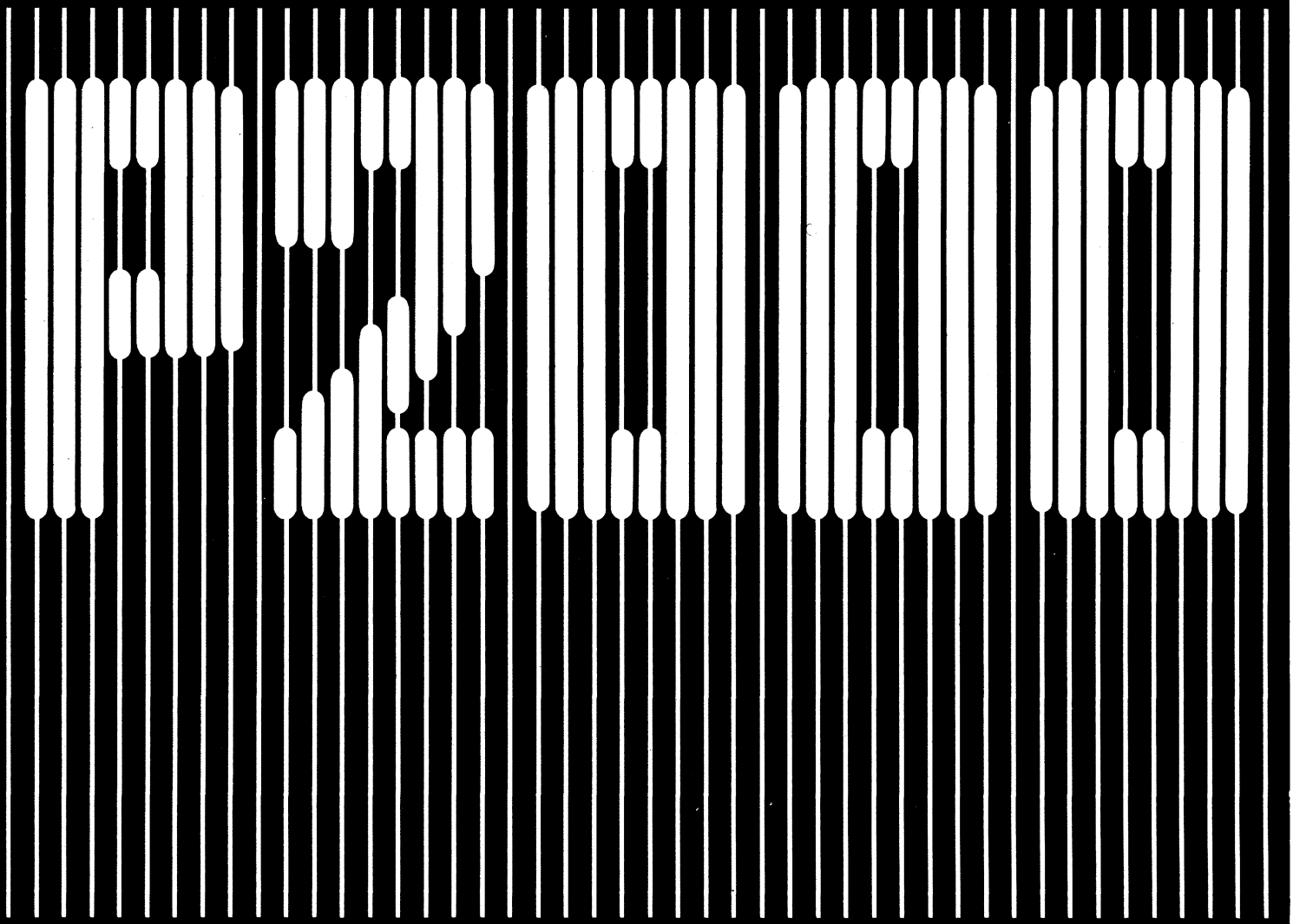
PHILIPS

P2250
UCSD p-SYSTEM (TKS)
OPERATOR MANUAL

MICRO COMPUTER SYSTEMS



Data
Systems

PHILIPS

P2250

UCSD p-SYSTEM (TKS)
OPERATOR MANUAL

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PREFACE

This manual describes the TKS (TurnKey Set) for the Philips P2500 microcomputer. With the exception of Appendix A, it is written for people who have never used a computer before.

First read through the introduction in Chapter 1. Then proceed with the instructions in Chapter 2. Chapter 2 tells you what to do when you are running the TKS for the first time. It also takes you step by step through the process of entering the date, to give you practice using the TKS.

Chapter 3 describes the day to day operation of the TKS. At the end of Chapter 3 is a description of the procedures for entering information.

Chapter 4 describes the DISKORG program. DISKORG helps you to organize your disks in an efficient way.

Appendix A describes the configuration program. The configuration program is used to adapt the software to any hardware changes.

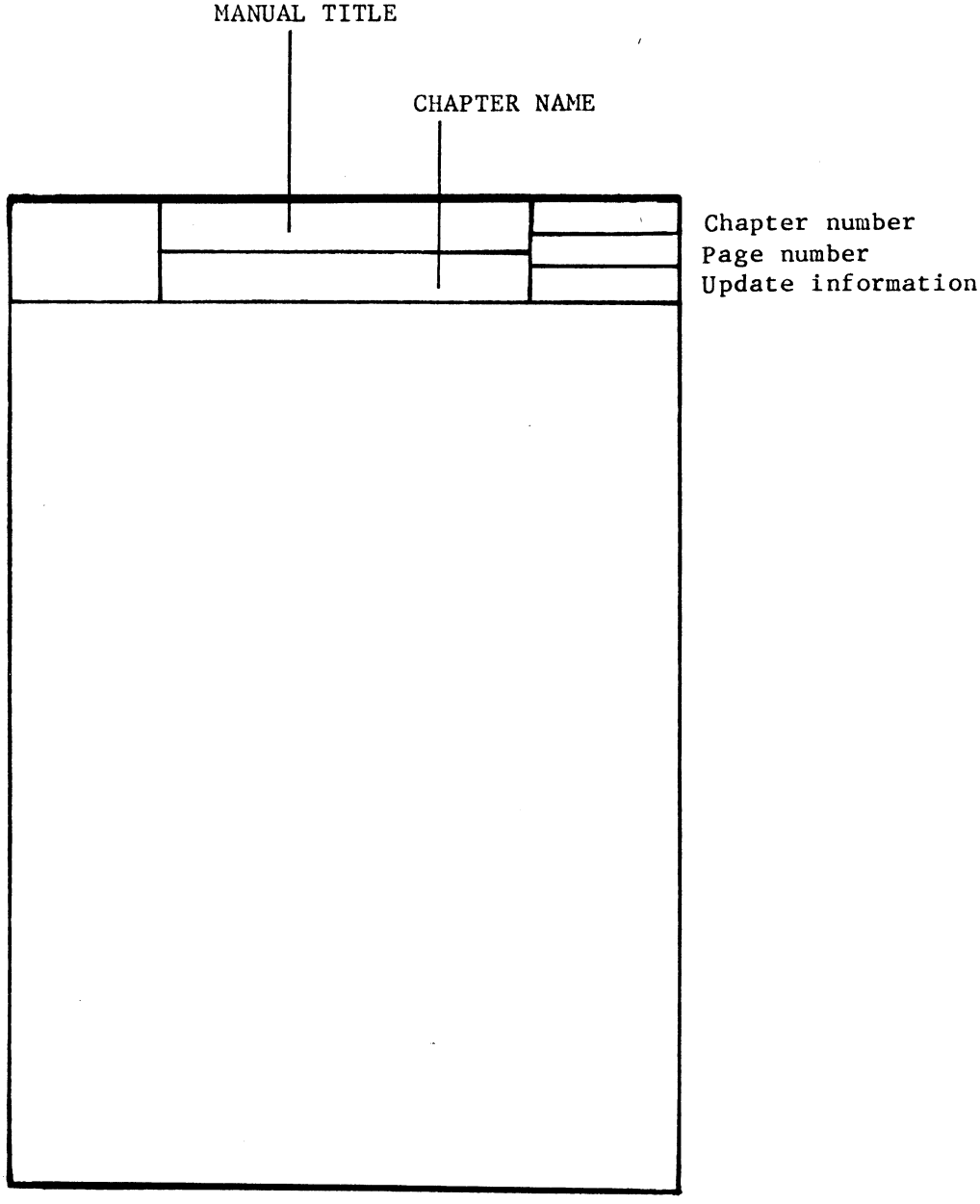
Appendix B lists system error messages.

