# ND-110 COMPACT ND-110 COMPACION Guide Operator Guide ND-30.089.1 EN ND-30.089.1 EN



# ND-110 COMPACT Operator Guide

ND-30.089.1 EN

### **Preface**

This manual is written primarily for those who are responsible for the operation of the ND-110 Compact computer. No previous knowledge of computer systems is required to understand the manual. The manual explains:

- how to start and stop the computer
- how to log in
- how to handle floppy diskettes
- how to take personal backup on floppy diskettes
- how to handle the streamer drive and tape cartridge
- how to handle simple error situations.

For more details on how to take backup and other system supervisor responsibilities, you are referred to the following manuals:

SINTRAN III System Supervisor ND-30.003 EN

BACKUP User Guide ND-60.250 EN

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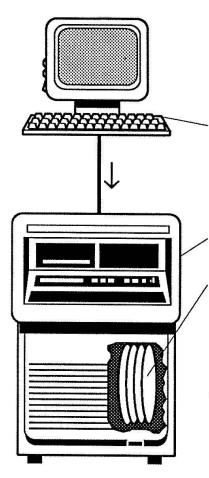
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### Introduction

### Read this if you know nothing about computers



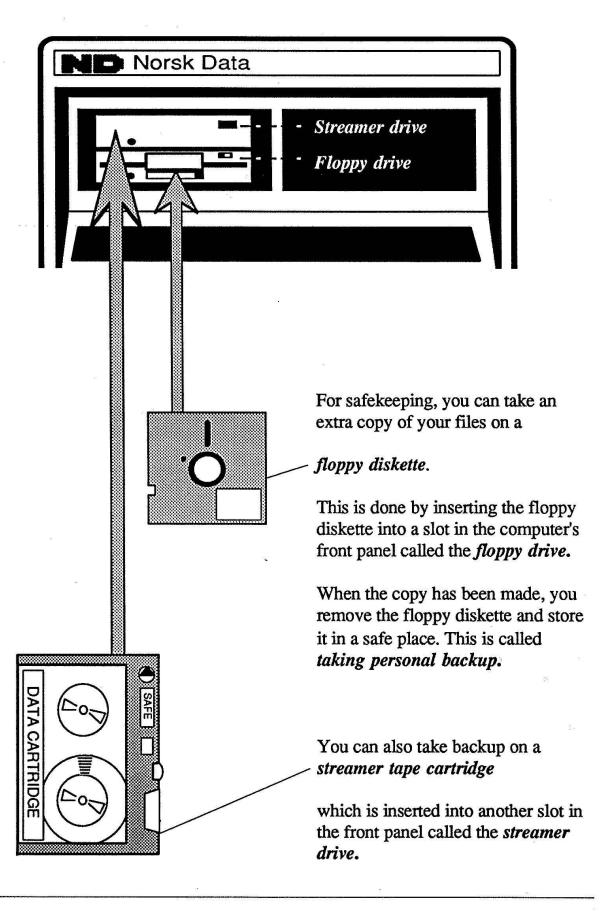
This is your terminal.

This is where you work. The work you do on the terminal's keyboard goes to the

computer where it is stored on a

disk pack.

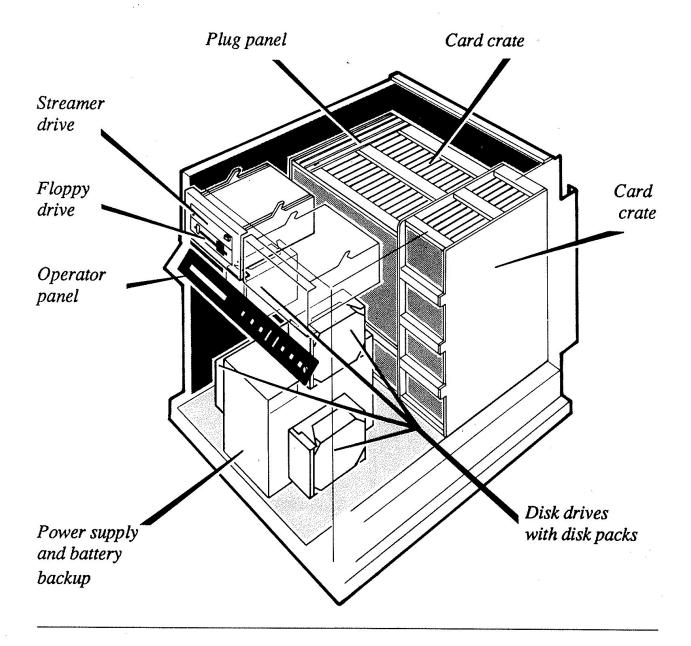
The disk pack is actually a stack of round magnetic plates, but you can think of it as a filing cabinet where your work is stored in *files* each of which is given a *file name*.

