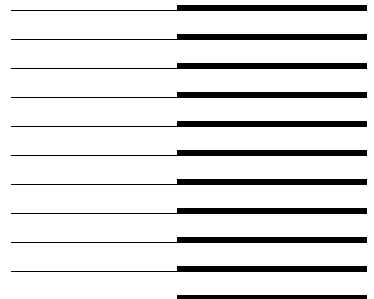




# Océ 9400-II



## *User Manual*





# Océ-Technologies B.V.

This manual contains a description regarding the Océ 9400-II system and a detailed explanation about the plot functions. The introduction (chapter 1) contains a general description of the working methods for using the copier and it is recommended that you read at least this chapter.

## Overview of copier parts on the covers

To assist you in finding parts of the copier/printer and the functions on the operating panel quickly, an illustration of the Océ 9400-II is presented on the inside front cover and of the operating panel on the inside back cover, both of which can be folded out.

## Safety information

This manual contains the following safety information:

- Appendix C lists 'Instructions for safe use'. ***You are advised to read this information before you start to actually use the copier.*** Technical safety information such as safety data sheets can also be found in appendix C.
- Where applicable, cautions and warnings are used throughout this manual to draw your attention to safety precautions to be taken.

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# Chapter 1

## Getting started

*This chapter contains a general description of the Océ 9400-II and how to install and setup the printer to be ready for use. Furthermore it describes how to get the copier ready to copy.*



---

# The Océ 9400-II printer

The Océ 9400-II is the successor of the Océ 9400. It has an improved faster controller and a higher memory configuration.

The Océ 9400-II is a wide format printing system. The machine is equipped with an automatic 1- or 2-roll unit. The Océ 9400-II prints on paper, transparent paper, vellum and polyester film. Its powerful digital technology offers users optimal ease of use and the reliability that one might expect from Océ.

The machine has features, such as:

- automatic language sensing and remote control
- centronics, Ethernet 10/100 Mb/s (TCP/IP) and SCSI interface (for Scan-to-File option only)
- fast, high quality printing
- autoscale of vector data
- media saver

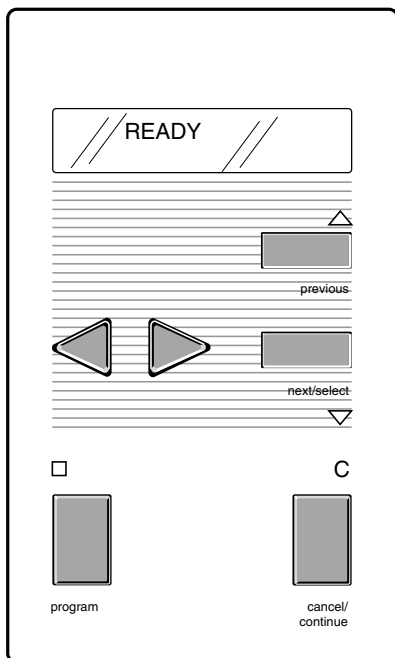
Optional:

- automatic 2-roll unit
- memory extension modules
- compact output stacker
- PostScript level 2
- high capacity delivery tray
- scanner Océ 9400-II
- print server for Novell and Ethertalk
- Repro Desk print management software
- Scan-to-file software
- Océ 940 off line folder

**Note:** *The optionals can vary per country.*

# The printer operating panel

The operating panel which is located at the right hand side of the printer console is easy to use (see figure 1). The panel consists of buttons and a display.



[1] Printer operating panel

In normal operation, the printer can process print jobs, and the 2 line display indicates the current status of the printer (e.g. 'READY' or 'RASTERIZING').

With the buttons on the operating panel you may enter the Program mode and easily setup the printer according to your requirements.

---

## Buttons

**'Program'** To activate the program mode and to enter the top level menu. In this mode the user can use 'next/select' the 'previous' and ◀ or ▶ buttons to step through the menu.

Pressing 'Program' again, or if there is no action during 1 minute in Program mode, the machine returns to the status mode.

**Note:** *If you press the Program button while the printer is printing, the led above the program button flashes. As soon as the printing process is ready, you automatically enter the program mode. Bear in mind that when you are in the Program mode, the printer will not print.*

**'Next/select'** To select an option or a setting in the menu. Or in case a submenu is present, enter a menu on a lower level.

**'Previous'** By pressing this button you go one level higher in the menu.

**Browse buttons** ◀ or ▶ These two buttons are used to select another mode at the same level of the menu, or to display the next or previous option from the option list.

**'Cancel/continue'** This button is used to cancel the present print job or to continue after an operator recoverable error.

---

## Display

The two-lines LCD display provides feedback about print job status in normal mode and menu items in Program mode.

During normal operation the following messages may appear:

**Status messages** indicates the actual status of the printer, e.g. 'READY', 'PROCESSING' etc.

**Warning messages** during a warning message the printer will continue to operate, but it is possible that the print quality is not optimal, e.g. 'REFILL TONER'.

**Error messages** the printer will stop and the user has to take action. For example: 'PAPER JAM'.

**Action messages** an action message prompts the user to perform an action before the print job is resumed. For example: 'FEED SHEET' in case of manual feed.

---

# The Océ 9400-II copier

The Océ 9400-II is also a digital copier for large documents (e.g. architectural or engineering drawings). The machine is easy to use and makes copies on paper, transparent paper, vellum and polyester film with the quality and reliability that one might expect from Océ.

To use the Océ 9400-II as a copier, a wide-format scanner is connected to the printer. Please note that you still can send print jobs when the Océ 9400-II is used as a copier. The print jobs are processed after copying is finished.

The machine detects whether a user wants to print a document or to make a copy, and switches automatically after 1 minute to printing mode.

---

## Image logic

The Océ 9400-II copier makes use of Océ image logic technology. This technology ensures that the quality of every copy is automatically optimised.

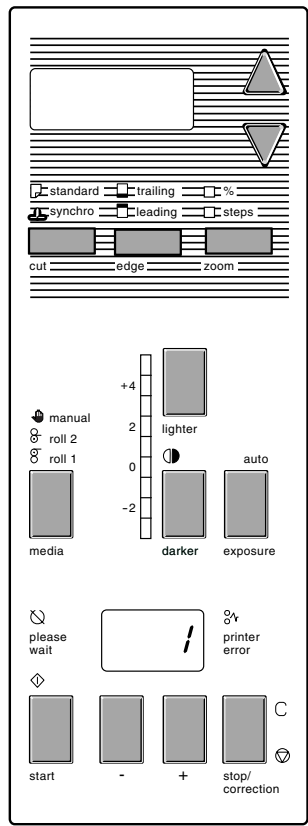
---

## Optional

Scan-to-file software (including Océ Scan Station and Océ View Station)  
Océ Batch Processor software.

# The scanner operating panel

The operating panel which is located at the right hand side of the scanner is easy to use (see figure 2).



[2] Scanner operating panel

---

## Stand-by mode

The operating panel (see the illustration on inside back cover) on the Océ 9400-II is easy to use and specially designed to carry out copy jobs.

After switching on the scanner, (see page 18), the machine is always ready for operation. In this state, the operating panel is in stand-by mode, which is in fact a low power mode. The operating panel activates in the following situations:

- when you feed an original
- when a button on the operating panel is pressed

**Note:** *If you do not work with the operating panel for more than 1 minute and no original is fed, it returns automatically to stand-by mode. The Océ 9400-II, however, remains always ready for operation. If however the original remains in the scanner feed table, the operating panel returns to stand-by mode after 2.5 minutes but the settings will remain.*

---

## Buttons and functions

**Start button** The copy process starts with the current settings. After pressing the start button no more changes are possible for the copies that are already being processed, with exception of the 'stop/correction' button.

**-/+ button** Press these buttons to increase or decrease the number of copies. The copy quantity can be changed at all times. Adjustable from 1 to 19 copies.

**Stop/Correction button** This button has two functions: stopping the original during the original transport, or correcting the selected settings.

- Before starting the copying process:
  - Pressing this button once:* The number of copies selected is erased and the default value '1' will be displayed. All other settings remain unchanged.
  - Pressing this button twice:* All settings that have been selected will also be erased and reset to the default settings. The number of copies selected will revert to '1', if it is not already set to this value. If required, you can select new settings.



■ **During the copying process:**

If you press this button while an original is being fed, the copying process will stop immediately. If you want to abort a multicopy job after the scanning of the original is finished, you must abort the copying process by pressing the 'cancel/continue' button on the printer. You have to open the top cover of the scanner to remove the original ('Clearing original jam' on page 126).

**Media button** With this button you choose the input of the copy material. Possible input selections are roll 1, roll 2 or manual feed.

**Exposure scale** You modify the exposure level with the 'lighter' and 'darker' buttons. The exposure level can be changed at all times.

**Auto exposure button** With this button the Automatic Background Compensation can be switched on or off.

**Cut button** This button toggles between synchro cut mode and standard cut mode.

In synchro cut mode, the copy is cut at the length of the original.

In standard cut mode, the copy is cut at a standard length.

**Edge button** This button toggles between leading and trailing edge. With this button you add or remove a strip at the leading or trailing edge.

**Zoom button** You can vary the zoom factor between 25% and 400%. Either in fixed steps or percentages.

**Up/Down buttons** When using zoom-, edge- or the standard cut-mode you can modify the values of these modes by pressing the up or down button.

**Start indication** This indication above the start button is on if the scanner is ready to make a scan and is off when the scanner is scanning an original. Also this is the only indication which is on when the scanner is in standby mode.

**Please wait** This indication is blinking when the user has pressed the start button but the system is not ready to scan. E.g. because the system is busy with a multicopy job or because the system is processing a printjob.

**Printer error** This indication is on if there is an error on the printer. Check the operating panel of the printer for the error message.

---

# Switching on/off the copier

Switching on the copier consists of:

- switching on the scanner
- switching on the printer (see page 19).

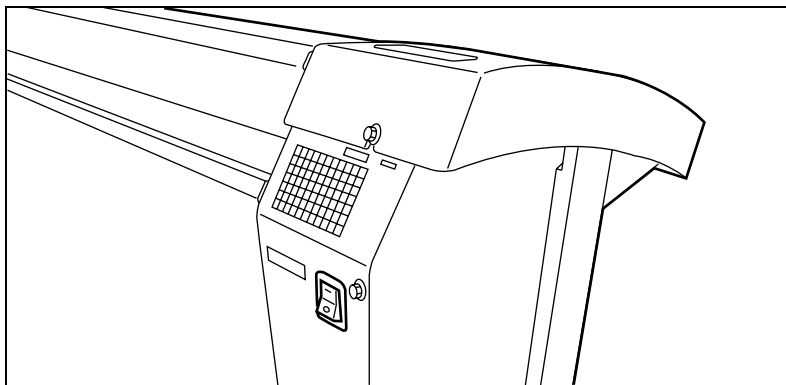
After switching on the system is ready for operation. In this state, the machine is in stand-by mode. There is no need to switch it off after each copy job. You can leave the copier switched on for the rest of the day. At all times, the Océ 9400-II is ready for operation.

If the copier has been inactive for more than 1 minute, the operating panel returns automatically to the stand-by mode. The operating panel of the scanner is activated in the following situations:

- you feed an original
- a button on the operating panel is pressed

## ▼ Switching on the scanner

- 1 Set the on/off switch at the rear of the scanner, to position '1' (see figure 3). If the mains is connected correctly, the green switch will light up.



[3] On/off switch of the scanner

**Note:** *The system is immediately ready for use. The scanner can be switched on and off independently from the printer and without any particular order.*

## ▼ Switching off the scanner

- 1 Set the on/off switch at the rear of the scanner, to position '0' (see figure 3).

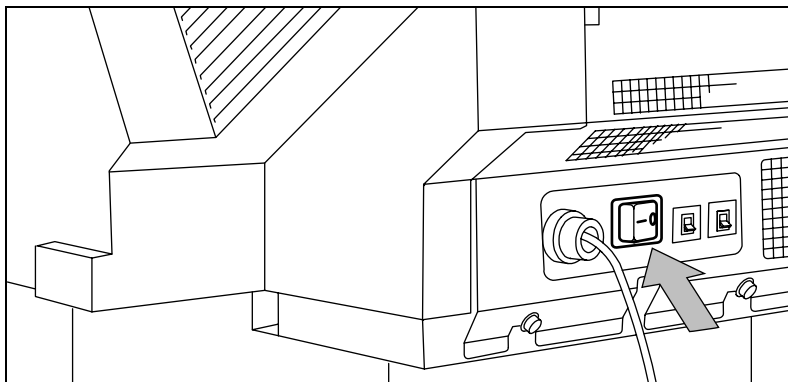
---

# Switching on/off the printer

After switching on the printer is ready for operation.