RELATED DOCUMENTS:

P2500 System Operator Manual.

Page Layout

The pages in all P2500 manuals are arranged as follows:



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1 INTRODUCTION

The TKS (TurnKey Set) forms part of a system called the UCSD p-System. It has been designed for people with no previous computer experience. As well as enabling you to run programs that have been written using the UCSD p-System, it also provides you with an easy-to-use method of organizing the disks used for storing your information. No knowledge of the UCSD p-System is necessary for TKS users.

Before you continue reading this manual, you should carry out the instructions in the System Operator Manual to unpack and install your machine.

1.2 BEGINNER'S NOTES

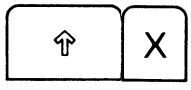
If you are using a microcomputer for the first time, some things may be a little unfamiliar to you. If you have used an earlier model of the P2500, you will find that some things (for example, the keyboard) are slightly different. The following beginner's notes are designed to give you confidence in using the system.

1.2.2 Key Representation

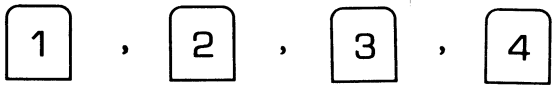
Sometimes in this manual it will be necessary to describe a sequence of keys that you have to press. This will be represented as follows:

- You should press just one key:

- You should press two (or more) keys simultaneously:



- You should press several keys, one after the other:



Sometimes you will need to type a piece of text, e.g. the name of something. Instead of showing each individual key the text you have to type will be printed in **BOLD** type. For example, suppose you have to type the word 'start' followed by the carriage return key. It will be represented like this:

- Type: **start** ↵

1.3 OPERATING CONVENTIONS

As well as letting you run programs written for your computer, the TKS enables you to perform various tasks that will help you to get the best use of your system.

For each operation you do with the TKS you will be given a menu. The TKS menus consist of a list of the things that can be done at any particular time. Each item in the list has a number. To select a particular item, simply type in the number of the item you want to select.

There is not room on the screen to display every possible task. For this reason the tasks are divided into groups. All the tasks in a particular group are related to one another. The first menu you will see contains a list of all the main groups. The first thing to do is to select the group that contains the task you want. You will then see another menu which will list all of the tasks within that particular group. Sometimes the tasks will be further divided into subgroups; keep selecting the successive subgroups until you see the task that you want.

When the desired task has been selected you will see the 'prompt line' for that task on the bottom of the screen. A prompt line is so named because it prompts you for the information that the system needs. Each prompt line contains gaps, known as fields, where the information is to be inserted. If you work through the example in Chapter 2, you will learn how to enter information on a prompt line. At the end of Chapter 3, there is a summary of the material covered in Chapter 2 and a few more points concerning cursor movement.

At all stages, you can return to the previous menu and repeat the previous exercise by pressing:

One last thing - if you need assistance at any time (maybe you are a little confused at some stage), all you have to do is press the Help key:

2 STARTING THE SYSTEM

Now that you have read the beginner's notes, you are ready to get everything started. The process of starting any system like the TKS is called 'bootstrapping' or just 'booting'. This simply involves inserting the SESAM-key in the side of the basic unit and the disk that contains the program you want to run (it could be any program, not just the TKS) into disk drive 1 and pressing the reset button.

If your TKS has not been used before, the disk will have to be initialized. To make it easier for you, the computer has the ability to recognise whether the TKS disk is brand-new or if it has been used before. To start with, carry out the instructions in Section 2.1. If the initialization message does not appear, your disk has already been initialized and you can continue with Section 2.2.

Note - If the message 'INIT ERROR' appears in the top left-hand corner of your screen, you have either forgotten to put in your SESAM-key or you have put in the wrong one.

2.1 RUNNING THE SYSTEM FOR THE FIRST TIME

When your TKS is new and has not been used before, the disk will have to be initialized. Proceed as follows:

- Connect all of the parts of your computer together, as described in the P2500 System Operator Manual, and switch them on.
- Insert the SESAM-key in the side of the basic unit.
- Put the TKS system disk in drive number 1 and close the flap. The P2500 System Operator Manual tells you how to do this.
- Press the reset button; this is the button on the front of the basic unit with the word 'Reset' written next to it.
- After a short period of time the screen will contain the following initialization message:

```
**********************************************************

   During execution of this program do NOT:

       - change disks
       - press the BREAK-Key or STOP-Key
       - press any other key not prompted in the program

**********************************************************

   Type < SPACE > to continue
```

- Press the space bar. The system will now initialize your disk. When the initialization process is complete (the message on the screen changes to tell you), proceed with the instructions in Section 2.2.

When the initialization is complete, the P2500 logotype appears in the centre of the screen and the following message appears on the bottom of the screen:

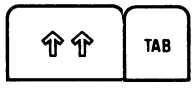
```
UCSD-TKS(4.011)      OPERATING SYSTEM          P2250 REL.1.2

DAY: 28  MONTH: 03  YEAR: 83                   ENTER DATE
```

The date at the bottom will be the date on which the disk was made and can be different for each disk.

You must now enter the date. This can be done simply by typing over the date which is already on display. Once you have typed two digits for the day, the cursor moves on automatically to the month, and so on. You can move on to the month or year by pressing:

and you can move back again by pressing:



Once you have entered the new date, tab across past the year to the right-hand side of the screen (this is done automatically as you type in the year). You can then confirm the date by pressing:

If you encounter any problems in entering the date, you should read section 2.2, which explains in detail how to enter information in TKS.

Note - If you wish to accept the date which is already displayed on the screen at the start, simply press:

2.2 ENTERING INFORMATION

This is a convenient point to start talking about the general concepts of entering the information your computer needs to carry out a specific task. The basic points are described here. At the end of Chapter 3 you will see a summary of everything you have learned in this chapter, plus a few more general points.

This section uses the date entry as an example of how to enter information. So if you have had no problems in doing this, you can go straight to section 2.3.

Your machine should have been booted. The prompt line is asking you to enter the date. Now look at the beginning of the line and you will see the words 'DAY', 'MONTH' and 'YEAR'. Next to each of these you will see a number. On the first number of the day you will see a green rectangle. This is called the cursor. Whenever you type a letter or number or punctuation mark on the keyboard it will appear in the position occupied by the cursor, and the cursor will move one place to the right.

You will notice that each of the numbers is underlined. The areas that are underlined on the prompt line are called 'fields'. A field is an area where a piece of information has to be entered. For each prompt line there will be a field for every piece of information the computer needs to carry out the specified task.

The task we want the system to perform at the moment is to set the date. So the information needed is the day, the month and the year. There is a field for each of these three pieces of information on the prompt line.

What we have to do is to make sure that each field contains the correct information. We do this by moving the cursor to each of the fields in turn and then typing the correct information on the keyboard. The computer will wait until we tell it that all the fields are correct. It will then carry out the task we have asked it to perform.

The easiest way to learn everything is to try it out. Before we actually enter the correct date, we will get a bit of practice with moving the cursor and entering some values.

You will see that the cursor is in the 'DAY' field.

- Press

.

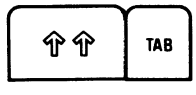
Notice that the number '1' appeared in the date field and that the cursor moved to the right.

- Press

The number '9' appeared next to the number '1' and the cursor jumped to the 'MONTH' field. You have now entered the day of the month. At this point it should be pointed out that the fields that appear in the prompt line can have different widths depending on the information to be entered. Later in this chapter we will see fields that are wider than two characters.