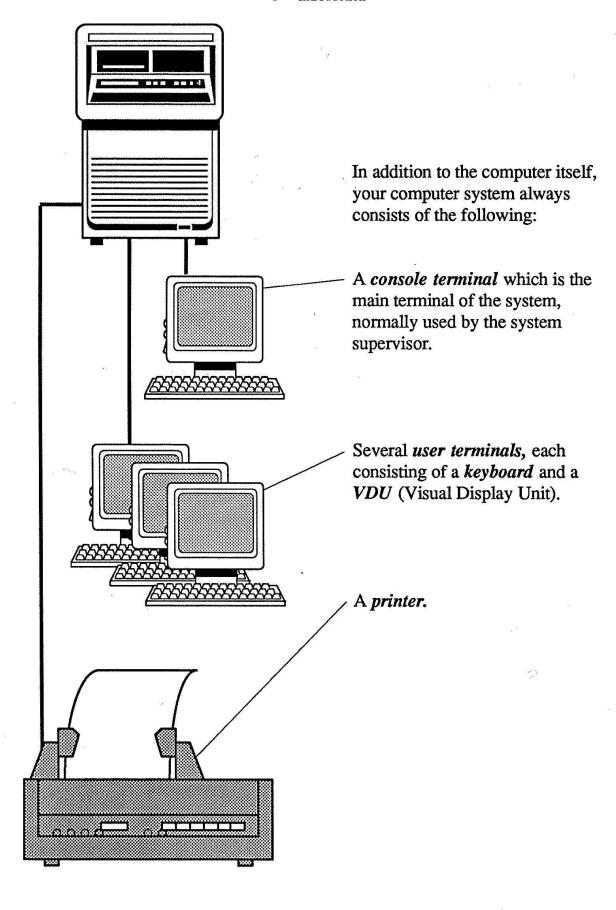


### The ND-110 Compact computer system

The ND-110 Compact is a physically compact computer intended for office use. It is small, quiet and easy to operate. It has a floppy drive and usually a streamer drive. A valuable service available for this machine is Telefix, which makes it possible to analyse and correct faults in the customer's computer directly from Norsk Data's Service Centre via the telephone network.

The ND-110 Compact computer cabinet contains all the necessary equipment (with the exception of terminals and printers) for a fully operational computer system.





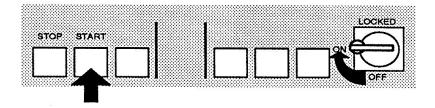
# Starting and stopping the ND-110 Compact

1. Locate the power switch in the lower right hand corner of the computer's front and switch it on.

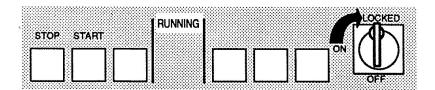
### **CAUTION!**

Do not move the computer when the power is on.

2. On the operator panel, turn the key switch to ON and push the START button.



3. Wait until the word RUNNING appears on the front panel, then turn the key switch to LOCKED. This blocks the front panel so that nobody can use it while the computer is running.



#### 7

### **CAUTION!**

The computer has a battery which keeps it alive for approximately 10 minutes in case of power failure. To prevent undesirable discharge of this battery, do not switch off the office power or disconnect the computer's power cable as long as the key switch is in position ON or LOCKED.

To prevent unwanted power breaks, it is recommended that the computer be given a separate power circuit which bypasses the office power switch.

### Stopping

Normally, it is unnecessary to stop the computer. However, if you must stop it, for example in order to move it, proceed as follows:

- 1. If the key switch is in LOCKED position, turn it to ON.
- 2. Press the STOP button.
- 3. Turn the key switch to OFF.
- 4. Switch off the power switch.

#### **CAUTION!**

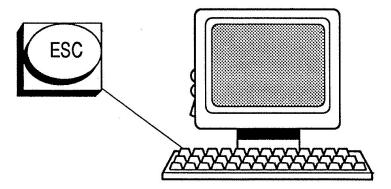
Always set the key switch to OFF before switching off the power switch.

## Logging in

When using the computer, the first thing you must do is to get in touch with it; that is, you must log in.

To log in, you need a user name and a password. The password is necessary so that only you can log into the computer using your name.