## ▼ Switching on the printer

- 1 Set the on/off switch at the rear of the printer to position '1' (see figure 4). If the mains is connected correctly, the green switch will light up.



[4] On/off switch of the printer

**Note:** When 'Ready' is displayed on the operating panel the printer is ready for use.

## ▼ Switching off the printer

- 2 Set the on/off switch at the rear of the printer to position '0' (see figure 4).

**Attention:** Switching off the printer during a print job may cause loss of information or a paper jam.



---

## Chapter 2

# Installation of the printer

*This chapter describes how to connect your printer to your host environment and how to configure the printer to your convenience.*



---

# Connect the printer to your host environment

The Océ 9400-II supports several types of interfaces (Centronics, Ethernet 10 & 100 Mb/s, TCP/IP). Through the optional print server Novell and Ethertalk are supported.

To ensure proper operation, please follow the next steps when connecting your host to the Océ 9400-II.

- 1 Ensure both, the host and the Océ 9400-II are switched OFF see ‘Centronics’ on page 23 or ‘SCSI-2’ on page 25.
- 2 Connect the appropriate interface cable to your local host and the corresponding interface connector to the Océ 9400-II see ‘Centronics’ on page 23 or ‘SCSI-2’ on page 25.
- 3 Switch on the Océ 9400-II see ‘Centronics’ on page 23 or ‘Ethernet’ on page 27.
- 4 Enter the Program mode to configure the connection parameters see ‘Centronics’ on page 23, ‘Ethernet’ on page 27 or ‘SCSI-2’ on page 25.
- 5 Enter the Program mode to configure the Océ 9400-II to your requirements see ‘Printing files’ on page 70 or ‘Customizing the printer’ on page 79.
- 6 Leave Program mode. If applicable install and configure the appropriate host software on your local host environment.
- 7 Switch the printer OFF and ON.

**Note:** *For connection settings, you have to switch the printer Off and On again, to take your new parameters into account. Advice: make all settings in one time, then switch the printer Off and On.*

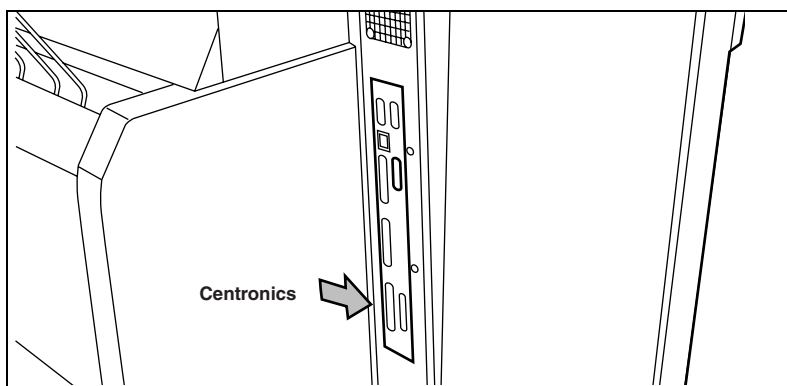
---

# Centronics

Connection through the Centronics interface is straightforward and data transfer is fast. You have to set two parameters, the transmission type and the plot time out.

## ▼ **Connecting Centronics**

- 1 Switch off the printer and host.
- 2 Connect one end of the Centronics cable to the computer's Centronics parallel port.
- 3 Connect the other end to the printer's Centronics parallel port (see figure 5).



[5] Centronics port

- 4 Switch on the printer.

## ▼ **Defining transmissio type**

You can select to enable the IEEE P1284 ECP mode (enabled) or force to use the IEEE P1284 Compatible mode (disabled). Default is disabled.

With some specific host environment, the ECP mode does not work correctly, and the Océ 9400-II offers the option to use the so-called compatible mode (ECP mode disabled). Note that if your host allows this mode, ECP mode is faster than compatible mode. default is ECP disabled.

- 1 Press 'Program' to enter the main menu.
- 2 Select the 'CONNECTIONS' menu using the ◀ or ▶ button.
- 3 Press 'next/select' to enter the 'CONFIGURATION' menu.
- 4 Select the 'CONNECTIONS' menu using the ◀ or ▶ button.
- 5 Press 'next/select' to enter the 'CONNECTION' menu.
- 6 Select the 'CENTRONICS' item using the ◀ or ▶ button.
- 7 Press 'next/select' to enter the 'CENTRONICS' menu.
- 8 Select the 'ECP' mode using the ◀ or ▶ button.
- 9 Press 'next/select' to enter the 'ECP' menu.
- 10 Select the required setting using the ◀ or ▶ button.
- 11 Press 'next/select' to confirm the selected type.
- 12 Press 'Program' to leave the main menu.



### **Defining the end of plot time out**

Normally, a print file will end with an instruction which tells the printer that the file is finished.

However, some print data files do not have an end of print instruction. In this case, the print will be considered as 'finished', when the printer does not receive any more graphic commands on Centronics.

The print time out option, sets the delay after which the print will be considered as finished. You can choose between: 15, 30, 180 and 500 seconds. Default is 180.

- 1 Press 'Program' to enter the main menu.
- 2 Select the 'CONFIGURATION' item using the ◀ or ▶ button.
- 3 Press 'next/select' to enter the 'CONFIGURATION' menu.
- 4 Select the 'CONNECTION' item using the ◀ or ▶ button.
- 5 Press 'next/select' to enter the 'CONNECTION' menu.
- 6 Select the 'CENTRONICS' item using the ◀ or ▶ button.
- 7 Press 'next/select' to enter the 'CENTRONICS' menu.
- 8 Select the 'PLOT TIME OUT' item using the ◀ or ▶ button.
- 9 Press 'next/select' to enter the 'PLOT TIME OUT' menu.
- 10 Select the required plot time out using the ◀ or ▶ button.
- 11 Press 'next/select' to confirm the selected plot time out.
- 12 Press 'Program' to leave the main menu.



---

# SCSI-2

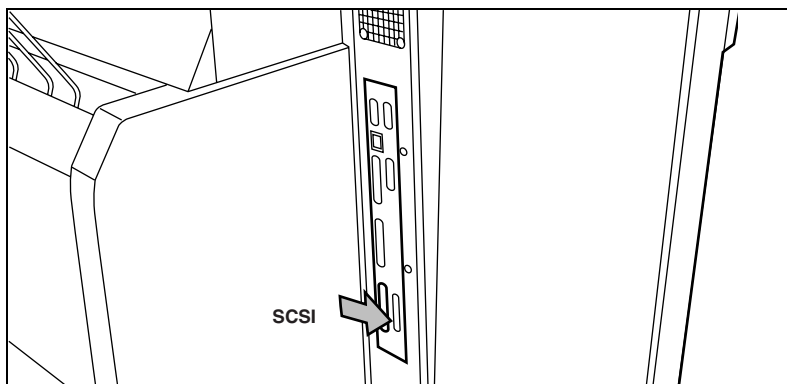
If you are using the SCSI-2 port (for the scan to file option), you need to configure two parameters; the SCSI-2 ID and the terminator.

**Note:** *The SCSI-2 port is used only for the scan to file option to upload data from the controller to the connected PC.*



## Connecting SCSI-2

- 1 Switch off the printer and the host.
- 2 Connect one end of the SCSI-2 cable to the computer's SCSI-2 port.
- 3 Connect the other end to the printer's SCSI-2 port (see figure 6).



[6] SCSI-2 port

- 4 Switch on the printer and the host.



### Defining the SCSI-2 ID

You can select a number between 0 and 7. The default is 0. Check the configuration of your computer to find an ID which is not used by another device on the SCSI-2-bus to which you want to connect the Océ 9400-II.

- 1 Press 'Program' to enter the main menu.
- 2 Select the 'CONFIGURATION' menu using the ◀ or ▶ button.
- 3 Press 'next/select' to enter the 'CONFIGURATION' menu.
- 4 Select the 'CONNECTIONS' menu using the ◀ or ▶ button.
- 5 Press 'next/select' to enter the 'CONNECTION' menu.
- 6 Select the SCSI-2 item using the ◀ or ▶ button.
- 7 Press 'next/select' to enter the SCSI-2 menu.
- 8 Select the 'ID' item using the ◀ or ▶ button.
- 9 Press 'next/select' to enter the 'ID' menu.
- 10 Select the required 'ID' (ranging from 0 to 7) using the ◀ or ▶ button.
- 11 Press 'next/select' to confirm the selected 'ID'.
- 12 Press 'Program' to leave the main menu.
- 13 Switch the printer off/on to activate the configured settings.



### Defining terminator

The termination should be set to 'ON' if the Océ 9400-II is the last device on the SCSI-2 chain. It should be set to 'OFF' when it is placed in between.

- 1 Press 'Program' to enter the main menu.
- 2 Select the 'CONFIGURATION' menu using the ◀ or ▶ button.
- 3 Press 'next/select' to enter the 'CONFIGURATION' menu.
- 4 Select the 'CONNECTIONS' menu using the ◀ or ▶ button.
- 5 Press 'next/select' to enter the 'CONNECTION' menu.
- 6 Select the SCSI-2 item using the ◀ or ▶ button.
- 7 Press 'next/select' to enter the SCSI-2 menu.
- 8 Select the 'TERMINATION' item using the ◀ or ▶ button.
- 9 Press 'next/select' to enter the 'TERMINATION' menu.
- 10 Select 'ON/OFF' using the ◀ or ▶ button.
- 11 Press 'next/select' to confirm the required selection.
- 12 Press 'Program' to leave the main menu.
- 13 Switch the printer off/on to activate the configured settings.

---

# Ethernet

On your controller you find both an AUI transceiver connector (10 MB/s) and an RJ45 connector (10 or 100Mb/s). Ethernet connections can therefore use Thin or Thick Ethernet or UTP cabling.

**Note:** *It is advisable to use the RJ45 100 Mbit to have the highest possible performance.*

*AUI: 10Mbit only*

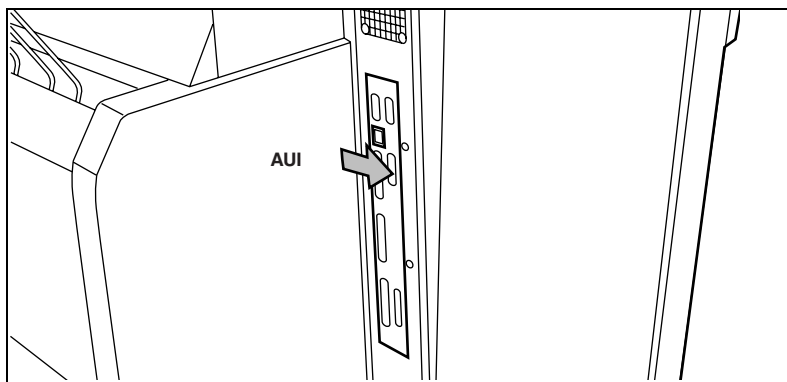
*RJ45 (UTP): 10 & 100 Mbit (automatic adjustment).*

*Do not use the AUI and RJ45 simultaneously.*

---

## Ethernet cabling

An AUI (Attachment Unit Interface) connector is meant to connect a cable from the network interface card in your controller to a transceiver mounted on the backbone Ethernet cable. The backbone cable may be Thin or Thick Ethernet cable.