You will have noticed that when you had filled the 'DAY' field the cursor jumped to the next field. When a field has been filled the cursor will always move to the next field.

Let us assume now that you entered the day incorrectly. All you have to do is move the cursor back to the 'DAY' field.

- Press 

The cursor will now be back in the 'DAY' field positioned over the number '1'.

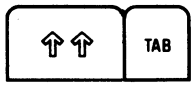
- Press

You will have replaced the number '1' with the number '2'. That is how easy it is to make changes to information you have already entered.

Now that you have corrected the 'DAY', we can move the cursor back to the 'MONTH' field.

- Press

To recap:



Moves the cursor to the beginning of the field. If the cursor is already at the beginning of the field, the cursor will move to the beginning of the field to the left.

Moves the cursor to the field to the right

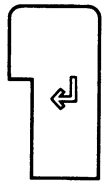
- To change a field, move the cursor to the field to be changed and enter the correct value.
- The cursor will jump to the next field when the current field is full.

Practise moving the cursor backwards and forwards between fields. Do not worry at this stage about what happens when the cursor moves to the end of the line.

Now move the cursor back to the month field. We want to enter '2' as the month.

- Press

This will have entered '2' as the month, i.e. February, but the cursor is still in the month field. This is because we have not filled the field. What we must do is move the cursor to the next field and, at the same time, delete anything else in the field.

- Press 

The cursor will jump to the 'YEAR' field and leave just the number '2' in the 'MONTH' field.

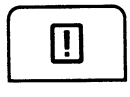
We are nearly there. All we have to is enter the year.

- Type: **83**

The the number '83' will be in the 'YEAR' field and the cursor will move to the end of the line. Notice that the words 'ENTER DATE' have been replaced by the word 'CONFIRM'. The cursor is now in what is called the 'CONFIRM' field.

Have a look at the date we have entered. You may have noticed that since 1983 was not a leap-year, the date (29th February) is not valid. This was done deliberately to show you what happens if you enter an invalid date. If you have already spotted this and corrected it, go back and change it again.

The 'CONFIRM' field is a very special field. When you are satisfied that all the other fields contain the correct information, move the cursor to the confirm field and press:

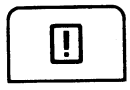


This tells the machine that all the fields contain the information you want them to contain and that it should now carry out the task specified, in this case, entering the date.

Because the date was invalid, the following message will appear on the line above the promptline.

ILLEGAL DATE ACCEPT:

The cursor will be next to the word 'ACCEPT'; this will happen whenever you enter something incorrectly. You must now acknowledge the fact that you have seen the message by pressing:



You are now ready to re-enter the date. Before entering the correct date here are a few other points to bear in mind.

- Assuming that the cursor is in the field, you can delete the last character you typed by pressing the backspace key. The backspace key looks like this:

- If you try to type an invalid character in a field (for example, a letter when a number was expected), the input will be ignored and you will hear a 'beep' instead.

- If the tab key is used to move the cursor to another field, the contents of the current field will not be changed. This saves you having to enter a new value if the field already contains the correct information.

Now go ahead and enter the correct date.

When the date has been entered correctly the system menu will appear; this is described in the next section.

2.3 MAKING A BACK-UP DISK

When the correct date has been entered, the system menu will appear on the screen. A menu is a list of the things you can do at a particular time. For each item in the list there is a number. To select a particular item, simply type the number of the item you want to select.

To add items to or delete items from the menu, you should use the Insert, Delete and Supershift keys. To add an item, press the Supershift and Insert keys together. Then you will see a prompt line at the bottom of the screen. It contains the next consecutive option number and two fields - a program field for the name of the code file (a Pascal file that can be executed from the menu) and a menu field for the name that you want to see in the menu itself. When you have entered the two names, press the Do key and the menu will now contain your addition.

To delete an item from the menu, press the Supershift and Delete keys together. You will see the same prompt line on the screen. Simply enter the number of the item that you want removed. The rest of the prompt line will be displayed automatically. Press the Do key to confirm your action.

The next thing we must do is to make two copies of the TKS disk. Call the first copy 'CONFIG' and the second 'SYSTEM'. From this second disk, remove all the PBIOS and SBIOS files (except 'SYSTEM.SBIOS' and 'SYSTEM.PBIOS'), SYSTEM.PRINTER, CONFIG.CODE, BACKUP.CODE, HD.BOOT and HD.INSTALL. You can 'boot' the system from either of these two copies.

To copy disks, we use a special program called DISKORG which lets you organize your disks efficiently. Maybe you have several programs on different disks; DISKORG lets you put them on one disk. DISKORG is described fully in Chapter 4. For the time being, we will just talk about the part that is needed to make your copies of the TKS disk.

The following should be displayed on the screen:

```
UCSD-TKS (4.011)      OPERATING SYSTEM                28-03-83

                    1 DISKORG
                    2 CONFIGURE AND INSTALL

                    0 DISPLAY DIRECTORY AND EXECUTE PROGRAM

SELECT: _                                           SYSTEM-MENU
```

At this stage, follow the procedure outlined in Section 2.3.1, if you want to copy a diskette. Section 2.3.2 describes your course of action when you want to copy a hard disk.

2.3.1 Backing-Up a Diskette

Put an unused disk in disk drive number 2. Select DISKORG by pressing:

The screen will be cleared and after a short time the following will appear on the screen:

```
P2250 REL.1.2                DISKORG                28-03-83

                        1 LIST
                        2 COPY
                        3 DELETE
                        4 RENAME
                        5 PREPARE
                        6 PRINT
                        7 REORGANIZE
                        8 CHANGE DATE
                        9 FILE PROTECTION

                        0 EXIT TO SYSTEM

SELECT: _                                          MAIN MENU
```

We want to copy the system disk so select the copy option by pressing:

The next menu will now appear:

```
DISKORG                      COPY                   28-03-83

                        1 FILE
                        2 DISK

                        0 EXIT TO MAIN MENU

SELECT: _                                              COPY
```

We want to copy the entire disk, so press:

The command line will now appear:

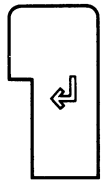
DRIVE: 1 VOLUME:_____ DRIVE: 2 VOLUME:_____ COPY DISK

- Press or

The volume name of the system disk will appear next to "VOLUME:" on the bottom line. The volume name is just a name that is given to the disk for identification purposes.

- Press or

Then type in the volume name that you want to give to the copy; e.g. CONFIG

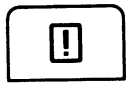
- Press 

This will cause the cursor to jump to the confirm field.

Look at what you have entered on the prompt line. If you have typed anything incorrectly go back and change it. Do you remember how? If you don't, go back to Section 2.2. When you are satisfied that everything is correct, move the cursor to the confirm field and press:

The system disk will now be copied to the disk that you inserted in drive 2. When the copying is complete, the words 'COPY TO' will stop flashing and the prompt line will be cleared. When this happens, remove the system disk from drive one and place it in its protective sleeve. Take the disk out of drive 2 and copy the details from the label of the system disk onto the label of the copy with a felt-tip pen. Put the original system disk in a safe place. Put the copy in drive 1, close the flap and press 'RESET'.

The system will now be 'booted' again. If the date is correct press:



If the date is not correct, enter the correct date. If you cannot remember how to enter the date, go back to Section 2.2.

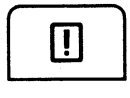
2.3.2 Backing-Up a Hard Disk

You can only back-up a hard disk if the system has been installed on hard disk and then 'booted' (see Appendix A).