Sit down in front of your terminal and press the key marked ESC in the upper left corner of the keyboard.



On the screen, you get a picture that looks more or less like the one shown below. Type your user name, then press the return key. Type the password and press the return key again.

#### **USER ENVIRONMENT**

Enter your name:

Your user name

Enter your password: Your password →

#### NOTE!

The password will not be shown on your screen when you type it.

If your computer uses an accounting system, the words project password appear. If you do not have a project password, simply press the return key.

Project password:

If you have done everything correctly, you get the main menu on the screen. If you do not get the main menu, see page 10.

The main menu is tailor-made for each installation. Therefore, the text may vary, but it will probably look more or less like this:

ser: JERRY MOUSE			13:0: 1987-10-23
	1	Word Processing	
	2	Other NOTIS Products	
	3	Change User Area	
	4	File Manager	
	5	Profile Manager	
	6	Special Functions	
	7	Go to SINTRAN	

You can choose any item from this menu by typing the corresponding number. In some cases this will bring on a new menu, from which you can make a new choice.

### **EXAMPLE**

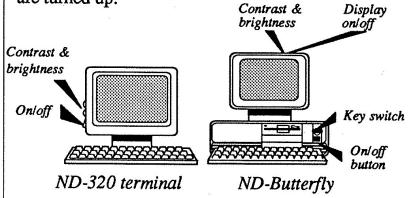
You want to take personal backup. Type 7 (Go to SINTRAN). This puts you in touch with SINTRAN, the computer's operating system. You can then start backup as explained on page 16.

### If something goes wrong when you log in...

The screen remains blank when you press the ESC key

Check that the ON/OFF switch is on, and that the mains voltage is connected.

Also check that the contrast and brightness controls are turned up.



Finally, check that the terminal is connected to a computer line, and check that the keyboard is connected to the terminal.

## You make a typing error

You can erase the letters with the key in the top right hand corner which looks like this:



If you do not discover the error until you have moved to the next line, you can move back by using the up arrow key

The computer writes:
"USER NAME MUST
BE GIVEN" or
"PASSWORD MUST
BE GIVEN"

You have forgotten to type your user name or password when logging in. Go back by pressing the up arrow key and type the correct name or password.

### If something goes wrong when you log in...

The computer writes
"USER NAME/
PASSWORD NOT RECOGNIZED"

The computer has rejected your user name or password. Go back by pressing the up arrow key and try again, taking care to avoid spelling mistakes.

## You do not get a menu

Some installations do not use menus. In this case you will get the SINTRAN sign (@) on the screen instead. This sign means that you are in touch with SINTRAN, the computer's operating system. You can now give the computer instructions by typing SINTRAN commands.

For example, to start a personal backup, you type BACKUP-SYSTEM. In SINTRAN commands, hyphens are used instead of spaces between words.

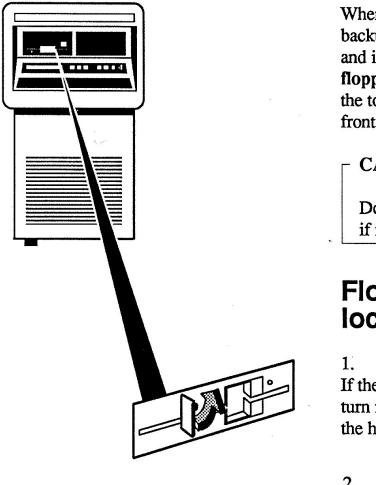
#### NOTE!

If you try to log in unsuccessfully more than 10 times, the computer will suspect that you are an unauthorized user trying to log in without knowing the correct user name or password. The computer will then respond with the words

### "TOO MANY ATTEMPTS TO ENTER",

and any further attempts to log in from your keyboard will be blocked. In this case, the terminal must be stopped from the computer. See instructions for stopping the terminal in the manual SINTRAN III System Supervisor.

## Inserting the floppy diskette



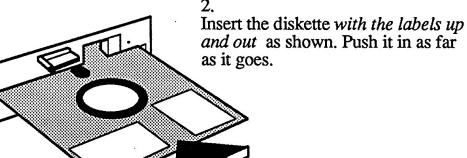
When you want to take a personal backup, you must go to the computer and insert a floppy diskette in the **floppy drive** which is located in the top left corner of the computer's front panel.

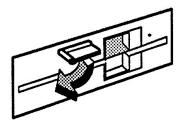
### **CAUTION!**

Do not try to open the floppy drive if its red lamp is on or blinking.

