wide for the type of printer you are using. Check the line length on the page you are printing and press the **RESUME** button to continue. If this is not the problem, contact your service representative.

8.56 THE PRINTER IS NOT AVAILABLE.

The printer you are attempting to use is currently doing a job for another console.

12.01 THE SYSTEM IS UNABLE TO LOAD THE CP/M OPERATING SYSTEM

Remove all disks, press the **RESET** button on the back of the console and try loading the data processing disks again. If the problem persists, contact your service representative.

12.02 THE READER IS NOT AVAILABLE

This message will appear if you try to use a paper tape reading device (PTR). Certain types of peripheral devices cannot be used with CompuPak. (Refer to the CP/M manual for an explanation of the types of devices available.)

Data Screen Messages   "The CP/M disk is not compatible with CompuPak. The interface is terminated."

This message will appear if you try to use a CP/M disk that has not been provided by an authorized CPT dealer.

"No directory space is available on the CP/M disk. The copy has failed."

A total of 64 file labels may be used to identify files on each CP/M disk. Either erase unwanted files from the CP/M disk or use a new disk.

"The CP/M disk is full. The copy has failed."

There is not enough room on the data processing disk to complete the transfer. Try again with a new data processing disk or erase unwanted files from the data processing disk. (See the CP/M manual for instructions on how to erase files.)

"The CP/M file already exists. The copy has failed."

There is already a file on the data processing disk with the same name. Rename the file to which you are transferring word processing information.

"Word processing filing system error. The copy has failed."

Try again. If the same error message appears, run the word processing disk through Disk Reconstruction, Operation 7. (Refer to the **CPT 8000 Operator's Manual.**)

"The CP/M file cannot be found. The copy has failed."

The file label for the information you are transferring to a word processing disk has been entered incorrectly. Check the file label by looking at the directory for the data processing disk. (Refer to the CP/M manual for information on how to do this.)

"The filing system page label is in error. The copy has failed."

The word processing page label: 1) already exists, 2) contains improper characters, or 3) is too long. Try the transfer again.

Data Processing Glossary

APPLICATION

A data processing program that will perform a specific job.

COMPATIBLE

An application program that will run properly on an operating system such as CP/M is said to be compatible. Many standard CP/M programs will run on the CompuPak-CP/M; however, only those purchased from an authorized CPT dealer are modified and tested to assure that they run properly.

COMPUPAK PROGRAM DISK

The first disk used in converting the CPT 8000 to data processing. It prepares the CPT 8000 to accept data processing instructions.

COPY

A special CPT data processing feature used to copy information back and forth between word processing and data processing disks.

CP/M (Control Program for Microcomputers) DISK

The second disk used in the process of converting from word processing to data processing. The CP/M disk provides the actual data processing instructions so that an application program can be run.

DATA PROCESSING

Using computer technology to manipulate and recombine information from structured data files.

DIRECTORY

An internal file system on the CP/M disk that keeps track of where information is stored. The CP/M directory can store up to 64 file labels.

FILE LABEL

The name used to store information on a data processing disk.

FORMAT

General term for structure, in this case, the way files are stored and retrieved from a disk. A data processing disk is formatted differently from a word processing disk.

INTERFACE

The junction between two dissimilar parts of a system, or the process of forming that junction. The CPT data processing program disk, CompuPak, is an interface that makes it possible for the CPT 8000 to use the CP/M operating system.

MESSAGES, DATA SCREEN

Messages that give information specifically related to data processing: operator instructions, incorrect procedures or malfunctions, applications instructions.

MESSAGES, SYSTEM

Messages appearing on the status line that identify problems with the 8000 system.

PAGE LABEL

The name used for storing information on a word processing disk.

RANGE OF PAGES

Labels between and including the first and last page labels of material to be copied from a word processing disk to a data processing disk.

STATIONS A AND B

The data processing names for Stations 1 and 2, respectively.

WORD PROCESSING

Using computer technology to simplify the handling of words and ideas.

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