For this routine, you should have 9 empty diskettes for each volume on the hard disk. (A 5Mb disk has two volumes and a 10Mb disk can have up to 4). If you have backed-up your disk before, you can use the copy disks again. Take option '0', which will list your directory. You will see this prompt line:

DRIVE: 1 SELECT: ___ PROGRAM: _____ DISPLAY/EXECUTE

Enter '1' (or press the Tab key) and you will see the directory of your disk. Now, select the 'BACKUP' program and confirm your action by pressing:

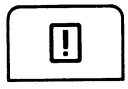


You will see the 'Back-Up' menu:

1 COPY VOLUME TO BACK-UP
2 RESTORE VOLUME FROM BACK-UP

0 EXIT TO SYSTEM

Take option '1'. Then you must select the volume number - in this case, '1'. The name of the volume will be automatically filled in for you and the cursor will wait for you to enter the name of the back-up volume. This name can be of any length up to 6 characters and contain any combination of characters except spaces. Confirm your action by pressing:



The next message appears:

INSERT BACK-UP DISK ≪xxxxxx≫ NUMBER 1 IN DRIVE 5 CONTINUE:

(A point to mention here is that, if you have two free drives, mount two diskettes. This will save you time because, when the two diskettes have been copied to, the next message will ask for back-up disk number 3, not number 2).

- Press

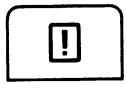
This process will continue until the ninth diskette has been asked for (or the fifth, if you have double-sided drives). Even if your hard disk is almost empty, the system will still ask for all the back-up diskettes to be loaded.

If you want to stop the copy operation at any time, press:

You will then be asked for confirmation:

STOP COPY...ARE YOU SURE? CONTINUE:

If you really want to stop, press:



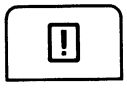
You will then be returned to the 'Back-Up' menu. But if you want to go on with your copying after all, press:

That is all there is to the copy operation. Should you need to restore from your copy (in other words, if something happens to your master disk), follow the opposite procedure to the one described above. (By the way, you may need to re-install the system - see Appendix A).

It goes like this. Select '2' from the 'Back- Up' menu ('RESTORE VOLUME FROM BACK-UP'). You will see the following:

```
VOLUME NUMBER:   VOLUME:                                  RESTORE VOLUME
```

Select '1' and the volume name will be automatically filled in. Confirm this (if you are sure that your input volume is number '1') by pressing:



The restoration now continues in the same way as the back-up process. If you want to stop, as before, press:

You will be asked for confirmation:

```
STOP RESTORE---ARE YOU SURE?                              CONFIRM:
```

Do exactly the same as you did with the back-up, depending on whether you want to stop or not.

At the end of the job, you will be asked to 'boot' again.

2.4 THE CONFIGURATION PROGRAM

Your system is almost ready to use. The last thing you might have to do is to run the configuration program. The configuration program is designed to enable your software to work with different combinations of the various pieces of equipment available. This is necessary because the P2500 is a very flexible system. If your system consists of the standard configuration, you do not need to run the configuration program.

The configuration program is described in Appendix A.

The standard configuration is as follows:

- One or two black and white monitors (any type)
- One basic unit
- One keyboard
- Two 5¼" disk drives
- A printer

Before running the configuration program, you should read Chapter 3.

Note - If you have installed your system on hard disk, you do not need to run the configuration program.

3 WORKING WITH THE TKS

You are now ready to run programs on your machine. The sections describing initialization and backing-up the TKS disk will probably not concern you again.

By now you will already be familiar with some of the general operating principles of the computer. You have booted your system and seen the P2500 logotype. You have entered the date and seen the system menu. You have, in fact, already run a program, the DISKORG program, when you made a copy of the TKS disk. Because DISKORG is a special program that will be used a lot, you only need to press one key to run it. With the other programs you will be running, you will have to give the name of the program. This will be described in the following sections.

Every time you begin working with your computer, it will probably be as it is now, switched off and without a disk inserted. You must, of course, boot the system every time you use it. The procedure is as follows:

1. Turn on all the parts of the computer.

2. Insert the SESAM-key.

3. Insert the TKS system disk in drive 1.

4. Wait for the P2500 logotype to appear then enter the date.

You are now ready to run a program. This is described in general terms in the next section but you should also refer to the manual supplied with the program you want to run in case any special conditions apply.

3.1 RUNNING A PROGRAM

You should have booted the TKS, entered the date and have the system menu on the screen. The system menu looks like this:

```
UCSD-TKS (4.011)      OPERATING SYSTEM                28-03-83

                    1 DISKORG
                    2 CONFIGURE AND INSTALL

                    0 DISPLAY DIRECTORY AND EXECUTE PROGRAM

SELECT:                                             SYSTEM-MENU
```

On your screen you will see the current date on the top line. Once the program is running you should refer to the manual supplied with it for further operating instructions. To select one of the three options, type a number from 0 to 2.

3.1.1 Display Directory and Execute Program

Use Option 0 if you know what disk the program is stored on but you cannot remember its exact name or if it has a long name that you do not want to type in.

- Press

- Type the number of the drive containing the disk on which the program is stored.

A list of all the programs on the disk will be displayed on the screen. A number will be displayed next to each program. To select a program, type its number (if the cursor does not jump to the 'CONFIRM' field when the number has been entered, press carriage return). To execute the program:

- Press

3.1.2 DISKORG

Option 1 is to run the DISKORG program. This is described in Chapter 4.

3.2 ENTERING INFORMATION

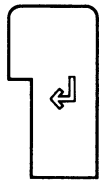
In this section we will continue talking about entering information.

Do you remember what you learnt in Section 2.2?

- For each task you will be given a prompt line.
- You must first fill in all the fields (the blank positions) with the correct information.
- Everything you type appears in the position occupied by the green rectangle known as the cursor.
- The field occupied by the cursor is known as the 'current' field.
- The fields are filled in by moving the cursor to each field in turn and then typing the correct information.
- If the information in a field has been entered wrongly, the cursor can be moved back to that field and the correct information typed.
- If a field already contains the correct information, you do not need to retype it.
- When all the fields contain the correct information, move the cursor to the 'CONFIRM' field then press:

Do you remember how to move the cursor?

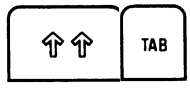
- If the information you have typed is shorter than the field, move the cursor to the next field by pressing:



- To move the cursor to the next field to the right without changing the contents of the current field:

  Press

- To move the cursor to the next field to the left without changing the contents of the current field:

  Press 

We will now talk about the other things you can do when entering information on a prompt line.

There are two fast cursor movements available:

To move the cursor from any field on the prompt line (including the 'CONFIRM' field) to the first field on the line:

- Press

To move the cursor from any field on the prompt line to the 'CONFIRM' field:

- Press

Note - If there any fields that have no information in them, you will not be able to move the cursor to the 'CONFIRM' field.

Sometimes you will need to specify the name of an existing file, e.g if you want to read it or rename it. Normally you would type the number of the drive containing the disk on which the file is stored, then type the name of the file. But what happens if you forget the exact name of the file? All you have to do is enter the number of the drive, then:

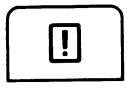
- Press

A list of all the files on the disk will be displayed on the screen. A number will be displayed next to each file. All you have to do now is to type in the number corresponding to the file you want.

If, at any stage, you are not certain what you should do to carry on, you can request help from the system by pressing:

A short message will appear on the screen telling you how to proceed. Sometimes you will be referred to the part of the manual where the relevant information is given.

When you have finished with the message you can carry on where you left off by pressing:

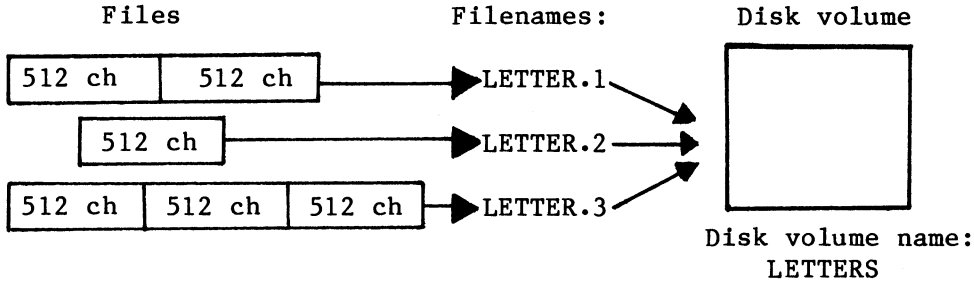


You are now ready to begin running programs and using your computer. If you decided after reading Section 2.4 that you need to use the configuration program then turn to Appendix A. If not, carry on with the instructions in the manual supplied with the program you want to run.