# Floppy drive with locking latch:

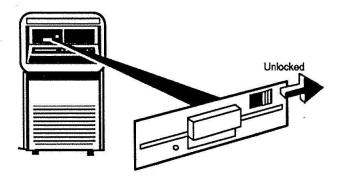
1. If the latch is in the vertical position, turn it 1/4 turn counterclockwise to the horizontal position.



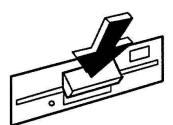


3. Close the floppy drive by turning the latch back to the vertical position.

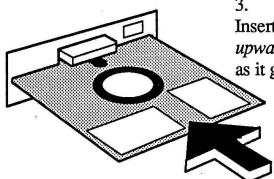
# Floppy drive with locking switch:



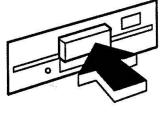
1. If the locking switch is in the locked position (red mark showing), push it to the right to the unlocked position.



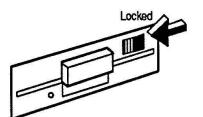
2. Press the upper side of the door. The door opens.



3. Insert the diskette with the labels upwards as shown. Push it in as far as it goes.

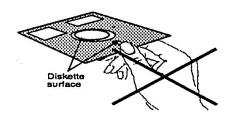


4. Close the door.



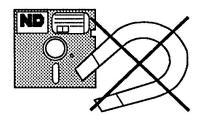
5. Set the locking switch to the locked position.

## Handling floppy diskettes

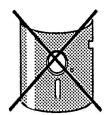


Good diskette habits minimize the risk of losing data. For your own benefit, always follow these rules:

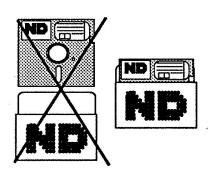
1. Hands off the diskette surface!



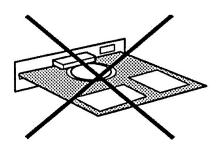
Keep the diskettes away from magnetic fields. Do not place them on top of your terminal or other equipment.



3. Do not bend or fold the diskettes.



4. Keep the diskettes in their jackets when not in use.



5. Be careful when inserting the diskette into the computer. Never leave it halfway inserted.

### **CAUTION!**

Take care not to drop the diskette on the carpet. If you do, pick it up immediately, as the static electricity in the carpet may damage it.

# Some things you should know about personal backup

What is a personal backup?

When you use your terminal, the work you do is normally stored in files on the computer's disk packs. To take a personal backup means to make a copy of these files on a floppy diskette. You can take a copy of all your files, or just some of them; for example, you may wish to copy the work you did last week, but not the week before.

Why take a personal backup?

Personal backup on a floppy diskette is taken for safety reasons in case the original files are accidentally erased or destroyed. The diskette should therefore be stored in a safe place such as a fireproof cabinet.

Who should take personal backups?

Each user is responsible for taking personal backup of his own work.

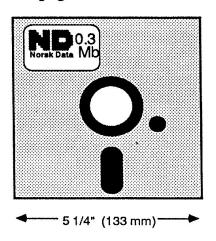
What this section tells you

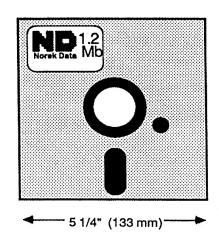
This section explains one simple method for taking personal backup. There are other methods and other options. If you want to learn more about backup, see the manual BACKUP User Guide, ND-60.250 EN.

### Taking personal backup on the latest ND diskettes

## 1. Get a diskette of the correct type

This example is only valid for the latest type of diskettes bought from Norsk Data since the autumn of 1987. These diskettes are clearly labelled "Norsk Data 0.3 Mb" or "Norsk Data 1.2 Mb". If you have another diskette type, see page 23.

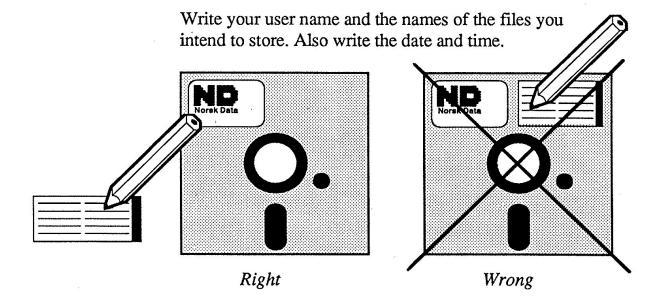




## 2. Fill in the diskette's label

It is very important to label the diskette, so that you will know what has been stored on it.