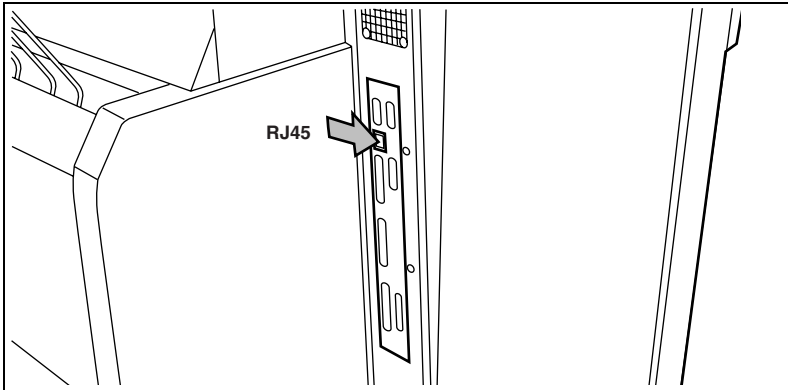
[7] AUI port

UTP (Unshielded Twisted pair) cable looks much like standard phone cable. The cable should have RJ45 plugs.

If you are using the ethernet port you need to configure a list of parameters. In the following procedures all parameters are described.

### ▼ **Connecting Ethernet**

- 1 Connect one end of the Ethernet cable to the computer's Ethernet port.
- 2 Connect the other end to the printer's Ethernet port (see figure 8).



[8] Ethernet port

### ▼ **Setting up the TCP/IP protocol**

You have to configure the printer IP address, subnet mask and default gateway IP address (check with your local administrator) Each of these four addresses are composed of 4 numeric field ranging from 0 to 255. E.g. 194.2.66.146 or 255.255.255.0. On the menu the following order is presented field 0, field 1, field 2, field 3.

- 1 Press 'Program' to enter the main menu.
- 2 Select the 'CONFIGURATION' menu using the ◀ or ▶ button.
- 3 Press 'next/select' to enter the 'CONFIGURATION' menu.
- 4 Select the 'CONNECTIONS' menu using the ◀ or ▶ button.
- 5 Press 'next/select' to enter the 'CONNECTION' menu.
- 6 Select the 'ETHERNET' item using the ◀ or ▶ button.
- 7 Press 'next/select' to enter the 'ETHERNET' menu.
- 8 Select the 'IP ADDRESS' menu using the ◀ or ▶ button.
- 9 Press 'next/select' to enter the 'IP ADDRESS' menu.
- 10 Select the 'FIELD0' menu using the ◀ or ▶ button.
- 11 Press 'next/select' to enter the 'FIELD0' menu.
- 12 Enter the number of 'FIELD0' of your 'IP ADDRESS' using the ◀ or ▶ button.

- 13 Press 'next/select' to confirm the required selection.
- 14 Press 'previous' to go up one level.
- 15 Repeat step 10 to step 14 for 'FIELD1, FIELD2, FIELD3'.
- 16 Press 'previous' to go up one level.
- 17 Select the 'SUBNET MASK' menu using the ◀ or ▶ button.
- 18 Press 'next/select' to enter the 'SUBNET MASK' menu.
- 19 Select the 'FIELD0' menu using the ◀ or ▶ button.
- 20 Press 'next/select' to enter the 'FIELD0' menu.
- 21 Press 'next/select' to confirm the required selection.
- 22 Enter the number of 'FIELD0' of your 'SUBNET MASK' using the ◀ or ▶ button.
- 23 Press 'previous' to go up one level.
- 24 Repeat step 19 to step 23 for 'FIELD1, FIELD2, FIELD3'.
- 25 Press 'previous' to go up one level.
- 26 Select the 'DEF.GATEWAY' menu using the ◀ or ▶ button.
- 27 Press 'next/select' to enter the 'DEF.GATEWAY' menu.
- 28 Select the 'FIELD0' menu using the ◀ or ▶ button.
- 29 Press 'next/select' to confirm the required selection.
- 30 Press 'next/select' to enter the 'FIELD0' menu.
- 31 Enter the number of 'FIELD0' of your 'DEF.GATEWAY' using the ◀ or ▶ button.
- 32 Press 'previous' to go up one level.
- 33 Repeat step 28 to step 32 for 'FIELD1, FIELD2, FIELD3'.
- 34 Press 'Program' to leave the main menu.
- 35 Switch the printer off/on to activate the configured Ethernet-ID.

---

## Supported printing protocols

The Océ 9400-II supports the following printing protocols LPD, FTP, SMB (also known as LAN Manager or Windows networking) on top of TCP/IP. Simultaneous multi protocols and users are supported.

---

## Preferred printing solution

### Windows network

- Use Windows printing through SMB to print directly to the printer from your workstation(s).
- If you experience problems connecting to the printer through SMB or if you want to centralize printing on a server, you can install the printer on the server (for example with a local connection to an lpr port) and then share it to the rest of the network. This can be the case if your printer can be accessed by an important number of clients.

### TCP/IP network.

- TCP/IP is common for Unix, Win 95/98/NT and OS/2 operating systems. For Win 95/98 LPD is not standard and must be supplied by third parties. Contact your local service organisation to check the availability of third party shareware or freeware. Use lpd or ftp (in this preference order).

---

# Printing via LPD

After the network connection for the Océ 9400-II has been set up (see ‘Connect the printer to your host environment’ on page 22), you can print via LPD.

**Note:** *We implement the Line Printer Daemon (LPD) protocol as specified in RCF 1179.*

The Océ 9400-II uses only one queue thus the queue name itself is not important, and you are free to use the queue name you want (e.g. queue 1).

For setting the client side, please contact your system administrator.

For Win NT: `lpr - Shostname - PqueueName (lpr -S194.2.66.146 -Pqueue1)`

---

# Printing via FTP

After the network connection for the Océ 9400-II has been set up you can print via FTP.

**Note:** *We implement the File Transfer protocol (FTP) as specified in RCF 959. We are also web browser compatible and thus the Océ 9400-II printer can be accessed like any Ftp site from your web browser.*



## Printing via FTP

**Note:** *Although FTP is not a standard printing protocol, you can send data files to a remote directory via FTP. This remote directory then allows the data files to be printed.*

- 1 Launch an FTP client.
- 2 Enter the 'ftp' command.
- 3 Open a FTP session with the printer using its address or the registered name (HOSTS or DNS).

**Note:** *Instead of performing steps 2 and 3 you could also enter "ftp host\_name" in the FTP client.*

- 4 Enter your user name (e.g. 'Guest').  
A connection is now set up for the default user 'Guest'.
- 5 In order to be connected to the remote server, you then validate the user connection by typing in the user password (e.g. 'Guest').

**Note:** *As there is no registered user, you can simply press Enter to initiate the connection. User name and password are not checked by the Océ 9400-II.*

- 6 Set the transmission mode to binary by entering 'binary'.
- 7 Go to the jobs directory using the following command: 'cd jobs'.
- 8 Go to the local directory in which the data you want to print are stored (for example C:\DRAWINGS) by using the following command:  
'lcd C:\DRAWINGS'.
- 9 Send the data file (for example: sample.hp) via the 'put' command:  
'put sample.hp'.

**Note:** *The 'mput' command is also supported.*



The data are now sent to the input spool directory of the controller, then processed and finally printed.

- 10 Quit FTP by entering the 'bye' or 'quit' command.

**Note:** *Two other directories are provided: Help and status. Putting files in this directories will result in an 'access denied' message.*

---

# Printing via SMB

On the Océ 9400-II SMB printing is supported for the following types of workstations:

- Windows 95/98
- Windows NT 4.0.

---

## Setting up SMB on Windows 95/98 and NT

Once the Océ 9400-II has been configured for printing via SMB, you can make the Océ 9400-II available on Windows 95/98/NT. This involves the following steps.

### ▼ **Enabling the Océ 9400-II on your Windows 95/98 and NT**

- 1 Log on to your workstation.
- 2 Double-click on the 'Network Neighborhood' icon on your Windows desktop.
- 3 Double-click on the workgroup for which the Océ 9400-II has been assigned.
- 4 Double-click on the device name for which the Océ 9400-II has been configured.

The list of shared print queues appears.

- 5 Double-click on the desired queue, or,  
Right-click on the desired queue then click on install.  
Select OCE 9400-IIPS to be associated with Océ PS driver.  
Select OCE 9400-II to be associated with Océ Windows Raster driver.  
You will be prompted to provide the driver.

Default values:

Workgroup: OCE-PRINTERS

Device Name: P-xxxxxxxxxxxx where xxx are the ethernet address of your printer e.g. P-08003E27E100.

Please contact your local service technician for modifying these default values.

**Note:** *Be sure that you do not have two printers with the same device name.*

---

## Troubleshooting

If the device cannot be accessed in the network neighborhood (either because the device cannot be opened or the workgroup the device belongs to does not show up) follow the next procedure:

- 1 Click on the "Start" Icon.
- 2 Click on the "Find" Icon.
- 3 Click on the "Computer..." icon.
- 4 Enter the device name of the Océ 9400-II machine and click on the "Find Now" icon.
- 5 When the device is found, follow the above procedure starting from step 4.

---

# Setup the memory configuration

Depending on the complexity of print jobs, the printer's memory partitions can be configured.

---

## Input buffer

This option enables you to set the print spool input buffer size. You can select small or large. A small buffer allows more free memory for processing more complex files. A large buffer allows the host to be freed sooner. Default is 'large'.

Files in the input buffer will be processed and printed in the same order as they arrive.

### ▼ Setting the input buffer size

- 1 Press 'Program' to enter the main menu.
- 2 Select the 'CONFIGURATION' item using the ◀ or ▶ button.
- 3 Press 'next/select' to enter the 'CONFIGURATION' menu.
- 4 Select the 'BUFFERS' item using the ◀ or ▶ button.
- 5 Press 'next/select' to enter the 'BUFFERS' menu.
- 6 Select the 'INPUT BUFFER' item using the ◀ or ▶ button.
- 7 Press 'next/select' to enter the 'INPUT BUFFER' menu
- 8 Select the required input buffer size using the ◀ or ▶ button.
- 9 Press 'next/select' to confirm the selected size.
- 10 Press 'Program' to leave the main menu.

### ▼ Activating the new input buffer size

- 1 Switch the printer off and then on again.

**Note:** *If you do not restart the printer the new memory allocation is not taken into account. Any print data in the printer's memory (files in the queue), will be lost when you switch off the printer.*

---

## Bitmap buffer

This buffer defines a percentage of the total RAM memory that can be used as the bitmap partition. This value will be set between two values depending on the RAM configuration.

The installed RAM can be divided into:

- bitmap partition
- processing area for files

The size of the bitmap partition determines the max. length of the image to be printed on a given paper roll (or manual sheet).

The size of the buffer setting has to be adjusted according to the type of roll you use and the print length of your file (or original).

There is no need to use a larger Bitmap buffer than required because this may result in lost of space for the processing area.

The minimum percentage always represents an E+ size. If you never print or copy files and/or originals that are longer than the E+ length (48"), you have to setup the minimum Bitmap buffer percentage.

If you print or copy files and/or originals that are longer, then you have to setup the right Bitmap buffer size.

Use the following formula to determine the percentage setting; (Paper width \* print length \* conversion factor) / controller memory configuration.

Conversion factor = 1.08 (width and length in inches)  
1.67 E-3 (width and length in mm).

E.g.: you print 70" on a D+ paper and you have 64 MB of memory;  
 $BM\% = 24 * 70 * 1.08 / 64 = 29\%$ .

E.g.: you print 6 meters on an A0 paper and you have 128 MB of memory  
 $BM\% = 841 * 6000 * 1.67E-3 / 128 = 66\%$ .

## ▼ Setting the bitmap buffer

- 1 Press 'Program' to enter the main menu.
- 2 Select the 'CONFIGURATION' item using the ◀ or ▶ button.
- 3 Press 'next/select' to enter the 'CONFIGURATION' menu.
- 4 Select the 'BUFFERS' item using the ◀ or ▶ button.
- 5 Press 'next/select' to enter the 'BUFFER' menu.
- 6 Select the 'BITMAP BUFFER' item using the ◀ or ▶ button.
- 7 Press 'next/select' to enter the 'BITMAP BUFFER' menu
- 8 Select the required bitmap partition using the ◀ or ▶ button
- 9 Press 'next/select' to confirm the required partition.
- 10 Press 'Program' to leave the main menu.

## ▼ Activating the new bitmap buffer size

- 1 Switch the printer off and then on again.