4 ORGANIZING STORED INFORMATION

All of the information that you store as well as the programs that make your TKS work, are organized in a special way. A "volume" has already been described where it was likened to a book. Because a book contains a great deal of information, it is usually further divided up into chapters. The information contained on a disk volume must similarly be divided up into more manageable entities. These entities are called "files". Each file, like each chapter in a book, is an organized collection of information - perhaps it is a number of letters or a particular month's accounting information. Just as a chapter may vary in length, so may a file. A chapter consists of a number of pages, whilst a file consists of a number of "blocks". (One block contains a maximum number of characters).

The following diagram illustrates the relationship between characters, blocks, files and volumes:



In the example, the volume LETTERS is organized as follows:

The file LETTER.1 consists of 2 blocks (max 1024 characters)
The file LETTER.2 consists of 1 block (max 512 characters)
The file LETTER.3 consists of 3 blocks (max 1536 characters)

DISKORG is a program that enables you to organize your disks in a tidy and efficient way. Sometimes it will be necessary to move files around either to make more room or to add files from another disk and sometimes to throw away an old file. Some offices have a filing clerk whose job it is to look after the files and see that they are well organized. DISKORG is the filing clerk of the TKS; you tell DISKORG what you want to do with your files and it will do it for you.

Before you begin working with DISKORG you should read Section 4.11. There you will see some general information about the possibility of errors.

When you have entered the date and it has been accepted you will see the system menu on the screen. To select DISKORG press:

The screen will be cleared and after a short time the DISKORG menu will appear. You will see that there are ten options available. Each option is dealt with in detail in one of the following sections.

4.1 LIST

The list option can be used for two things: you can use it to produce a list of all the files on a disk and you can use it to produce a list of all the disks that are currently inserted in the system.

To select LIST from the DISKORG main menu:

- Press [1]

The LIST menu will now appear.

4.1.1 Disk Directory

A disk directory is a list of the names of all the files that are stored on a disk.

To select 'DIRECTORY / FREE SPACE' from the LIST menu:

- Press [1]

Type the number of the drive that contains the disk you want to produce a directory of. The system will look at the disk and display its directory on the screen.

Below is a sample directory listing:

```
DISK-NAME : SAMPLE              14-05-82
          FILE NAME              DATE          TYPE       BLOCKS
            DISKORG.CODE         12-12-82      CODE         20
          * TEMP.FRED            14-12-82      DATA         30
            LETTER1              03-01-83      TEXT         25
            LETTER2              11-11-82      TEXT         50
ALLOCATED BLOCKS : 147  FREE BLOCKS : 461  LARGEST UNUSED : 461
```

On the top line you can see the name and date of the disk. If there are a lot of files on the disk, there will not be room to display the whole directory on the screen. In this case the directory will be divided into pages. On the right of the top line you can see the number of the page in the directory that is currently being displayed. If there is more than one page in the directory, the figure in brackets indicates the total number of pages in the directory.

The asterisk (*) next to the file TEMP.FRED indicates that the file is protected. For a description of file protection, see section 4.9.

If there is more than one page in the directory, you can display the other pages as follows.

To display the next page in the directory:

- Press ,

To display the previous page in the directory:

- Press ,

The following information is given about each file:

- The name of the file.
- The date on which the file was created or last amended.
- The type of the file. There are three main types of file: code, data and text. Code files contain a program that can be run by the P2500. Data and text files contain information produced by an application program.
- The number of blocks in a file. Each block can contain up to 512 characters.

On the bottom line, you will see information about how much of the disk is used. The figure 'ALLOCATED BLOCKS' is the total amount of the disk that is used. The 'FREE BLOCKS' figure indicates how much space is available on the disk for storing new files. The figure 'LARGEST UNUSED' is the largest single area that is free on the disk. As files are deleted and new ones created this figure will become smaller than the total number of free blocks. Eventually you will reach the stage where the largest free area is too small to be of any use. You should then reorganize the disk, as described in Section 4.7.

When you have finished with the directory listing you can return to the LIST menu by pressing:

You can go from the list menu to the DISKORG menu by pressing:

4.1.2 Printing the Directory

It is often useful to print a copy of the directory so that you can refer to it without running DISKORG. If you have a lot of disks you can keep a printout of all the directories together, this makes it easier to locate a particular file.

To print a directory:

- Make sure that your printer is connected, switched on and paper inserted.
- List the directory on the screen as described in Section 4.1.1.
- Press

The entire directory will now be printed on the printer.

4.1.3 Volumes On-Line

The 'VOLUMES ON-LINE' option causes the names of all the disks that are inserted to be displayed on the monitor screen. It will also indicate whether or not a printer is connected and is switched on.

The term 'on-line' means that the piece of equipment referred to is switched on and is functioning properly. In the case of disks, 'on-line' means that the disk unit is switched on and that there is a disk inserted and the flap closed.

The list produced will tell you the names of the disks that are inserted in each drive and the amount of space available on each disk.

For each disk, the following information is given:

- The name of the disk.
- The number of the drive in which the disk inserted.
- The number of blocks on the disk that are used, unused and the largest single piece of unused space.

When you have finished with the volumes listing, you can return to the LIST menu by pressing:

You can go from the list menu to the DISKORG menu by pressing:

4.2 COPY

The copy option is normally used to make backup copies of your files. You have already used the COPY to make a backup of your system disk. It can also copy individual files from one disk to another. This could be very useful if you have a disk with many old files on it that you no longer need, together with a few files that you would like to keep. These files could be copied to another disk and the old disk deleted. To select COPY from the DISKORG main menu:

- Press

The COPY menu will now appear.

4.2.1 Copy File

This is selected from the COPY menu by pressing:

The 'COPY FILE' prompt will now appear on the bottom line of the screen. The first thing to do is to enter the number of the disk drive that contains the file you want to copy. When this has been done, the cursor will jump to the 'FILE' field. Now type in the name of the file you want to copy. If you have forgotten the exact name of the file, you can display a list of all the files on the selected disk by pressing:

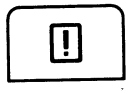
A list of the files will be displayed with a number next to each one. All you have to do now is type in the number corresponding to the file you want.

Note - If you want to select one of the files numbered 1 to 9, do not forget to press the carriage return key to move the cursor to the next field.

When you have selected the file to be copied, the cursor will jump to the 'DRIVE' field for the destination volume. Type in the number of the drive containing the disk you want to copy the file to.

The name of the file that is being copied will appear in the 'DESTINATION FILE' field. You can either type in a new name, and then press carriage return, or you can press the TAB key to keep the same name. In both cases, the cursor will jump to the confirm field.

If everything is correct:

- Press 

If not, move the cursor back and repeat the process.

After the file has been copied, you can either enter another COPY FILE command or return to the COPY menu by pressing:

When the COPY menu is displayed, you can return to the DISKORG main menu by pressing:

4.2.2 Copy Disk

This is selected from the copy menu by pressing:

If you have only two disk drives and you want to copy a disk other than the system disk, you can remove the system disk when the prompt line appears.

Enter the number of the drive that contains the disk to be copied. The name of the disk that you select will be displayed.

Put the disk that is to become the copy in one of the disk drives. Then enter the number of the drive and the name you want to give to the disk. The disk copying action will now start.

After the disk has been copied, you can either enter another COPY DISK command or return to the COPY menu by pressing:

When the COPY menu is displayed, you can return to the DISKORG main menu by pressing:

4.3 DELETE

The delete option can be used either to delete all the files on a disk or to delete individual files. Select DELETE from the DISKORG main menu by pressing:

The DELETE menu will now appear.

4.3.1 Delete File

Select delete file from the DELETE menu by pressing:

The 'DELETE FILE' prompt will now appear.

