27 APR. 1989

Delivery list for:

ND-no	Ver	Product name	Price cat.
211187	B	DISK RESTORE	STIN

Language	Ver/Rev
English:	B 01

The product consist of:

ND-no	Ver	Product Name	Rev. week

Manual(s):

ND-no	Ver	Rev	Lng	Name	Rev. week
NONE .					

PD- or PI-sheet:

ND-no	Ver	Rev	Lng	Name	Rev. week
895081.1			EN	Product Information for ND-211187B	8848

Diskettes:

Format DS/DD:	Format SS/SD:	Rev. week
211187B01-XX-01D	None	8848
211187B01-XX-02D		8848
211187B01-XX-03D		8848

Last revised: 29.11.1988

Norsk Data

Product Information

Product name	Product number
Disk Restore	*211187B*

Description of product

The stand-alone program Disk Restore can be used to restore the main directory of the computer from a backup device, when SINTRAN-III is not running.
This is necessary for example if a physical disk crash has occurred, or if you want to install a completely new version of the main directory ("system disk") from streamer, magtape or another disk.

Disk Restore version B can restore backups taken by:

- Backup Manager   (Copy-method : Image)
- Backup-System   (DEVICE-COPY command)

Disk Restore version B is delivered on three separate diskettes.
The diskettes contain a stand-alone version of SINTRAN-III and the Disk Restore program.

Reason(s) for new product or version

New features in Disk Restore version B:

- can handle Backup Manager tape volume format
- can restore from a tape containing several image-backups (Backup Manager format)
- can restore an image backup copied with the Backup Manager control-option (Pu) "Pages used on directory"
- can restore from backup devices on both SCSI adaptors 1 and 2
- you can interactively define SCSI adaptor and node number for a SCSI-device.

The userinterface has been changed.

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1 Prerequisites

The following things are <u>required</u> in order to use this product.

1.1 Hardware prerequisites

The following hardware must be present for this product to be used:

<u>CPU type (any of the following)</u>:

- 100 CX
- 110 Standard
- 110 CX
- 120 Standard
- 120 CX
- 500
- 5000

<u>NOTE!! All with minimum 2MB memory (Mem.Mgt II)</u>

Floating format: Any

<u>Other hardware</u>:

None

1.2 Software prerequisites

None

Product Information

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1.3 Other prerequisites

None

2 Dependencies

In addition to the above listed hardware and/or software prerequisites, the following dependencies exist between this and other products. The hardware and software listed here may, for example, be necessary to use the product´s full functionality.

2.1 Hardware dependencies

None

2.2 Software dependencies

There are dependency relationships between this product and the following software:

Product name	Product number
Backup Manager	211226
Backup-System	210337

Nature of dependency

The backup copy you want restore must have been produced by one of these products.

2.3 Other dependencies

None

Product name	Product number
Disk Restore	*211187B*

3 Documentation

Included (distributed free with product)

Title	Number
None (Only this product information)	*89*

4 Installation procedure

4.1 Automatic installation

As Disk Restore is a stand-alone program, no automatic installation procedure exists.

4.2 Non-automatic installation

Disk Restore must be run from Terminal number 1 (the Console).

• Insert diskette number 1 in Floppy-Disk-1 unit 0.

• Execute the following commands:

```
#MACL↵
#1560&                    (NOTE! Do NOT press ↵ after 1560&)
```

You will then get the messages:

-- *FLOppy to MEMory copying B01 --*
Insert next floppy and type any character to continue -->

• Insert diskette number 2 in Floppy-Disk-1 unit 0, and type any character on the console to continue.

You will then get the message:
Insert next floppy and type any character to continue -->

• Insert diskette number 3 in Floppy-Disk-1 unit 0, and type any character on the console to continue.