**Note:** *If you do not restart the printer the new memory allocation is not taken into account. Any print data in the printer's memory will be lost when you switch off the printer.*

RAM	Min	Max
64	31 % (E+ paper)	71 % (2.92 meters on E+ paper)
128	16 % (E+ paper)	78 % (6.41 meters on E+ paper)
256	9 % (E+ paper)	84 % (13.82 meters on E+ paper)

**Note:** *The presented memory percentages are only an indication and may vary a little from one firmware release to another one.*

If you experience difficulties to print your files with these settings, then you can try to change the value knowing that:

- Increasing the bitmap buffer size, decreases the processing area size.
- The size of the processing area determines the ability to process complex files (e.g. larger number of vectors).
- A high percentage of bitmap partition allocation, allows printing of long plots without windowing.
- A low percentage of bitmap partition allocation, means the ability of processing very complex files (vector and raster).

---

## Chapter 3

# (Re)load media and toner

*This chapter describes how to insert new media, how to add toner and how to program the media settings.*



---

# Inserting a new print material roll

Before you use the copier for the first time, you have to choose the order in which the paper formats are shown on the scanner operating panel. You can do this by choosing between ISO, ANSI or ARCHITECT paper format on the printer operating panel.

## ▼ Setting the media format

- 1 Press 'Program' to enter the main menu.
- 2 Select the 'CONFIGURATION' item using the ◀ or ▶ button.
- 3 Press 'next/select' to enter the 'CONFIGURATION' menu.
- 4 Select 'PLOT MANAGER' using the ◀ or ▶ button.
- 5 Press 'next/select' to enter the 'PLOT MANAGER' menu.
- 6 Select 'MEDIA FORMAT' using the ◀ or ▶ button.
- 7 Press 'next/select' to enter the 'MEDIA FORMAT' menu.
- 8 Select the required format using the ◀ or ▶ button.
- 9 Press 'next/select' to confirm the selected format.
- 10 Press 'Program' to leave the main menu.

If the message 'ROLL EMPTY' appears in the display, you have to load a new roll of print material. Depending on your configuration you can reload roll 1 and/or roll 2.

**Note:** *After reloading the plot is re-printed automatically.*

---

## Automatic roll switching

If a roll becomes empty the printer reports a roll empty error. The printing stops. The printer clears the paperpath and generates a message to indicate that the printer is ready to accept a new print command. If the correct material type and material format is on the other roll, the printer will use the other roll and will resume printing automatically.

If there is no match of material type and material format, you have to refill the empty roll.



▼ **Defining automatic roll switching**

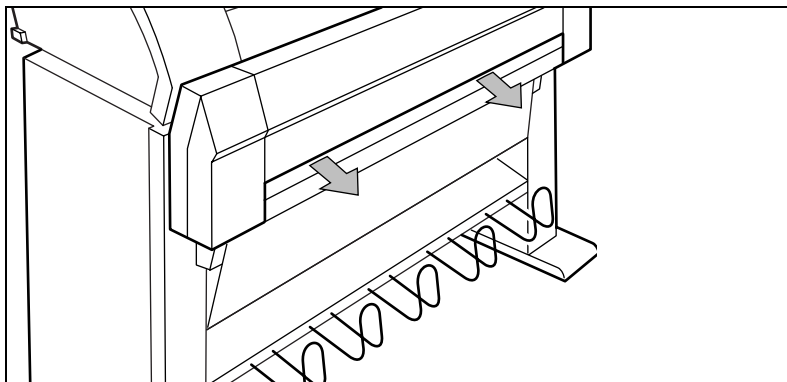
- 1 Press 'Program' to enter the main menu.
- 1 Select the 'MEDIA SETTINGS' item using the ◀ or ▶ button.
- 2 Press 'next/select' to enter the 'MEDIA SETTINGS' menu.
- 3 Select 'MEDIA MODE' using the ◀ or ▶ button.
- 4 Press 'next/select' to enter the 'MEDIA MODE' menu.
- 5 Select 'AUTO SWITCH' using the ◀ or ▶ button.
- 6 Press 'next/select' to enter the 'AUTO SWITCH' menu.
- 7 Select the required setting 'On' or 'OFF' using the ◀ or ▶ button.
- 8 Press 'next/select' to confirm the selected setting.
- 9 Press 'Program' to leave the main menu

---

## Reloading rolls

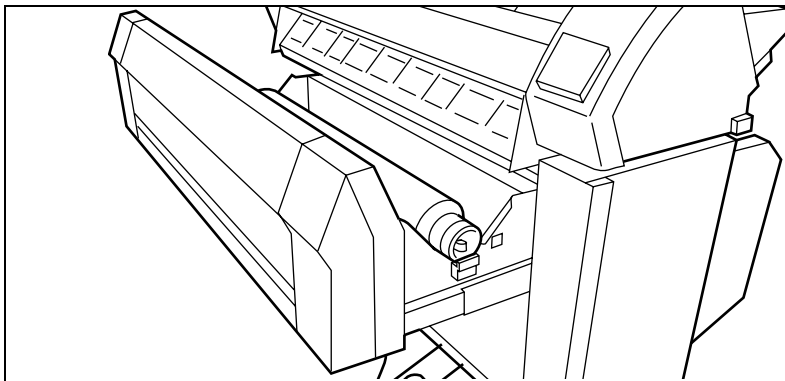
▼ **Reloading roll 1**

- 1 Open the drawer completely (see figure 9).



[9] Opening the drawer

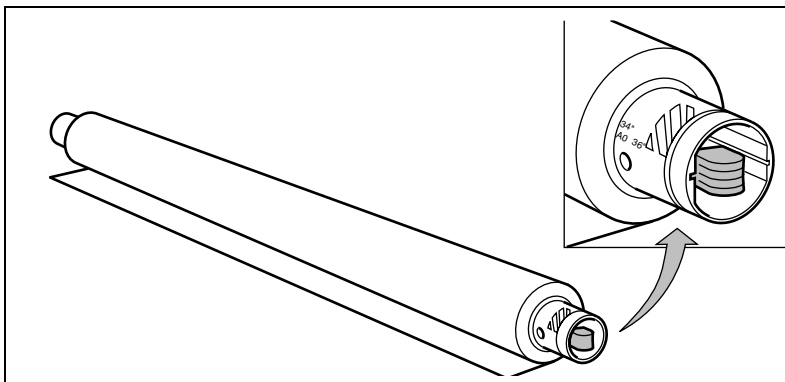
- 2** Remove the roll holder from the drawer (see figure 10 on page 42)



[10] Removing the roll holder from the drawer

- 3** Remove the empty core from the roll holder while pressing the knob (see figure 11).
- 4** Slide the roll holder in the new roll of material while pressing the knob (see figure 11).

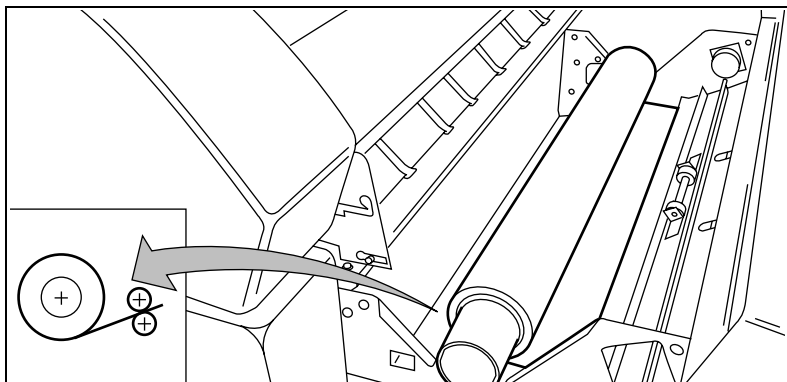
It is important to have the knob at the right hand side and paper as shown in figure 11.



[11] Pressing the knob

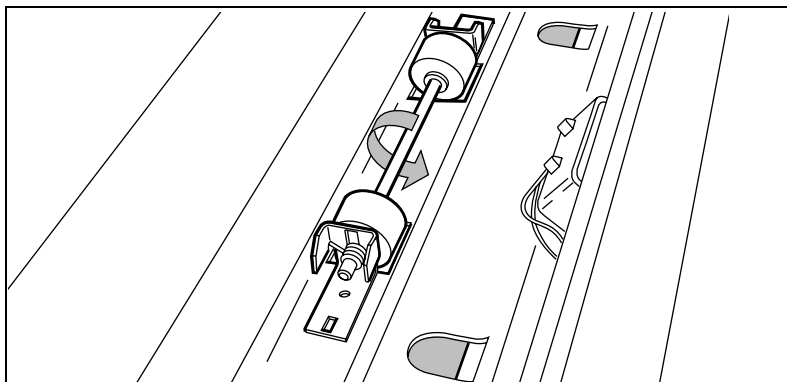
- 5** Align the roll with the appropriate lines on the roll holder while pressing the knob. This line has to be completely visible.

- 6** Place the roll holder with the material in the drawer (see figure 12).



[12] Repositioning the roll

- 7** Feed the material between the input guide plates against the rollers.
- 8** Turn the rollers until the material is visible (see figure 13). Also refer to the sticker inside the drawer.



[13] Feeding the material

- 9** If you have inserted a roll with another material or with a different width, you have to program the correct width and material type (refer to 'Programming media settings' on page 48).

If you want to cut the paper to get a straight leading edge refer to 'Cutting the paper to get a straight leading edge' on page 44.

Otherwise continue with the next step.

- 10** Close the drawer.
- 11** Press the button 'Cancel/Continue'.

---

## Cutting the paper to get a straight leading edge

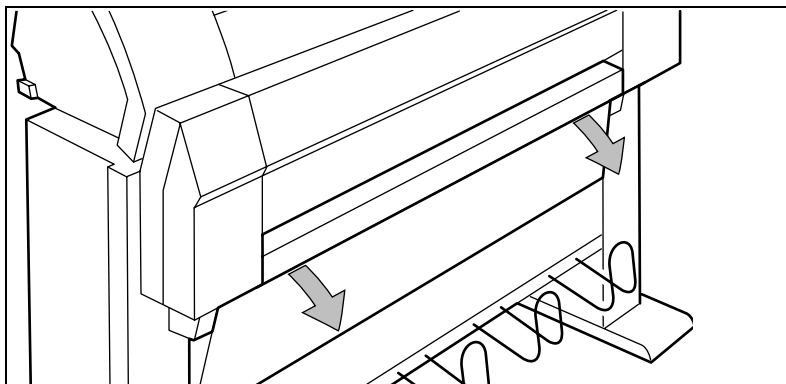
If the paper does not have a straight leading edge, you can cut it off at right angles from the roll.

### ▼ Cutting the paper from roll 1 or roll 2

- 1 Open the drawer.
- 2 Feed the paper manually until it is approximately 5 cm above the top drawer.
- 3 Close the paper drawer.
- 4 Press 'Program' to enter the main menu.
- 5 Select the 'MEDIA SETTINGS' item using the ◀ or ▶ button.
- 6 Press 'next/select' to enter the 'MEDIA SETTINGS' menu.
- 7 Select 'CUT MEDIA' using the ◀ or ▶ button.
- 8 Press 'next/select' to cut the paper.
- 9 Open the paper drawer.
- 10 Remove the scrap of material.
- 11 Pull back the material until it is visible and positioned correctly (see figure 13 on page 43).
- 12 Close the drawer.
- 13 Press the button 'Cancel/Continue'.

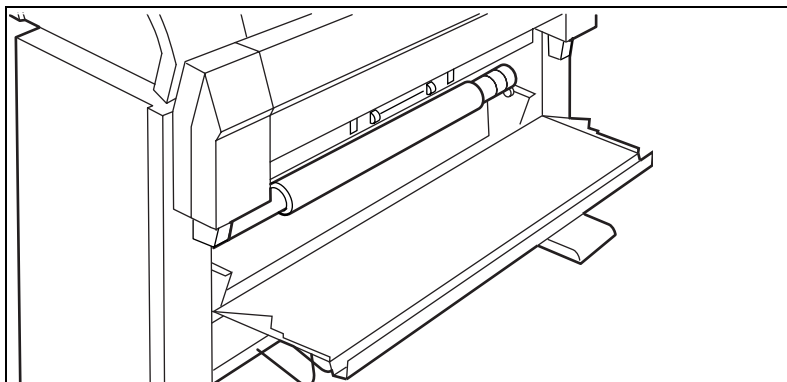
### ▼ Reloading roll 2

- 1 Open the cover to get access to roll 2 (see figure 14).