Labels are included in the diskette boxes. Fill in the label **before** placing it on the diskette, or you might damage the magnetic layer of the diskette.



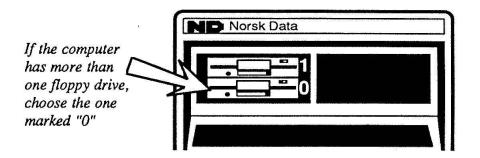
# 3. Check that the floppy drive is free

Go to the computer and locate the floppy drive (a horizontal slot in the upper left area of the computer's front).

#### **CAUTION!**

If the door is closed and the red lamp is on or blinking, it means that the floppy drive is in use. Do not try to use the floppy drive if it is in use, or you will spoil the data for the person using it.

If the computer has more than one floppy drive, we assume that you choose the one marked "0".



## 4. Insert the floppy diskette

When you have made sure that the floppy drive is not in use, insert the floppy diskette as explained on pages 12 and 13.

### 5. Log in

Go to any terminal connected to the computer and log in as explained on page 8. It might be practical to use a terminal in the computer room.

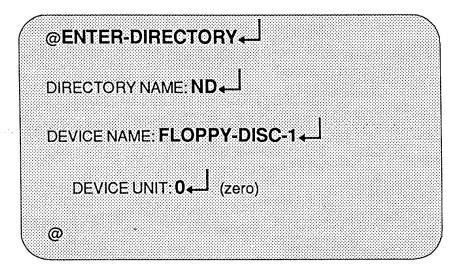
## 6. Get in touch with SINTRAN

Choose "SINTRAN" or "Go to SINTRAN" from the main menu.

This sign appears on your screen: @

This is the SINTRAN sign. It means that you are in touch with SINTRAN, the computer's operating system. You can now give the computer instructions by typing SINTRAN commands.

First, you must tell the computer that you want to use the floppy drive (and not some other type of equipment). To do this, type the commands as shown below.



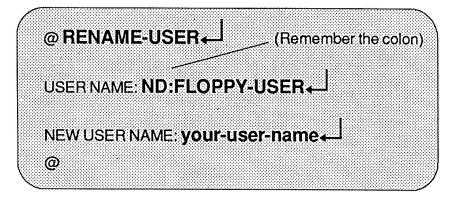
If you receive an error message on the screen, check that you have inserted the floppy diskette correctly, make sure you have not made a typing error, and make certain you are using the correct type of floppy diskette.

### How to type SINTRAN commands

- You must only type SINTRAN commands immediately after the SINTRAN sign @.
- Use hyphens instead of spaces between words.
- Always press the J (return) key after typing a command. The command is not carried out until you do.
- All commands may be abbreviated as long as they are not ambiguous. For example, the command COPY-USERS-FILES may be abbreviated to C-U-F.
- Use upper- or lowercase letters, it makes no difference.
- If you run into trouble, you can usually escape by pressing the ESC key one or more times.

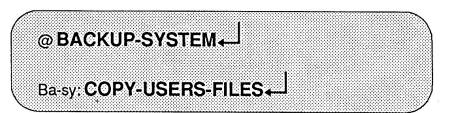
8. Rename the floppy diskette, giving it your user name (unused diskettes only)

All diskettes have names to identify them. New diskettes are all given the common name "ND:FLOPPY-USER" prior to delivery. When you start using a new diskette, you must therefore rename it, giving it your own user name. (If you have used the diskette before, skip this step and go to step 9.)



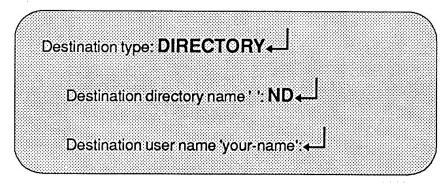
## 9. Start the backup program

Type the command BACKUP-SYSTEM and wait for the letters "Ba-sy" to appear. Then type COPY-USERS-FILES.



## 10. Specify destination

You must specify the destination of the files you intend to copy. The destination is the floppy diskette with your user name.



### 11. Specify source

You must also specify the source of the copying, i.e. the file or files you want to copy.

Source type: DIRECTORY

Source directory name ' ': 

Source user name 'your-name': 

Source file name: name-of-file-to-be-copied

Manual selection: NO

If you do not specify a source file name, but simply press return, you will be able to copy *all your files* or *a selection of files*. To copy all your files, answer NO to the question "Manual selection". To copy a selection of files, answer YES. A list of all your files will be displayed on your screen, and you must choose whether or not to copy each individual file by answering YES or NO after each file name.