First enter the number of the drive containing the disk that stores the file to be deleted. The cursor will skip to the 'FILE' field.

Specify the file to be deleted as follows:

Either:

- Type in the name of the file followed by carriage return.

Or:

- Press

- Then enter the number corresponding to the desired file.

Note - This command will only work with unprotected files (see Section 4.9, File Protection).

After the file has been deleted, you can either enter another DELETE FILE command or return to the DELETE menu by pressing:

When the DELETE menu is displayed, you can return to the DISKORG main menu by pressing:

4.3.2 Delete Disk

This is selected from the DELETE menu by pressing:

The DELETE DISK prompt will appear. Enter the number of the disk drive containing the disk to be deleted. The name of that volume will appear in the 'VOLUME' field and the cursor will jump to the 'CONFIRM' field.

Be certain that you have selected the correct disk (if necessary, move the cursor back and change the drive number). Then press:

All the files on the disk will now be deleted (assuming that they are not protected - see Section 9).

After the disk has been deleted, you can either enter another DELETE DISK command or return to the DELETE menu by pressing:

When the DELETE menu is displayed, you can return to the DISKORG main menu by pressing:

4.4 RENAME

The rename option can be used to change the name of an entire disk or the name of an individual file.

To select RENAME from the DISKORG main menu:

- Press

The RENAME menu will now appear.

4.4.1 Rename File

This is selected from the RENAME menu by pressing:

The 'RENAME FILE' prompt will now appear.

First enter the number of the disk on which the file to be renamed is stored. The cursor will jump to the 'OLD FILE' field.

Specify the file to be renamed as follows:

Either:

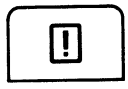
- Type in the old name of the file followed by carriage return.

Or:

- Press

- Enter the number corresponding to the desired file. Type the name in the 'NEW FILE' field that you want to give to the file, followed by carriage return.

The cursor should now be in the 'CONFIRM' field. Make sure that all the information you have entered on the prompt line is correct (change it, if necessary). When everything is correct, press:



After the file has been renamed, you can either enter another RENAME FILE command or return to the RENAME menu by pressing:

When the RENAME menu is displayed, you can return to the DISKORG main menu by pressing:

4.4.2 Rename Disk

This is selected from the RENAME menu by pressing:

The 'RENAME DISK' prompt will now appear.

Enter the number of the drive containing the disk that you want to rename. The old name of the disk will appear in the 'OLD VOLUME' field.

Type the name that you want to give to the disk; then press carriage return.

The cursor should now be in the 'CONFIRM' field. When you are certain that everything is correct, press:

After the disk has been renamed, you can either enter another RENAME DISK command or return to the RENAME menu by pressing:

When the RENAME menu is displayed, you can return to the DISKORG main menu by pressing:

4.5 PREPARE

When a disk has not been used before, you will first have to use the PREPARE option to prepare it for use with the P2500. This is a simple operation and is described below.

Note - If you have a new disk, on which you want to keep a copy of another disk, you do not need to prepare it first.

To select PREPARE from the DISKORG main menu:

- Press

The 'PREPARE DISK' prompt will now appear.

First type in the number of the drive containing the disk to be prepared. The cursor will jump to the 'VOLUME' field and the number of blocks for the new disk will be displayed.

Enter the name that you want to give the disk. Then press carriage return. You can give it any name you like as long as it consists of seven or less letters or digits. The name of the disk can also contain a hyphen (-) or a full stop (.). It is best if you choose a name that gives some indication of the contents of the disk, e.g. the disk that contains all the memos you sent in April could be called 'MEM-APR'.

After the disk has been prepared (as indicated by a message on the screen), you can either continue and prepare another disk or return to the DISKORG main menu by pressing:

4.6 PRINT

The print option is used to print the contents of text files on your printer. Quite often you will want to print text contained in one of your files. For instance, you might have some figures produced by one of your programs that you want to put into a written report.

To select PRINT from the DISKORG main menu:

- Press

The 'PRINT TEXT-FILE' prompt will now appear on the right-hand side of the screen.

First enter the number of the disk on which the file to be printed is stored. The cursor will jump to the 'FILE' field.

Specify the file to be printed as follows:

Either:

- Type in the name of the file followed by carriage return.

Or:

- Press

This will produce a list of all the text files on the selected disk. Enter the number corresponding to the desired file.

After the file has been printed you can either enter another PRINT FILE command or return to the DISKORG menu by pressing:

When the text is being printed the printer can be stopped by pressing:

To resume printing after the printer has stopped:

- Press

If no more printing is required after the printer has stopped:

- Press

4.7 REORGANIZE

The REORGANIZE option is used when your disk begins to accumulate areas of empty disk space, which are of little use for storing files because they are too small. This happens because, as files are removed or created, small areas of disk space remain. The REORGANIZE option allows you to join all of these small areas together to produce one large, useful area of free disk space.

To select REORGANIZE from the DISKORG main menu:

- Press

Enter the number of the drive containing the disk that you want to reorganize. The name of the disk will appear in the 'VOLUME' field.

The cursor should now be in the 'CONFIRM' field. When you are certain that everything is correct, press:

When the disk has been reorganized, you can either enter another REORGANIZE command or return to the DISKORG main menu by pressing:

4.8 CHANGE DATE

If you entered the date incorrectly when you started your system, you can use the CHANGE DATE option to correct it.

To select CHANGE DATE from the DISKORG main menu:

- Press

The 'DATE' prompt will now appear.

The date is entered in the same way as described in Section 2.2.

Note - As the date is stored on your system disk, you must make sure that your system disk is not write-protected when you are using this operation.

4.9 FILE PROTECTION

Sometimes you will make mistakes, everybody does. One of the worst mistakes you could make is to delete a file accidentally. This can cause a lot of problems if the file contains valuable information. When you protect a file, you will be unable to delete it unless you remove the protection.

To select FILE PROTECTION from the DISKORG main menu:

- Press

The 'FILE PROTECTION' menu will now appear.

The procedures for setting and resetting protection are identical. Type 1 or 2 to select SET or RESET PROTECTION; then enter the name of the relevant file.

Specify the name of the desired file as follows:

Either:

- Type in the name of the file followed by carriage return.

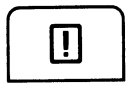
Or:

- Press

Then enter the number corresponding to the desired file.

Note - When protecting a file, only files that are unprotected will be listed and vice versa.

When you are satisfied that everything is correct, move the cursor to the 'CONFIRM' field and press:



When the file protection is complete, you can either enter another file to be protected or return to the DISKORG main menu by pressing:

4.10 EXIT TO SYSTEM

When you have finished using DISKORG, you will want to return to the system menu so that you can select another program to run.

To return to the SYSTEM menu from the DISKORG main menu:

- Press

The screen will be cleared and after a short time the SYSTEM menu will appear.

4.11 ERROR MESSAGES

Sometimes you will enter information incorrectly - everybody makes mistakes. It is also possible that you will ask the system to do something that it cannot do because some piece of equipment is not functioning properly. If this happens, the system will not be able to continue, so it will produce an error message. If an error message appears you will also see the word 'CONTINUE' or 'ACCEPT' following the message. You now have two alternatives:

If you have entered the information incorrectly, you can return the cursor to the prompt line by pressing:

You can now re-enter the information.

You can return to the last menu by pressing:

Some error messages relate to a specific option and are listed in Appendix B.

A

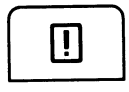
THE CONFIGURATION PROGRAM

The purpose of the configuration program is to adapt the system software to a specific hardware configuration. The information about the system is stored as an extra block tagged onto the file 'SYSTEM.MISCINFO'. This information is available to applications programs.

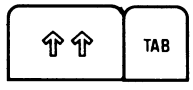
Care must be taken to select a configuration that is appropriate to the hardware. Some configuration changes must be carried out by a qualified service engineer. In such cases the engineer will also run the configuration program to adapt the system software to the new hardware.