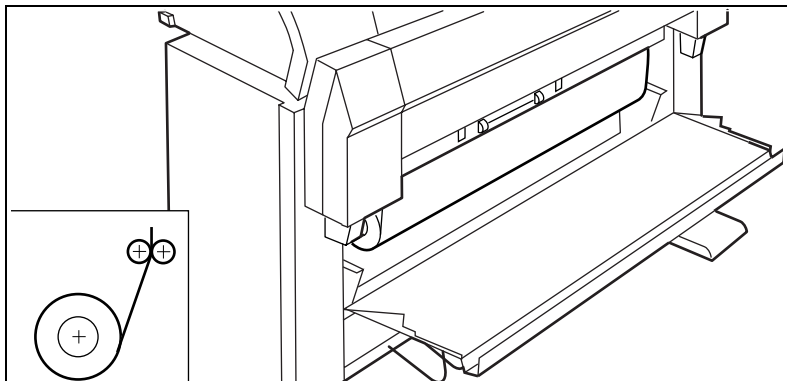
[14] Opening the lower drawer

- 2 Remove the roll holder (see figure 15).



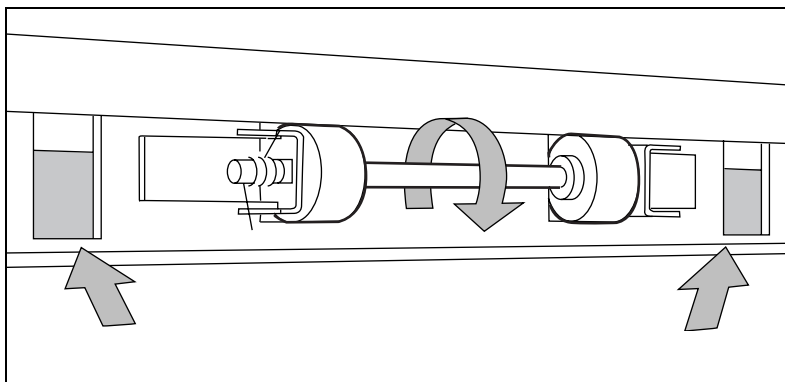
[15] Removing the roll holder from the lower drawer

- 3 Remove the empty core from the roll holder while pressing the knob (see figure 11 on page 42).
- 4 Slide the roll holder in the roll of print material while pressing the knob (see figure 11 on page 42).  
It is important to have the knob at the right hand side and the paper as shown in figure 11.
- 5 Align the roll with the appropriate lines on the roll holder while pressing the knob.
- 6 Place the roll holder with the material in the lower paper compartment (see figure 16).



[16] Repositioning the roll

- 7** Feed the material between the input guide plates against the rollers. Turn the rollers until the material is visible (see figure 17). Also refer to the sticker inside the drawer.



[17] Feeding the material

- 8** If you have inserted a roll with another material or with a different width, you have to program the correct width and material type (refer to 'Programming media settings' on page 48).  
If you want to cut the paper to get a straight leading edge refer to 'Cutting the paper to get a straight leading edge' on page 44.  
Otherwise continue with the next step.
- 9** Close the lower paper compartment.
- 10** Press the button 'Cancel/Continue'.

# Printing using the manual feed

There are two possibilities to select manual feed:

- via remote control commands added to the print file (by means of Plot Director, drivers (see 'Use of the Scan-to-File option' on page 75).
- by changing the 'MEDIA MODE' in the program mode.

If the user wants to use manual feed, he has to:

- 1 program the media settings on the printer, refer to 'Programming media settings' on page 48.
- 2 send the file.
- 3 wait until the message 'FEED SHEET' appears in the printer display.
- 4 feed the sheet of paper portrait into the printer.
- 5 hold the paper until the engine pulls-in the first part of the sheet.

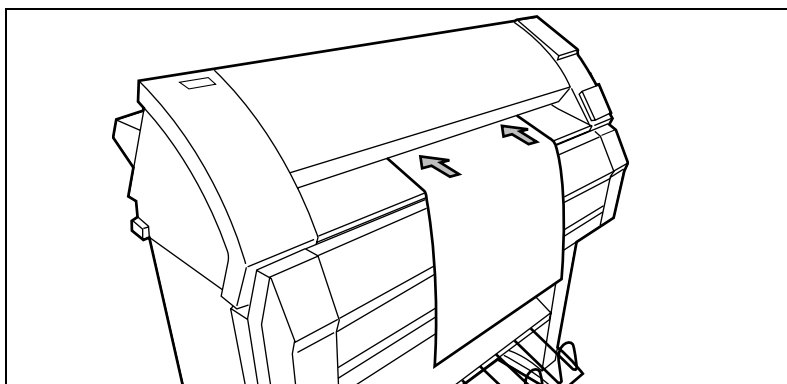
If the user has selected manual feed in a print file, the printer will ask the user via the operating panel, to feed the sheet into the printer, at the moment this job is processed. There will be a user-selectable time-out between 30 and 300 seconds on feeding the sheet. Default timeout is 60 seconds. See 'Setting the time-out for manual feed' on page 50. If the user does not feed the sheet within this time the job is flushed and the next job will be processed.



## Inserting print material in the manual feed

- 1 Feed the print material centrally into the feed table in accordance with the guidelines (see figure 18).

**Note:** *The minimum length of the print material must be 420 mm.*



[18] Manual feed

# Programming media settings

If you have inserted a new roll with another material or with a different width, you have to program the new roll specifications. These specifications are:

- width of the material.

You can select A0 (841 mm), A1 (594 mm), A2 (420 mm), A3 (297), E (34"), D (22"), C (17"), B (11"), E+ (36"), D+ (24"), C+ (18"), B+ (12"), 30", 500 mm, 700 mm and B1 (707 mm). Default is 36".

- kind of media.

- auto roll selection:

By activating this function the machine automatically selects the correct roll, depending on original size.

- auto roll switch:

If you activate this function the machine automatically switches to the other roll, if the used one becomes empty. The switch only occurs if the kind of media and the width of the material is the same for both rolls.

Materials	Weight	Media type setting
<i>Plain paper</i>	75 g/m <sup>2</sup>	paper
<i>Plain paper</i>	110 g/m <sup>2</sup>	paper
<i>ECO papers</i>	75 g/m <sup>2</sup>	paper
<i>Translucent paper</i>	60 g/m <sup>2</sup>	translucent
<i>Transparent paper</i>	80/85 g/m <sup>2</sup>	transp <= 95 gr
	90/95 g/m <sup>2</sup>	transp <= 95 gr
	110/115 g/m <sup>2</sup>	transp 110 gr
<i>Polyester film</i>	3.5 mil	film <= 4 mil
<i>PPC film</i>	3.5 mil	film <= 4 mil
<i>PPC Type C Polyester film</i>	3.5 mil	film <= 4 mil
<i>Clear polyester film</i>	4 mil	film <= 4 mil
<i>Contrast film</i>	3.5 mil	film <= 4 mil
<i>Polyester film **</i>	4.5 mil	film 4.5 mil
<i>Vellum</i>	20 lbs	vellum
<i>Vellum</i>	16 lbs	vellum
<i>Contrast paper</i>	135 g/m <sup>2</sup>	paper
<i>Fluor paper</i>	90 g/m <sup>2</sup>	paper
<i>Pastel paper</i>	80 g/m <sup>2</sup>	paper

\*\* The sticker on this polyester roll contains '4 mil', but the thickness is really 4.5 mil.



▼ **Programming media width settings**

- 1 Press 'Program' to enter the main menu.
- 2 Select the 'MEDIA SETTINGS' item using the ◀ or ▶ button.
- 3 Press 'next/select' to enter the 'MEDIA SETTINGS' menu.
- 4 Select 'ROLL 1', 'ROLL 2', 'MANUAL FEED' using the ◀ or ▶ button.
- 5 Press 'next/select' to enter the 'ROLL' or 'MANUAL FEED' menu.
- 6 Select the 'WIDTH' item using the ◀ or ▶ button.
- 7 Press 'next/select' to enter the 'WIDTH' menu.
- 8 Select the desired width using the ◀ or ▶ button.
- 9 Press 'next/select' to confirm the selected width.
- 10 Press 'Program' to leave the main menu.

▼ **Programming media type settings**

- 1 Press 'Program' to enter the main menu.
- 2 Select the 'MEDIA SETTINGS' item using the ◀ or ▶ button.
- 3 Press 'next/select' to enter the 'MEDIA SETTINGS' menu.
- 4 Select 'ROLL 1', 'ROLL 2', 'MANUAL FEED' using the ◀ or ▶ button.
- 5 Press 'next/select' to enter the 'ROLL' or 'MANUAL FEED' menu.
- 6 Select the 'TYPE' item using the ◀ or ▶ button.
- 7 Press 'next/select' to enter the 'TYPE' menu.
- 8 Select the desired media type using the ◀ or ▶ button.
- 9 Press 'next/select' to confirm the selected media type.
- 10 Press 'Program' to leave the main menu.

▼ **Programming default paper feed**

Roll 1 is default.

- 1 Press 'Program' to enter the main menu.
- 2 Select the 'MEDIA SETTINGS' item using the ◀ or ▶ button.
- 3 Press 'next/select' to enter the 'MEDIA SETTINGS' menu.
- 4 Select 'MEDIA MODE' using the ◀ or ▶ button.
- 5 Press 'next/select' to enter the 'MEDIA MODE' menu.
- 6 Select the 'DEF. PAPER FEED' using the ◀ or ▶ button.
- 7 Press 'next/select' to enter the 'DEF. PAPER FEED' menu.
- 8 Select the default roll using the ◀ or ▶ button.
- 9 Press 'next/select' to confirm the selected mode.
- 10 Press 'Program' to leave the main menu.

### ▼ **Programming automatic roll selection**

- 1 Press 'Program' to enter the main menu.
- 2 Select the 'MEDIA SETTINGS' item using the ◀ or ▶ button.
- 3 Press 'next/select' to enter the 'MEDIA SETTINGS' menu.
- 4 Select 'MEDIA MODE' using the ◀ or ▶ button.
- 5 Press 'next/select' to enter the 'MEDIA MODE' menu.
- 6 Select 'AUTO ROLL' using the ◀ or ▶ button.
- 7 Press 'next/select' to enter the 'AUTO ROLL' menu.
- 8 Select on or off using the ◀ or ▶ button.
- 9 Press 'next/select' to confirm the selected mode.
- 10 Press 'Program' to leave the main menu.

### ▼ **Programming automatic switching**

- 1 Press 'Program' to enter the main menu.
- 2 Select the 'MEDIA SETTINGS' item using the ◀ or ▶ button.
- 3 Press 'next/select' to enter the 'MEDIA SETTINGS' menu.
- 4 Select 'MEDIA MODE' using the ◀ or ▶ button.
- 5 Press 'next/select' to enter the 'MEDIA MODE' menu.
- 6 Select 'AUTO SWITCH' using the ◀ or ▶ button.
- 7 Press 'next/select' to enter the 'AUTO SWITCH' menu.
- 8 Select on or off using the ◀ or ▶ button.
- 9 Press 'next/select' to confirm the selected mode.
- 10 Press 'Program' to leave the main menu.

### ▼ **Setting the time-out for manual feed**

Default is 60 seconds.

- 1 Press 'Program' to enter the main menu.
- 2 Select the 'MEDIA SETTINGS' item using the ◀ or ▶ button.
- 3 Press 'next/select' to enter the 'MEDIA SETTINGS' menu.
- 4 Select 'MANUAL FEED' using the ◀ or ▶ button.
- 5 Press 'next/select' to enter the 'MANUAL FEED' menu.
- 6 Select the 'TIMEOUT' using the ◀ or ▶ button.
- 7 Press 'next/select' to enter the 'TIMEOUT' menu.
- 8 Select the desired timeout using the ◀ or ▶ button.
- 9 Press 'next/select' to confirm the selected timeout.
- 10 Press 'Program' to leave the main menu.