If you do not specify a *full* source file name, but type one single letter or group of letters, you will be able to copy all files whose name begin with this letter or group of letters. You can still choose whether to copy all or just some of these files. See the table below.

	Source file name:	Manual selection:
Copying a single file	Specify full file name	NO
Copying all files	Press →	NO
Copying selected files	Press →	YES
Copying all files whose name start with "n"	Type "n", then press ↓	NO
Copying selected files whose names start with "n"	Type "n", then press ↓	YES

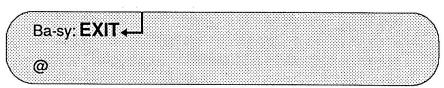
<sup>&</sup>quot;n" = any character or group of characters

## 12. Wait while the backup is taken

The red lamp on the floppy drive lights, and the backup starts. It takes several minutes if you have many files.

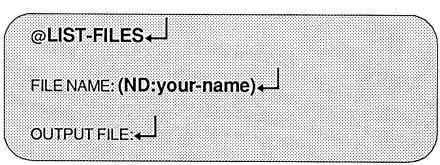
## 13. Leave the backup program

When the letters "Ba-sy" reappear on your screen, the backup is finished, and your files have been copied onto the floppy diskette (they also remain on the computer's disk pack). You can leave the backup program by typing:



# 14. Check that the backup has taken place

You may now check that the files have actually been copied onto the floppy diskette:



Remember to type *ND*: in front of your name, and enclose it all in parentheses.

# 15. MAKE THE FLOPPY DRIVE AVAILABLE FOR THE NEXT USER!

### **IMPORTANT!**

Before you remove the floppy diskette from the drive, you must make the drive available for the next user by typing:

### @RELEASE-DIRECTORY

DIRECTORY NAME: ND

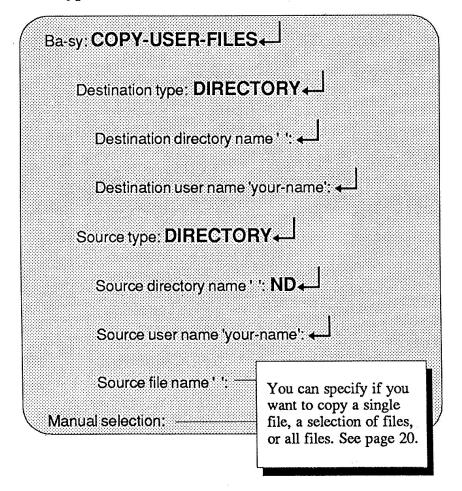
If you forget this, the next person who tries to use the floppy drive will be unable to do so.

### Copying from the floppy diskette to the disk pack

If, after you have taken backup, the contents of the computer's disk pack is erased or destroyed, you can restore it by copying the files back from the floppy diskette. To do this, first follow steps 3 to 7 (page 17).

If the floppy diskette belongs to somebody else (i.e. it has another name than the one you are logged in under), you must *rename* it, giving it your own user name as explained in step 8, page 19.

Then type the instructions as shown below.



NOTE!

Remember to release the directory. See page 21.

# Taking personal backup on older ND diskettes and diskettes from other vendors

Older ND diskettes: Before you can use the diskette you must prepare it by *creating directory* and *creating user*. Go to step 2 on the next page and follow the instructions given.

Diskettes from other vendors: The procedure is the same as for older ND diskettes, but first you must format the diskette. To format a diskette means to prepare it for data storage. Start on step 1 below and follow the instructions on the following pages.

#### **CAUTION!**

The procedure described here will wipe out any data stored on the diskette.

1. Formatting the diskette (diskettes from other vendors only)

Follow steps 3 through 6 on page 17. Then type the instructions as shown:

@ DEVICE-FUNCTION

FILE NAME: FLOPPY-1

FUNCTION: SET-FLOPPY-FORMAT

FORMAT:

O

Zero if your diskette is the 0.3 Mb type

17

17 if your diskette is the 1.2 Mb type

@DEVICE-FUNCTION

FILE NAME: FLOPPY-1

FILE NAME: FLOPPY-1

FILE NAME: FLOPPY-1

□

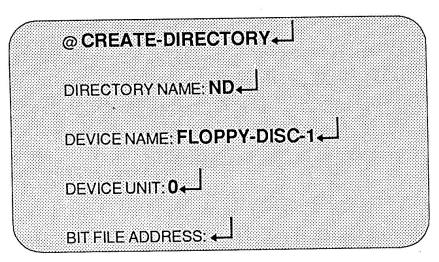
FUNCTION: FORMAT-FLOPPY

The floppy is now being formatted. The formatting is complete when the @ sign reappears.