For each part of the program, a number of values have to be entered. In each of the fields where a value is to be entered, a default is displayed. To accept the default, press the TAB key. When the TAB key is pressed or a valid entry is made, the cursor will skip to the next field. When all entries have been made, the cursor will be in the confirm field.

When the cursor is in the confirm field, the values can be accepted by pressing:



Or the cursor can be moved back to one of the other fields, to enable changes to be made, by pressing:



Option 0 in the menus can be used if a mistake has been made and the user needs to terminate the current activity without storing any changes.

The program is stored on the system disk and is run by selecting Option 3 - Configure and Install.

When the program is loaded, the following menu appears:

```
P2500                    CONFIGURATOR                    VERSION 1.2

     1 CONFIGURE THE CURRENT SYSTEM DISK
     2 INSTALL APPLICATION
     3 INSTALL SYSTEM ON HARD DISK OR DOUBLE-SIDED FLOPPY DISK

     0  EXIT TO SYSTEM

SELECT : _                                              CONFIGURATOR
```

Each option is described in one of the following sections.

Note - If the configuration is going to be changed to incorporate either 8" disks or a slave processor, the appropriate environment must be selected first.

A.1 CONFIGURE THE SYSTEM DISK

Option 1 from the main menu.

When the option is selected, you will have two choices of configuration, as you will see from the screen below:

CURRENT CONFIGURATION

```
PRINTER     : EMPTY          :  1200 BAUD

ENVIRONMENT : DISK 1 - 5" P2500 SINGLE-SIDED DISKS
              DISK 2 - 5" P2500 SINGLE-SIDED DISKS
              DISK 3 - 5" P2500 NOT USED
              DISK 4 - 5" P2500 NOT USED
              DISK 5 - 8" P2500 NOT USED
              DISK 6 - 8" P2500 NOT USED

              SERIAL INTERFACE         - NO
              SLAVE PROCESSOR PROGRAM - NO
```

CONFIGURE SYSTEM DISK

```
1 CONFIGURE PRINTER
2 CONFIGURE ENVIRONMENT

0 EXIT

SELECT :                                  CONFIGURE SYSTEM DISK
```

Select the desired configuration by typing the appropriate number. However, nothing will be changed until the reset button is pressed. The only alternative to re-booting and accepting the new configuration is to press:

A.1.1 Configuration for the Printer

Option number 1 from the menu.

The purpose of this part of the program is to adapt the system to the printer that is being used. This is necessary because the printers available have slightly different characteristics.

The current configuration is displayed on the top line of the screen. The printer configurations available will depend on which tables are available in the file SYSTEM.PRINTER. A list of these tables will be displayed with a number next to each. The desired printer table is selected by entering the appropriate number.

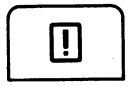
Some of the printer table names consist of two parts. The first five characters are the Philips catalogue number for the printer. The catalogue numbers are:

P2121 Daisy wheel printer
P2123 Matrix printer

The suffixes (the characters after the full stop) indicate the relevant national version. Remember that even if you are only changing the daisy wheel on your printer, you should also update the printer configuration. National version suffixes are as follows:

EMPTY	A table which does no translating for printing
GP300	General Printer
MT100	Manesmann-Tally printer
MT140	Manesmann-Tally printer
ASC	ASCII daisy wheel
BIL	Bilingual daisy wheel
ESA	European/South American daisy wheel
WP	Word Processing daisy wheel
D/A	Matrix printer with German/Austrian character set.
E	Matrix printer with Spanish character set.
F	Matrix printer with French character set.
S	Matrix printer with Swedish character set.
S/SF	Matrix printer with Swedish/Finnish character set.
UK	Matrix printer with English character set.

When the new configuration has been selected it can be accepted by pressing:



The user now has the following options:

1 CONFIGURE THE PRINTER
2 CONFIGURE THE ENVIRONMENT
3 STORE PERMANENTLY

0 EXIT WITHOUT CHANGE

The user can return to the main configuration menu at any time without changing the configuration by pressing:

or return to the printer configuration menu, by pressing 1:

Option 3 will cause the new configuration to be stored on the system disk (it will not be stored in memory until you re-boot). This configuration will always be loaded when the system is booted with that disk.

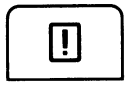
A.1.2 Configuration for the Environment

Option number 2 from the menu.

If either 8" disks, a serial interface or a slave processor are to be used, the first thing that must be done is to change the environment. The purpose of selecting an environment is to indicate to the system software which hardware drivers are to be loaded when the system is booted.

When the option is selected the possible environments are displayed. The column in inverse video shows the current environment.

Select the desired environment by typing the appropriate number, the cursor will jump to the 'CONFIRM' field. Confirm the action by pressing:



The environment will not be changed until the reset button is pressed. The only alternative to re-booting and accepting the new environment is to escape by pressing:

This will return the user to the main menu.

After you have have confirmed your selection, you will see on the next screen the 'Configuration for the Drives'; i.e. the possible combination of disks for this configuration. The disks that can be configured are indicated by a letter, and the disks that cannot, with a '#'.

When you have made your selection, you will be returned to the 'Configure System Disk' menu, and you will have the chance to store your configuration permanently. Again, you can undo your actions by pressing:

A.2 INSTALL APPLICATION

This procedure is used to transfer an application to a hard disk. The application will include all necessary data files and libraries.

Option number 2 from the main menu.

This screen appears:

SOURCE-DRIVE : _ DESTINATION-DRIVE : _ **INSTALL APPLICATION**

Select the drive number of the source disk and the number of the target disk. You are asked to confirm, and then the program will do the installation for you.

All applications must have been initialized before the installation process can begin.

The system will check that there is enough room on the target disk before the transfer starts.

The file 'COMMAND.TEXT' is not copied during the install procedure. It is only resident on the source disk to tell the install program what files are to be installed. Any libraries used by the application should be copied via 'COMMAND.TEXT'. Any units copied in this way will be automatically inserted in 'USERLIB'.

Note - If you want to install an application which does not have 'COMMAND.TEXT' associated with it (for example, existing users of ELFIE), you must transfer the application with the 'DISKORG' program.

When installing an application, the application code file does not automatically appear in the menu. This has to be done as explained in Chapter 2.3.

A.3 INSTALL SYSTEM ON HARD DISK OR DOUBLE-SIDED FLOPPY DISK

Option number 3 from the main menu.

You will see the 'Install System' menu, which looks like this:

```
1 INSTALL SYSTEM ON HARD DISK
2 INSTALL SYSTEM ON 5" DOUBLE-SIDED DISK
```

A.3.1 Install System on Hard Disk

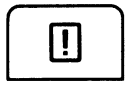
Option number 1 from the 'Install System' menu.

Once more, you see the 'Configure' menu:

```
1 CONFIGURE THE PRINTER
2 CONFIGURE THE ENVIRONMENT
3 INSTALL THE SELECTED SYSTEM

0 EXIT WITHOUT INSTALLATION
```

At the top of the screen is a table showing the current configuration. Ensure that the hard disk is switched off before starting the install procedure. Wait until the message 'INSTALLING SYSTEM ON HARD DISK' appears on the screen. After this, you will see another message telling you to switch on the hard disk. Switch it on and wait for at least ten seconds before pressing the Do key:



Option 3 will now install your new system.

Note - Install System is also necessary if the system has been corrupted on the hard disk.

To give yourself more directory space, you may remove all the SBIOS and PBIOS files (with the exception of SYSTEM.SBIOS, SYSTEM.PBIOS, SBIOS.5 and PBIOS.5). These files will first have to have their protection removed (see Chapter 4.9). After you have done this, for housekeeping purposes, you should reorganize your disk.

A.3.2 Install System on 5" Double-Sided Disk

Option number 2 from the 'Install System' menu.

The procedure is exactly the same as in the last section, except that double-sided diskettes do not need to be turned off. Choose your configuration and store it. Don't forget that you can escape without changing your system by pressing:

or

To give yourself more directory space, you should remove all the SBIOS and PBIOS files (with the exception of SYSTEM.SBIOS and SYSTEM.PBIOS). After you have done this, for housekeeping purposes, you should reorganize your disk.