---

# Refilling toner

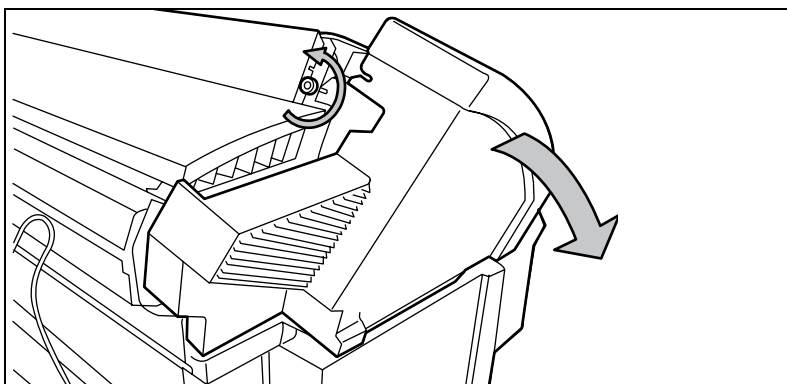
If the message 'REFILL TONER' --- > Press Continue, appears in the display, you must refill toner immediately.



## Refilling toner

**Attention:** Use only Océ B4 toner (the B4 toner is equal to the Océ 9400 toner).

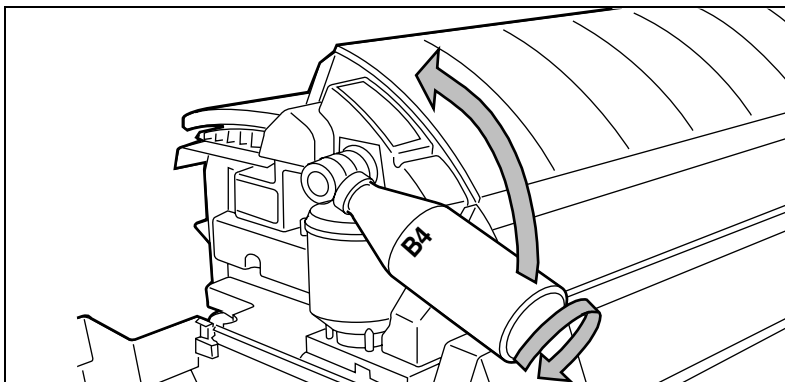
- 1 Unscrew the knurled nut at the left hand side of the printer and open the left cover (see figure 19).



[19] Unscrewing the knurled nut and opening the cover

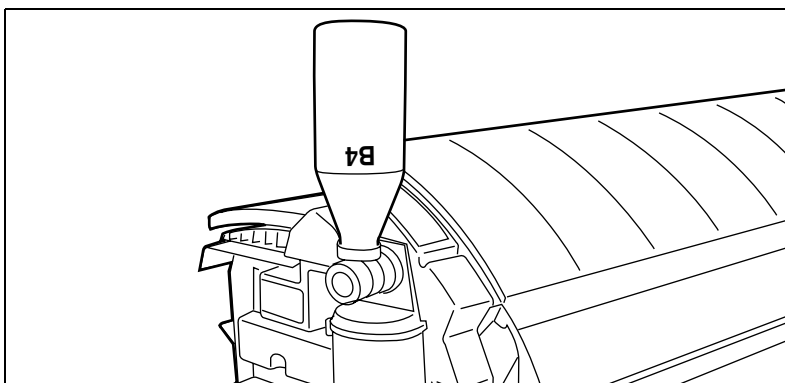
- 2 Shake the toner bottle thoroughly and open the bottle.

- 3 Screw in the bottle clockwise in a slanted position (see figure 20).



[20] Screwing in the bottle

- 4 Move the toner bottle to a vertical position (see figure 20) and 21).



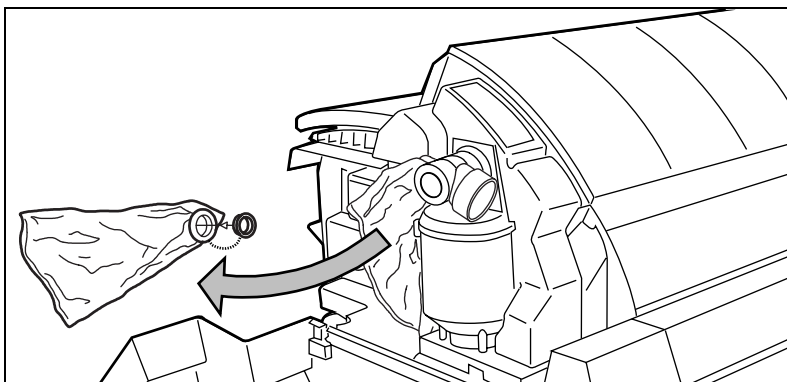
[21] Adding toner

- 5 Tap the toner out of the bottle.
- 6 When the toner bottle is empty return the bottle to the original position.
- 7 Unscrew the toner bottle anti clockwise.



### Replacing the waste toner bag

- 8 Pull the waste toner bag from the holder and place the cap provided on the bag (see figure 22).



[22] Replacing the waste toner bag

- 9 Slide a new waste toner bag over the holder.
- 10 Close the cover and tighten the knurled nut.
- 11 Press the 'Continue' button to resume printing.



---

# Chapter 4

## Copy jobs

*This chapter describes how to make copies.*



---

# Introduction

With the Océ 9400-II, you can make copies on paper, transparent paper, vellum and polyester film, while Océ's Image Logic Technology ensures optimal copy quality.

Depending on your configuration your system is equipped with a 1 roll- or 2 roll-dispenser. With the use of the 'media' button you can select from which roll you want to copy, or if you want to manually feed a sheet of paper.

With the Océ 9400-II you can make 1:1 copies and you can reduce or enlarge your original from 25% to 400%. You can set the zoom in fixed or in % steps. The default setting is 100%.

The Océ 9400-II cuts the paper to the length of the original, this is called synchro cut. Or, if you have selected standard cut mode, the copy is cut at a standard length, (see 'Copying using synchro or standard cut' on page 63).

The automatic exposure setting ensures the production of background-free copies from most line-drawings. If you have an extremely dark or light original, or an original with pasted parts or photographs, you may have to adjust the exposure setting manually (see 'Modifying the exposure' on page 67).



---

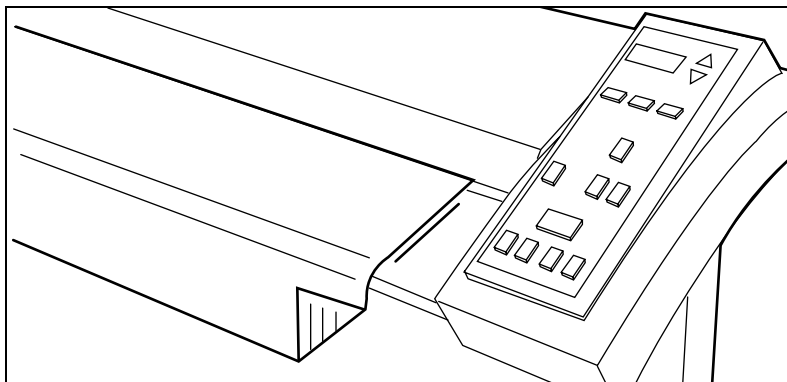
# Making copies

The copying process starts after pressing the 'start' button. Before pressing the 'start' button, you can change the settings.



## Feeding the original

- 1 Insert the original face down and right aligned, along the original guide on the scanner feed table in such way that the line is completely visible (see figure 23).



[23] Inserting the original

The original will be transported about 1 centimeter to a defined position.

- 2 Now you are ready to change settings or to start the copy process (see 'Starting the copy process' on page 58).  
If you make a copy within the time-out of 1 minute, the machine will use the settings of the previous copy job.

---

## Starting the copy process

If you press the 'start' button without changing any settings, the settings of the previous copy job will be used or the default settings of the machine:

- number of copies 1
- using roll 1
- zoom 100%
- synchro cut
- no leading /trailing edge
- auto exposure on; exposure setting 0.

Default settings are used in the following situations:

- after switching on
- after pressing stop/correct twice
- after a time-out of 1 minute (since the end of previous copy job has expired).

If the 'start' button is pressed and the printer is not busy, the original will be scanned. After the original is scanned, it will be returned to the operator.

During the scanning process no changes in settings can be made.

When the original is returned completely, it can be removed and a new original can already be fed and settings programmed.

If the printer is busy at the moment you press the 'start' button, the 'PLEASE WAIT' indicator lights up. Printing will resume 1 minute after the copying process is finished. The scanning will start automatically when the printer is ready again.

---

## Activating/de-activating the rewind function

**Note:** *The default setting is configured by the Océ service technician.*

If you have a very precious original, it may be useful not to return the original back to the operator. In this case you can use the 'start' button to activate a deviation from the default settings.

Three default settings are possible:

- 1 the original is always rewinded after scanning.
- 2 the original is rewinded after scanning, unless you tell the scanner to leave the original at the back of the scanner.
- 3 the original is not rewinded, unless you tell the scanner to feed the original back to the front of the scanner.

If you feed an original, and the rewind function is not active, you have to press the 'start' button only for the first original. The next originals will be fed automatically (stream feed). Make sure you have made new settings before feeding the original.

### ▼ **De-activating the rewind function (in situation 3)**

- 1 Insert the original face down and right aligned.
- 2 Make the required settings.
- 3 Press the 'start' button.
- 4 During scanning press the 'start' button again. The indication light above the start button is flashing.
- 5 The original will be hold at the back of the scanner.

### ▼ **Activating the rewind function (in situation 2)**

- 1 Insert the original face down and right aligned.
- 2 Make the required settings.
- 3 Press the 'start' button.
- 4 During scanning press the 'start' button again. The indication light above the start button is flashing.
- 5 The original will be rewinded after scanning.

The settings will return to default,

- if no original is fed,
- an error has occurred,
- the correction button is pressed,
- the panel time out has exceeded.

---

# Change settings

To perform special copy jobs, the Océ 9400-II offers you the possibility to change settings, to match your requirements. This section explains in detail how to change these particular settings.

---

## Number of copies

If you want to have multiple copies from one original you have to enter the desired number of copies on the scanner operating panel. The quantity of copies will count down on the operating panel of the printer. The original will be scanned just once and the required number of copies will be processed.

Refer to ‘Product specifications scanner’ on page 131 for the limitation of multiple copy jobs.

### ▼ **Selecting the number of copies**

- 1 Enter the number of copies (1 upto 19) using the ‘+’ or ‘-’ button on the scanner operating panel.  
The display shows the number of copies.

---

## Copying using roll 1 or roll 2

You can select between two rolls by pressing the ‘media’ button. When a roll is chosen, the copy material is taken from the selected roll.

**Note:** *Only use paper as specified in ‘Copy material that can be used’ on page 137.*

### ▼ **Selecting roll 1, roll 2 or manual feed**

- 1 Press the ‘media’ button until the indicator that corresponds with your choice lights up.

---

## Copying using manual feed

If you want to copy a job on a paper type and/or size that is not available on the paper rolls, it can be convenient to manually feed sheets of paper instead of changing the paper rolls. The sheet feed is a special slot just above the paper roll drawers on the print engine. You can insert pre-cut copy material in this slot, one sheet at a time. Also refer to 'Printing using the manual feed' on page 47.

You have to program the media settings before using manual feed. Refer to 'Programming media settings' on page 48.

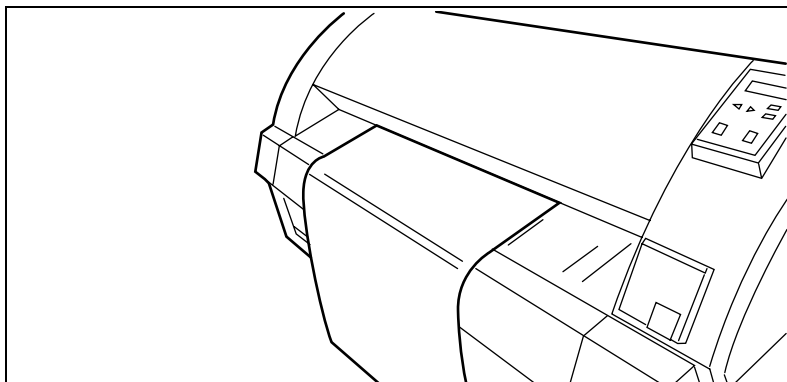


### Selecting manual feed

- 1 Feed the original in portrait orientation.
- 2 Press the 'media' button until the manual feed indicator lights up.
- 3 .Make other settings if required.
- 4 Press the 'start' button.
- 5 Wait for the message 'FEED SHEET' in the printer display.
- 6 Feed the copy material in portrait orientation (min. length 420 mm).
- 7 Hold the paper until the engine pulls-in the first part of the sheet.