If you get the error message "FORMATTING ERROR", first check that you have chosen the correct format (0 or 17). If so, try again with another diskette.

### 2. Create directory

To create directory means to identify the floppy diskette to the computer. Proceed as follows:

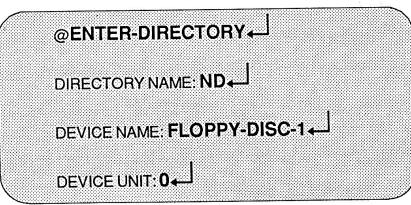


Wait until the @ sign reappears. This might take some time.

If you get the error message "PAGE XXX IS BAD", your floppy diskette is defective. Try again with another diskette.

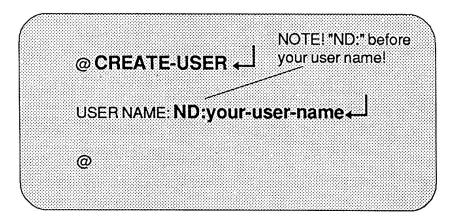
# 3. Tell the computer that you want to use the floppy drive

Now you must tell the computer that you want to use the floppy drive in which you have placed the diskette.



#### 4. Create user

To create user means simply to create a 'drawer' on the floppy diskette in which you can put your data. This drawer must be given a name, normally the user name that you are logged in under.

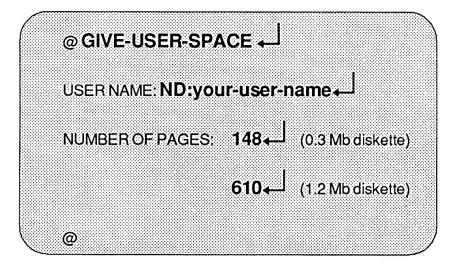


### 5. Give user space

You must now define how many pages of data there will be in the drawer you created in step 4. The maximum numbers of pages that can be allocated are:

148 pages for 0.3 Mb diskette

610 pages for 1.2 Mb diskette



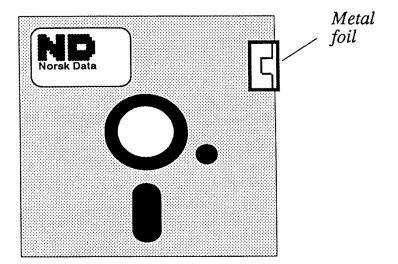
Your floppy diskette is now ready for backup. Go to page 19 step 9 and follow the instructions given.

# Protecting your floppy diskettes from accidental erasure

You can protect your diskettes against accidental erasure by placing a metal foil (enclosed in the disk pack) over the indentation at the edge of the diskette, as shown below. This makes it impossible to copy anything on this diskette.

### - NOTE!

When using a diskette, always check that it has not been protected against copying.



### Cleaning the floppy drive

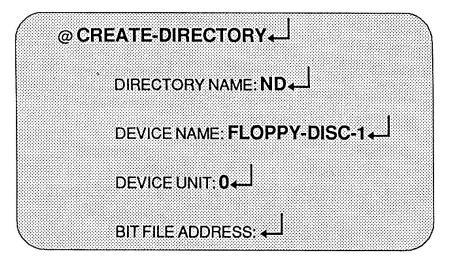
The floppy drive should be cleaned at least once a month. Use the PERFECT DATA Head Cleaning Kit and follow the instructions given on the envelope of the cleaning diskette.

### NOTE!

The floppy drive is dual sided. The perforated tab on the cleaning diskette must therefore be removed.

How to start the floppy drive for cleaning:

- 1. Insert the cleaning diskette.
- 2. Choose "SINTRAN" or "Go to SINTRAN" from the main menu.
- 3. Type the instructions as shown:



You may get an error message on the screen, but this is of no importance.

The cleaning is completed when the @ sign reappears.