Installation on 5" double-sided disks can only be achieved if the system has been configured with Drive 1 as double-sided. No installation is necessary if the double-sided drives are configured in any other position.

If a system is installed on a hard disk or a double-sided disk, it will not then be possible to install the system on another disk if that newly-installed system is used. In other words, if you install from disk A to disk B, and then try to install to disk C, using disk B, only a basic system will be created. This is because the file 'COMMAND.TEXT' was not transferred during the first install. If the second install is attempted, only the system files will be transferred. That means that, although the system will boot, no programs can be run.

A.4 EXIT

This is option 0 from the main menu.

When this option is selected, the system returns to the main command level prompt. No further updating of the disk will be done, because this should have been done within the relevant sections of the program.

B ERROR MESSAGES

The error messages are divided into four categories - BACK-UP, CONFIGURATION, DISKORG and SYSTEM MENU. You should, accordingly, refer to the appropriate section. Messages are listed with a number and the corrective action to be taken.

B.1 BACK-UP ERROR MESSAGES

2 Write-error on hard disk: track 0 from volume #
: Contact your hardware dealer.

3 Volume number # on hard disk is not on-line
: Switch the volume on-line.

4 Write-error on back-up disk number # in drive #
: Replace, if necessary, as the disk may be bad.

5 Back-up disk number # in drive # is write-protected
: Remove the write-protection.

6 Drive # is not on-line
: Switch the drive on-line.

8 Latest back-up: use another
: You are trying to overwrite the latest back-up disk. Use another or new set of disks.

9 Back-Up from another volume: use correct back-up
: You are trying to overwrite the back-up of another volume. Use the correct one.

10 Wrong back-up disk number
: Insert the correct disk.

11 The system is not configured to write to the disk in drive #
: Re-configure the system.

13 Invalid system configuration: hard disk can't be used
: Re-configure the system for the available hardware.

14 Invalid system configuration: drive 5 can't be used
: Re-configure the system for drive 5.

15 Wrong back-up disk number
: Enter the correct number.

16 Invalid disk in drive # (incorrect system configuration)
: Re-configure the system correctly.

17 Disk in drive # is not back-up disk for restore volume
: Load the correct back-up disk.

18 Disk in drive # is not the latest back-up
: Load the latest back-up disk.

19 No UCSD directory
: Prepare the disk and continue. If this does not work, you must use another disk.

20 Disk in drive # is not a back-up disk
: Load the correct disk.

21 Corrupt directory on disk in drive #: carry on with restore?
: Continue with the restore.

24 Disk in drive # belongs to another back-up set.
: Load the correct disk.

25 Read-error on disk number # in drive #
: Use the other back-up disk.

26 Write-error on hard disk volume #
: Call your hardware dealer.

28 Wrong SESAM-Key inserted
: Insert the correct SESAM-Key.

29 No SESAM-Key inserted
: Insert a SESAM-Key.

30 Read-error on hard disk volume #
: Call your hardware dealer.

31 Invalid Operating System
: Re-configure with valid system software.

32 Invalid system configuration: drive 5 not compatible
: Re-configure the system.

34 No room in memory
: Press RESET and rerun the job.

B.2 CONFIGURATION ERROR MESSAGES

1 Write-error on volume in drive #
: If the disk is not write-protected, it is corrupt. You must make a copy of the back-up.

2 Drive # not on-line
: Switch the drive on-line.

4 Volume in drive # is write-protected
: Remove the write-protection

5 No room on volume in drive #
: Reorganize the disk.

6 Directory on volume in drive # is full
: Remove one or more files. (The configuration program requires 3 blank directory entries. It will not run if the disk has more than 74 files).

7 BIOS not compatible
: Restore all the BIOS files from the configuration disk.

10 〈 〉 not on system disk.
: Restore the file onto the system disk from the configuration disk.

11 Drive # not on-line
: Switch the drive on-line.

12 Write-error on disk in drive #
: If the disk is not write-protected, it is corrupt. You must make a copy of the back-up.

13 Disk in drive # is write-protected
: Remove the write-protection.

19 Invalid Operating System
: Refer to Appendix A.

21 〈 〉 not found
: The missing file is not loaded. Load the appropriate disk and press the Do key.

22 File 〈 〉 not on volume in drive #
: The missing file is not loaded. Load the appropriate disk and press the Do key.

23 Wrong file 〈 〉 on volume in drive #
: Load the appropriate disk and press the Do key.

24 Wrong file 〈SYSTEM.PRINTER〉
: Insert the correct disk.

25 〈SYSTEM.PRINTER〉 not found
: Ensure that 'SYSTEM.PRINTER' is on the disk from which the configuration program was started.

26 Invalid file 〈 〉 on volume in drive #
: Press the Do key and re-install the system on hard disk.

27 Missing files: system cannot be installed on hard disk
: Copy the required files onto the configuration disk source.

28 Selected BIOS invalid
: Use DISKORG to restore the file from the back-up disk.

30 System error #
: Press RESET and re-boot.

31 Memory error #
: Press RESET and re-boot.

34 Application disk not initialized
: Initialize the application disk.

35 Disk inserted in drive # is not UCSD disk
: Insert the correct disk.

36 Missing file 〈 〉 on application disk
: Contact your software dealer.

37, 39-43 Syntax error in file 〈 〉
: Contact the originator of 'COMMAND.TEXT'.

38 Invalid text file 〈 〉
: Load the correct text file.

45 10-Mbyte hard disk not supported
: Re-configure your system.

46 No SESAM-Key inserted
:Insert a SESAM-Key.

47 Wrong SESAM-Key inserted
: Insert the correct SESAM-Key.

B.3 DISKORG ERROR MESSAGES

66 Drive # is not on-line
: Switch the drive on-line.

68 Illegal file name
: Specify the correct name.

69 Illegal volume name
: Specify the correct name.

71 Volume is physically damaged
: Restore from the back-up, using a new disk.

72 Disk in drive # is not of UCSD standard
: Prepare the disk and try again. If this does not work, you must use another disk.

73 Printer is not on-line
: Switch the printer on-line.

74 File < > not found
: Insert the correct disk.

78 Same volume names are not allowed
: Choose another name.

79 Copy was not successful
: Target disk error - use another disk.

80 File < > already exists
: Delete the existing file on the target disk (if it is not used anymore) and, if possible, use another name.

81 Disk is write-protected
: Remove the write-protection.

82 File < > is protected
: Remove the protection.

83 File < > protected, reset protection
: Reset the protection.

84 Not enough room on < >
: Reorganize the disk. If there is still not enough room, transfer some files to another volume.

87 Volume < > not found in drive #
: Load the correct disk.

88 < > is invalid file name
: specify the valid name.

89 # is invalid device number
: Specify valid number.

90 File < > already protected

91 File < > not protected

92 File < > not text file
: A text file is required (only text files can be printed).

96 Already prepared as < >
: The prepare operation is not needed.

101 Terminated due to error while moving file
: Try the operation again. If it still fails, call your dealer.

103<SYSTEM.PASCAL> was moved during reorganization - please re-boot
: Re-boot the system.

106 Illegal date
: Specify the correct date format.

122 Drives differently configured
: Select the correct configuration.

126 Original not initialized
: Initialize the disk and try again.

128 No SESAM-Key inserted
: Insert a SESAM-Key.

150 Wrong SESAM-Key inserted
: Insert the correct SESAM-Key.

B.4 SYSTEM MENU ERROR MESSAGES

2 Slave device not present
: A Slave board is required for loading the slave program. Plug in the board.

3 Slave load error
: Switch off the system. Switch it back on again and re-boot.

28 System disk is write-protected
: Remove write-protection.

31 Execute ⟨p⟩ not allowed
: Enter the correct program number from the menu.

32 Program ⟨p⟩ not found
: Insert correct disk.

33 Program ⟨p⟩ not executable
: Enter the correct program number from the menu.

34 Drive # not on-line.
Switch the drive on-line.

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UCSD p-System TKS Operator Manual

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