**Attention:** *If sheets of copy material are curled, feed them in with the curl facing down, otherwise the drum can be damaged.*

- 8 If the copy job requires more sheets, the printer display will ask to feed the next sheet.
- 9 Repeat step 5 to 8 to complete the job.



[24] Manually feeding a sheet of paper

---

**Attention:** *If you do not wait until the message ‘FEED SHEET’ appears, you may get a paper jam, or a print job is using the wrong sheet of paper.*

**Note:** *Manual feed time-out (see ‘Setting the time-out for manual feed’ on page 50).*

---

## Reduction/enlargement

With the Océ 9400-II you can reduce or enlarge your original from 25% to 400%. By pressing the ‘zoom’ button you can toggle between the fixed step zoom mode or the % zoom mode. In fixed steps mode 8 pre-set zoom settings are available. You can select the zoom factor by means of the ‘up’ or ‘down’ button when the indication is flashing. Also refer to ‘Overview of standard zoom formats’ on page 139.

### ▼ **Making reduced/enlarged copies with pre-set zoom settings**

- 1 Press the ‘zoom’ button to activate the steps zoom mode.
- 2 Press the ‘up’ or ‘down’ button to select the required reduction/enlargement ratio.

The display shows the chosen ratio. If you make adjustments using this button, one of the indications above the button is flashing. If the adjustment differs from the default setting, the indication remains on. You confirm the setting by pressing the zoom, edge, cut, media or start button.

### ▼ **Making reduced/enlarged copies with 1% steps**

- 1 Press the ‘zoom’ button to activate the % zoom mode.
- 2 Press the ‘up’ or ‘down’ button to select the required reduction/enlargement ratio.

The display shows the chosen ratio. If you make adjustments using this button, one of the indications above the button is flashing. If the adjustment differs from the default setting, the indication remains on. You confirm the setting by pressing the zoom, edge, cut, media or start button.

---

## Copying using synchro or standard cut

In synchro cut mode, the copy is cut at the length of the original, taking into account the zoom factor and the leading/trailing edge setting. Synchro cut mode is selected by default.

In standard cut mode, the copy is cut at a standard format (portrait). You select the width of the standard format with the 'up' or 'down' button.

**Example:** selecting 36 inches, means selecting a format of 36 inches width and a corresponding 48 inches length. Independently of the roll width, the material is cut at a length of 48 inches.

**Note:** Depending on the used range of ISO, ANSI or ARCH you get the paper sizes mentioned in the appropriate column (see 'Order of standard sizes for using standard cut' on page 140).

If you make adjustments in standard mode using the cut button, the indication 'standard' above the button is flashing. After confirming the standard selection, the indication remains on. You confirm the setting by pressing the zoom, edge, cut, media or start button.

When choosing standard cut, the system always cuts at the selected length. Even if the real original length is shorter or longer than the selected length, taking into account the zoom factor and the leading/trailing edge setting, the cut will be made at the selected length.



### Selecting synchro or standard cut

- 1 Press the 'cut' button to select the cut mode you want. The indicator of the chosen cut mode will light.  
If you select standard cut:
- 2 Press the 'up' or 'down' button' to select the required cut length.  
The required length is shown in the operating display. You confirm the setting by pressing the zoom, edge, cut, media or start button.  
For an overview of the possible standard lengths refer to 'Order of standard sizes for using standard cut' on page 140.

---

## Adjusting the leading/trailing edge

Increasing the copy length to accommodate for a filing strip is possible by selecting a positive leading/trailing edge.

If you don't want the filing strip to show on the copy, it is possible to remove it, by selecting a negative leading or trailing edge. The adjustment steps are indicated on the operating panel, expressed in millimetres or inches.

### ▼ Adjusting the leading/trailing edge

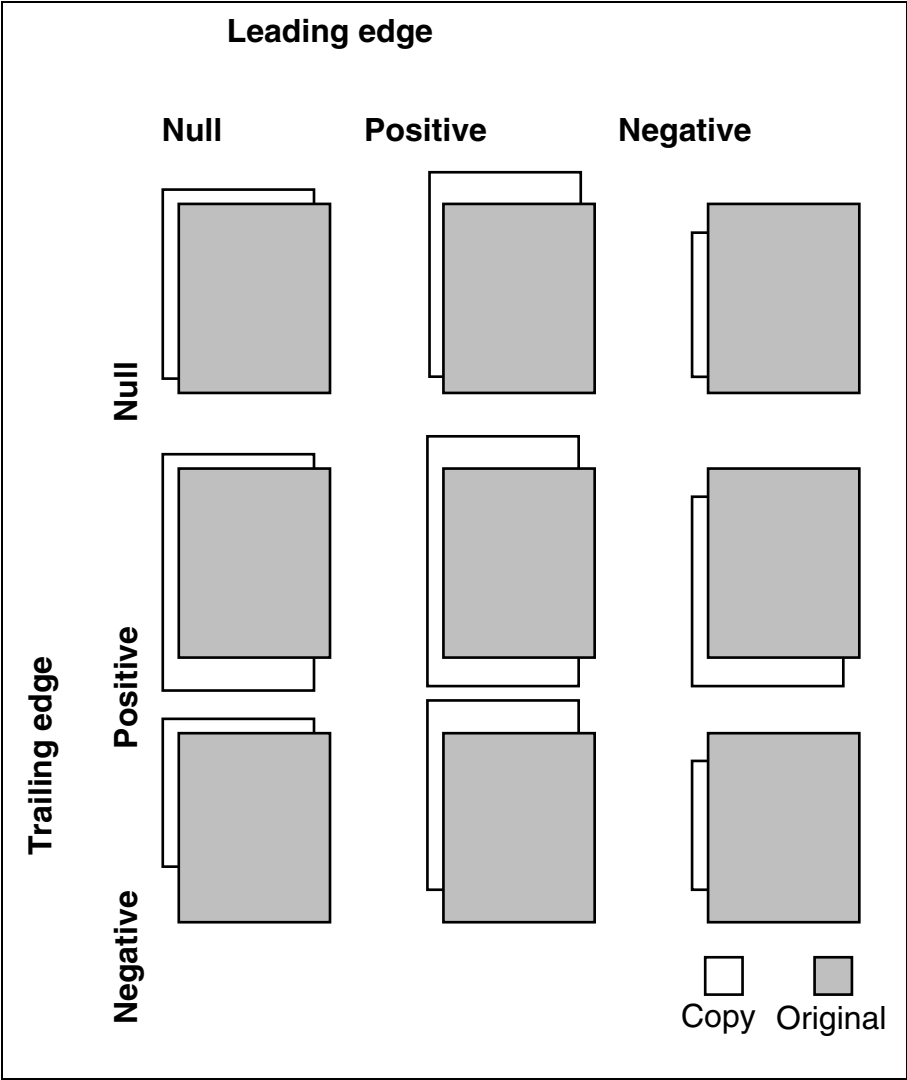
- 1 Press the 'edge' button to toggle between leading and trailing edge.
- 2 Press the 'up' or 'down' button to select the required leading/trailing edge value. The length of the currently selected edge is shown in the display. If you make adjustments using this button the indications above the button are flashing. If the adjustment differs from the default setting, the indication remains on. You confirm the setting by pressing the zoom, edge, cut, media or start button.

---

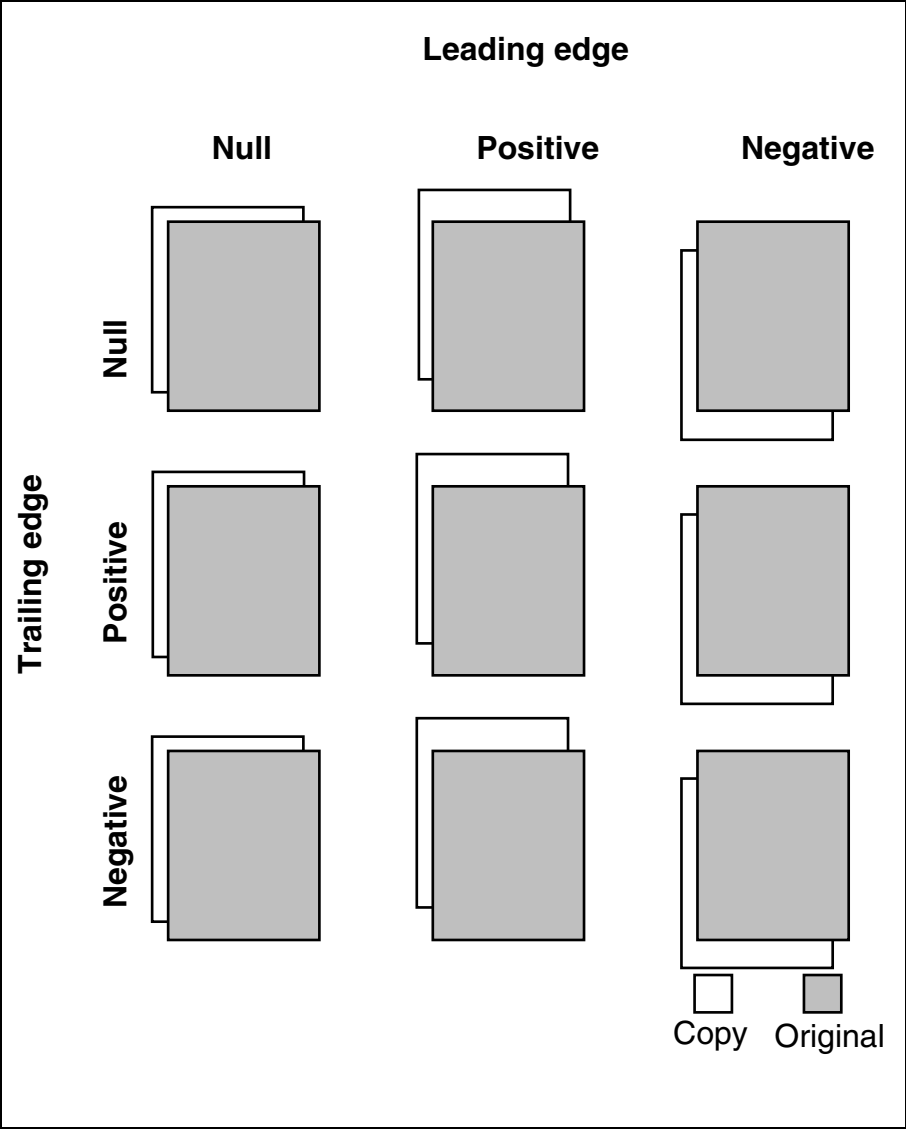
**Attention:** *Be aware that decreasing the edges too much may result in a loss of information.*

The behaviour of adjusting the leading/trailing edge is different, depending on using roll feed or manual feed (see 'Leading/trailing edge when copying on rolls of paper' on page 65) and 'Leading/trailing edge when copying on sheet of paper' on page 66).





[25] Using rolls



[26] Using sheets

---

## Modifying the exposure

The automatic exposure setting ensures the production of background-free copies of most line drawings. In this case the automatic background compensation is activated.

The background is constantly measured during scanning of the original. However, the result of some originals may not match your requirements.

Normally the automatic background compensation is active and the exposure level is 0.



### **Manually adjusting the exposure**

In case you still have background on the copy:

- 1 Leave your originals in the scanner.
- 2 Adjust the exposure level with the 'lighter' button.
- 3 Press the 'start' button.

In case weak information is not visible anymore:

- 1 Leave your originals in the scanner.
- 2 Adjust the exposure level with the 'darker' button.
- 3 Press the 'start' button.