# If something goes wrong when you take personal backup...

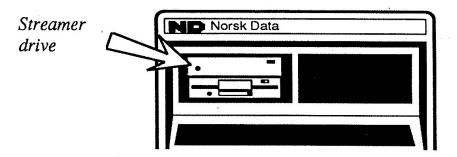
If you get an error message, or if you run into other kinds of trouble when taking a personal backup, check the following:

- Have you inserted the diskette correctly (page 12, 13 and 17)?
- Have you checked that your diskette is not protected against copying (page 26)?
- Are you using the correct diskette type (page 16)? If not, try formatting the diskette (page 23).
   CAUTION! All data will be wiped out! Do not use this option if there is data on the diskette that you want to keep!
- When formatting, have you chosen the correct format (page 23)?
- Does the diskette have the right name (the one you are logged in under)? If not, rename the diskette (page 19).
- If you get the message "FILE ALREADY RESERVED" or "UNIT OCCUPIED": Has the person using the floppy drive before you remembered to release directory (page 21)? If not, insert a blank diskette and type RELEASE-DIRECTORY ND.
- If you get the message "PAGE XXX IS BAD": Your diskette is probably defective. Try again with another diskette.

**Remember:** You can always escape by pressing the ESC key.

## Streamer drive and tape cartridge

This section applies to computers equipped with a streamer drive.



### What is the streamer drive used for?

In the previous section we explained how to take *personal* backup, i.e. how to make a copy of your own personal files on a floppy diskette.

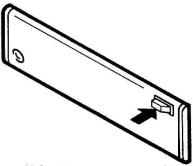
You can also take backup of the entire contents of the computer's disk pack. This is called taking device backup.

The backup is taken on a streamer tape cartridge which you insert into the streamer drive. The reason why you cannot use the floppy drive, is that there is not enough room for all the data on a single floppy diskette.

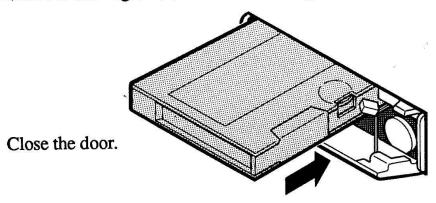
The following pages tell you how to handle the tape cartridge and the streamer drive. The different procedures for taking device backup is described in the manual BACKUP User Guide, ND-60.250 EN.

### Inserting the tape cartridge

Open the door by pushing the knob.

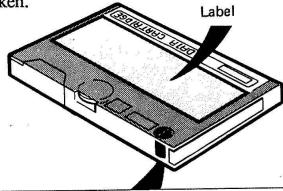


Slide the cartridge in as shown until it stops.



## Labelling the tape cartridge

It is very important to label the tape cartridge, so that you will know what has been stored on it. Always write the date and the name of the disk unit from which the backup was taken.

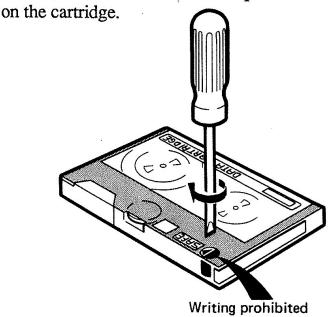


### NOTE!

Do *not* fasten the label to the metal plate on the underside of the cartridge (see drawing). The thickness of the label will force the cartridge out of its correct position.

# Protecting the tape cartridge from accidental erasure

To protect existing data on a tape cartridge from accidental erasure, turn the write protect plug to the SAFE position. It will now be impossible to record data on the cartridge



### Cleaning the streamer drive

It is extremely important to clean the read/write heads of the streamer drive regularly. They gather dust and dirt, which will prevent them from writing and reading data properly.

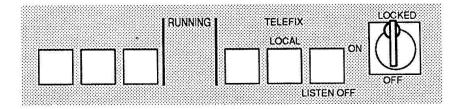
If backup is taken daily, you must clean the read/write heads once a week. If backup is taken weekly, you must clean them once a month.

You can use Tandberg Data's kit No. 7566 'TDC Cleaning Cartridge'. Follow the instructions provided with the kit.

## Telefix - how to get help from Norsk Data's Service Centre

Telefix makes it possible to trace and correct faults in your computer directly from the ND-Telefix Centre.

To use Telefix, you must first phone the ND-Telefix Centre and ask them to set up a connection to your computer. When connection is established, the front panel looks like this:



Set the key switch to ON. This unlocks the panel, and you can use the two rightmost buttons to operate Telefix. The buttons have a toggle function and will change state every time they are pressed. One button sets the LOCAL/REMOTE function and the other sets the LISTEN ON/LISTEN OFF function.

Functions for the two Telefix buttons are:

LOCAL and LISTEN OFF: No connection to Telefix.

LOCAL and LISTEN ON: You control the computer, and the ND-Telefix Centre "listens in" to what is going on.

**REMOTE and LISTEN OFF:** The ND-Telefix Centre controls the computer.

**REMOTE and LISTEN ON:** The ND-Telefix Centre controls the computer and you "listen in" on your local terminal.

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