You should now get the following messages:

-- *End of copy, now starting SINTRAN-III*

Disk restore version B01 October 24, 1988

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● Mount the backup storage medium on the source device, and execute the command:

Di-Re: <u>RESTORE-DISK</u>↵

```
From (Directory/Volume)      : VOLUME↵
Source device name           : STREAMER-1↵
Source device unit           : 0↵
Retension(Yes/No)            : NO↵
Compare (Yes/No)             : YES↵
Destination device name      : DISC-SCSI-1↵
Destination device unit      : 0↵
Destination device subunit   : 0↵
```

> Note that a ↵ will display the default values

Loading

Mounted volume is: TESTVOL
on device: STREAMER-1,0

> Retension means winding/rewinding the tape once to release stress. Question will only be asked when restoring from streamer device.

Give command (Continue/Retry/Cancel) : <u>CONTINUE</u>↵

> If a wrong volume is mounted, then you can
> ● mount a new and RETRY
> ● or CANCEL procedure

Searching
---------------- Image found ----------------------
```
Volume        : TESTVOL
Reel          : 1

Index         : 1
Computer      : BIFROST
Directory     : TEST-2
Device        : DISC-SCSI-2
Pages         : 61054
Backed up     : 88-10-11 15:29:30
Control       : RdFc (Reserve Directory, Force Close)
```

Confirm start of restore (Start/Next-Image/Cancel) : <u>START</u>↵

Copying
Rewinding
Comparing

> Use START to start restoring this image. Use NEXT-IMAGE to search for next image on the tape.

1 image(s) copied

Di-Re:

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• When the image of the main directory is restored, restart the
computer by using the "stop" and "start"-buttons on the computers
frontpanel.

SINTRAN-III will then boot and start from the new main-directory.
You should now be able to log in as normal.

5 Modifications

5.1 New functions/commands

● Disk Restore can now handle Backup Manager tape volume format. Disk Restore can therefore restore a directory from a tape volume containing copies of several directories.

● Disk Restore can restore from backup devices connected to either ND-100 SCSI-adapter 1 or 2. (See chapter 7 for SCSI node number conventions.)

● The following commands are now available in Disk-Restore:

```
DESCRIBE-COMMANDS <command>
HELP <command>

LIST-PARAMETER <parameter>
SET-PARAMETER <parameter>

RESTORE-DISK <from><source device name><unit><subunit><compare>
             <destination device name><unit><subunit>

DEFINE-SCSI <devicenumber><adaptornumber><scsi nodeno.>
LIST-SCSI <devicenumber>
DELETE-SCSI <devicenumber>

STOP-SYSTEM
```

See CH.7!

5.2 Changed functions/commands

```
SET-PARAMETER :
          OVERWRITE DIRECTORY (YES/NO)      : Default NO
          (check destination before restore from tape)
          SINTRAN-COMMANDS ENABLED  (YES/NO): Default NO
          (no Sintran commands allowed from Disk-Restore)
          TERMINAL-TYPE                     : Default -5067

RESTORE-DISK  : handles Backup Manager tape format etc.
START-SYSTEM  : to start SINTRAN-III from restored disk
```

5.3 Removed functions/commands

None

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6 Errors corrected

CIPHER Magtape on unit 0 can now be handled.

7 Limitations concerning SCSI-devices

For backup devices connected to ND-100 SCSI, Disk Restore has implemented the following default conventions for SCSI adapter numbers, SCSI node numbers and device names:

Devicename used in DISK-RESTORE commands	DISK-RESTOR defaults SCSI-adapter/-node
STREAMER-1	1.1
STREAMER-2	2.1
MAG-TAPE-1	1.2
MAG-TAPE-2	2.2
<systemdisk>	1.0

NOTE!
The DELETE-SCSI and DEFINE-SCSI command can be used to alter this convention for a given SCSI-device on your computer.
The devicenumbers for some backup-devices are:

STREAMER-1	2206B
STREAMER-2	2207B
MAG-TAPE-1	560B
MAG-TAPE-2	1111B