If the result still does not match your requirements:

- 1 Leave your originals in the scanner.
- 2 Deactivate the automatic exposure background compensation by pressing the 'auto exposure' button. The background is not measured anymore during scanning of the original.
- 3 Adjust the background level of the copy using the 'lighter' and 'darker' buttons.
- 4 Press the 'start' button.

---

## Inverted copies/Blueprints

To copy old blueprints you can select the invert copy mode. To prevent using this option by mistake, this function is protected. You must first feed the original and then press the 'correction' and the 'zoom' button simultaneously.

### ▼ **Making invert copies**

- 1 Feed the original.
- 2 Press the 'correction' and the 'zoom' button at the same time.  
The invert copy mode is now active. The copy quantity is reset to 1 (cannot be changed) and will flash. The auto exposure is automatically switched off.
- 3 Press the 'start' button.  
Remove the original after it is returned. The invert copy mode is not longer active.

---

## Poster mode

When copying originals with large black areas Poster mode ensures an optimal copy quality by increasing the density of the copy. If required, select this option.

### ▼ **Activating Poster mode**

- 1 Press the 'lighter' and 'darker' button simultaneously.  
The Exposure light will flash. The Poster mode is now active.
- 2 If required you can still modify the exposure level.
- 3 Feed the original.
- 4 Press the 'Start' button.

### ▼ **De-activating the Poster mode**

- 1 Press the 'lighter' and 'darker' button again at the same time.
- 2 Press the 'Stop/Correction' button.

---

# Chapter 5

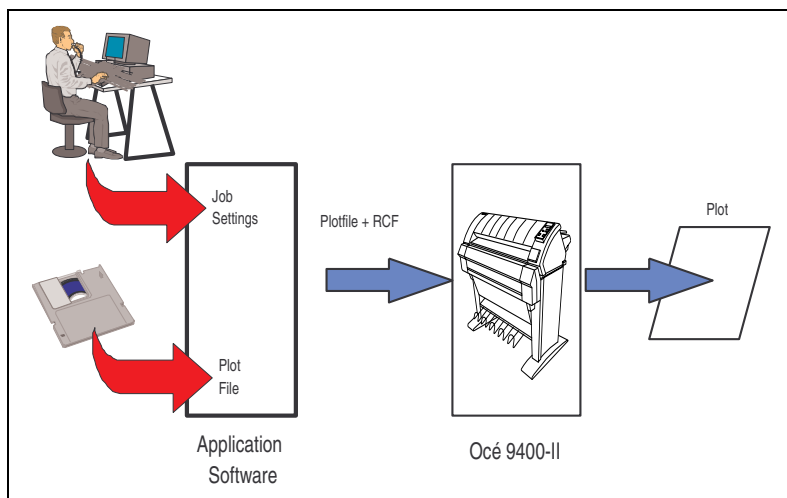
## Print jobs

*This chapter describes how to print files.*



# Printing files

The Océ 9400-II can be connected to a host environment, which may be either a stand alone PC/Workstation or a PC/Workstation connected to a network. It accepts various standard format CAD/CAM vector and EDMS raster data files from the host environment and converts these into high quality plots (see figure 27).



[27] Dataflow to the Océ 9400-II

When an Océ 9400-II receives vector (HP-GL, HP-GL/2, Calcomp 906/907), raster (HP-RTL, TIFF, CALS) or PostScript (PostScript level 2 optional) data it will generate a plot with the settings (e.g. number of copies, plotter emulation etc.) as specified on the operator console in Program Mode.

In order to gain maximum flexibility, each plot job can be preceded by remote control commands to specify the settings to be used for this job. This so-called header contains job and file specific settings (e.g. number of copies) in Remote Control Format (RCF) which overrule the settings programmed in Program Mode.

In order to compose such a header, you may:

- Compose the header within your application. Please refer to the Océ 9400-II Programmers Manual for details about the RCF syntax and functionality.
- Use an Océ Windows and/or Autocad ADI driver to generate both a plottable file (e.g. HP-RTL, HP-GL/2) and the appropriate header with RCF-commands. Please refer to the Océ Windows / Autocad Driver documentation for more details.
- Use the Océ Windows application Plot Director in order to compose jobs of plottable files in a very flexible and user friendly way. Please refer to the Océ Plot Director manual for more detail.

---

## Océ application

The following application is available:  
Plot Director (MS-Windows 95/98 and NT)

---

## Océ drivers

**Note:** Please refer to the Océ website ([www.oce.com](http://www.oce.com)) for obtaining the latest drivers.

The Océ 9400-II only supports 32-Bits applications and Operating systems in order to meet the highest performance. The following drivers are available:

ADI driver for AutoCAD R13C3 (Windows 95/98),

ADI driver for AutoCAD R13C4 (MS-DOS, Windows 95/98, NT 4.0),

ADI driver for AutoCAD R14 (Windows 95/98, NT 4.0),

HDI driver for AutoCad 2000 (Windows 95/98 and NT 4.0),

AutoCad LT: use a window system driver provided by Océ (e.g.; Windows Raster Driver),

Windows Raster Driver (Windows 95/98 and NT),

PostScript driver (Windows 95/98, NT and Macintosh).

**Note:** For AutoCAD R14 and Bentley MicroStation software, the driver is integrated in the application. For numerous other CAD/EDM/PDM applications such as PTC's Pro-Engineer and Intergraph certified drivers are available.

---

## Cut method

This setting can be used to select standard cut or synchro cut (see ‘Order of standard sizes for using standard cut’ on page 140).

**Note:** *Use Synchro Cut when you define a non-standard paper size in your application.*

*The values selected for leading or trailing edge are taken into account when using Synchro Cut.*



### Programming cut method

- 1 Press ‘Program’ to enter the main menu.
- 2 Select ‘MEDIA SETTING’ item using the ◀ or ▶ button.
- 3 Press ‘next/select’ to enter the ‘MEDIA SETTING’ menu.
- 4 Select the ‘PLOT POSITION’ item using the ◀ or ▶ button.
- 5 Press ‘next/select’ to enter the ‘PLOT POSITION’ menu.
- 6 Select the ‘CUT METHOD’ item using the ◀ or ▶ button.
- 7 Press ‘next/select’ to enter the ‘CUT METHOD’ menu.
- 8 Select the desired cut method using the ◀ or ▶ button.
- 9 Press ‘next/select’ to confirm the selected cut method.
- 10 Press ‘Program’ to leave the main menu.

---

## Plot Center

This setting can be used to enable or disable centering of the plot on the paper. If center is off, the plot will be positioned in the left top corner of the page.

If Standard Cut is selected, the plot is printed and the media is cut according to the standard cut functionality. If Plot Center is ON, the plot is shifted up/down and left/right to be centered on the selected bounding box.

**Note:** *If you print a plot longer than standard size, the machine automatically switches to synchro cut, to prevent you from losing information.*

If Synchro Cut is selected, the bounding box of the plot sets the hard clip limits. If Plot Center is ON, the plot is shifted left/right to be centered on the page.



## ▼ Programming Plot Center

- 1 Press 'Program' to enter the main menu.
- 2 Select 'MEDIA SETTING' item using the ◀ or ▶ button.
- 3 Press 'next/select' to enter the 'MEDIA SETTING' menu.
- 4 Select the 'PLOT POSITION' item using the ◀ or ▶ button.
- 5 Press 'next/select' to enter the 'PLOT POSITION' menu.
- 6 Select the 'PLOT CENTER' item using the ◀ or ▶ button.
- 7 Press 'next/select' to enter the 'PLOT CENTER' menu.
- 8 Select the 'ON/OFF' using the ◀ or ▶ button.
- 9 Press 'next/select' to confirm the setting.
- 10 Press 'Program' to leave the main menu.

---

## Leading/trailing edge

The leading edge setting can be used to add a white strip at the top of the image. The page length will increase accordingly.

The trailing edge setting can be used to add a white strip at the end of the image. The pagelength will increase accordingly

**Note:** *The leading/trailing edge option only works if the cut method is set to synchro cut.*

*The value for the trailing or leading edge can be set between 0 to 80 mm (in steps of 5 mm) or 0 to 3 inch (in steps of  $\frac{1}{4}$  inch).*

## ▼ Programming leading or trailing edge

- 1 Press 'Program' to enter the main menu.
- 2 Select 'MEDIA SETTING' item using the ◀ or ▶ button.
- 3 Press 'next/select' to enter the 'MEDIA SETTING' menu.
- 4 Select the 'PLOT POSITION' item using the ◀ or ▶ button.
- 5 Press 'next/select' to enter the 'PLOT POSITION' menu.
- 6 Select the 'TRAILING' or 'LEADING EDGE' item using the ◀ or ▶ button.
- 7 Press 'next/select' to enter the 'TRAILING' or 'LEADING EDGE' menu.
- 8 Select the required value using the ◀ or ▶ button.
- 9 Press 'next/select' to confirm the value.
- 10 Press 'Program' to leave the main menu.

---

## Demo plot

Having installed the Océ 9400-II it is recommended to check the printer and the controller.

### ▼ **Making a demo plot**

- 1 Press 'Program' to enter the main menu.
- 2 Select the 'PLOT' item using the ◀ or ▶ button.
- 3 Press 'next/select' to enter the 'PLOT' menu.
- 4 Select the 'DEMO PLOT' item using the ◀ or ▶ button.
- 5 Press 'next/select' to print the demo plot.
- 6 Press 'Program' to leave the main menu.

---

## Cancel plot

If you want to cancel the a plot before printing starts:

### ▼ **Cancelling a plot**

- 1 Press 'cancel/continue'.  
The printer stops. It is possible that the plot will not completely be printed.  
The paper is always ejected.

---

# Chapter 6

## Use of the Scan-to-File option

*This chapter describes the digitizing of analogue drawings while using the Océ 9400-II.*



---

# Introduction

The Océ 9400-II can be used also for digitizing analogue drawings and uploading them to a host computer using a SCSI-2 interface. Therefore the Scan to file option is required.

This option consists of the following parts:

- Océ Scan Station software
- Océ View Station software
- SCSI-2 board (option) in the PC to connect the Océ 9400-II
- SCSI-2 cable (option)



## **Making uploads**

After everything has been installed correctly on the Océ 9400-II and on the PC both systems should be connected with SCSI-2 cable and the uploading can start, refer to 'SCSI-2' on page 25.

- 1 Switch on the Océ 9400-II and the PC.
- 2 Start the Upload application and set all scan parameters as required and proceed as follows. (Also refer to the Océ 9400 series Scan Station manual). As soon as the upload is started with the application, the Océ 9400-II printer panel displays "SCANMODE" after which the system is ready to make uploads.
- 3 Insert an original in the scanner, make the required settings on the scanner's operating panel and press the Start-button on the scanner (see also notes below).
- 4 When the original has been scanned and transported back to its start position, a checkplot is made. If this has been selected to do so in the Scan Station application. The checkplot is made on the media which has been selected on the scanner's operating panel.
- 5 Then the Océ 9400-II controller creates the file which will be uploaded to the PC.  
When the file is uploaded it can be viewed on the PC.
- 6 Settings can be modified on the PC and on the scanner and a next original can be scanned, or the current original can be re-scanned with the new settings.
- 7 The Upload process can be stopped on the PC and the Océ 9400 series is free for print and/or copy jobs. (Also refer to the Océ 9400 series Scan Station manual)

The following buttons are disabled on the Océ 9400-II scanner operating panel when it is in Upload mode:

- ‘Cut’
- ‘Edge’, except negative leading edge
- ‘Zoom’
- Display of number of copies is fixed to "1" if checkplot is enabled on the Scan Station application.

The following buttons are disabled on the Océ 9400-II scanner operating panel when it is in Upload mode and checkplot is disabled:

- ‘Media’
- ‘+’ and ‘-’ for number of copies
- Display for number of copies is cleared

The size of the drawing which can be uploaded (and printed with checkplot) is limited by the amount of memory which is installed in the Océ 9400-II controller and the bitmap partitioning (see ‘Setting the bitmap buffer’ on page 38).

---

## Related documentation

- Océ Scan Station Manual
- Océ View Station Manual
- Océ Machine Monitor Manual



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# Chapter 7

## Customizing the printer

*How to set the Océ 9400-II defaults like pen settings and languages to accommodate print jobs that you use most frequently.*

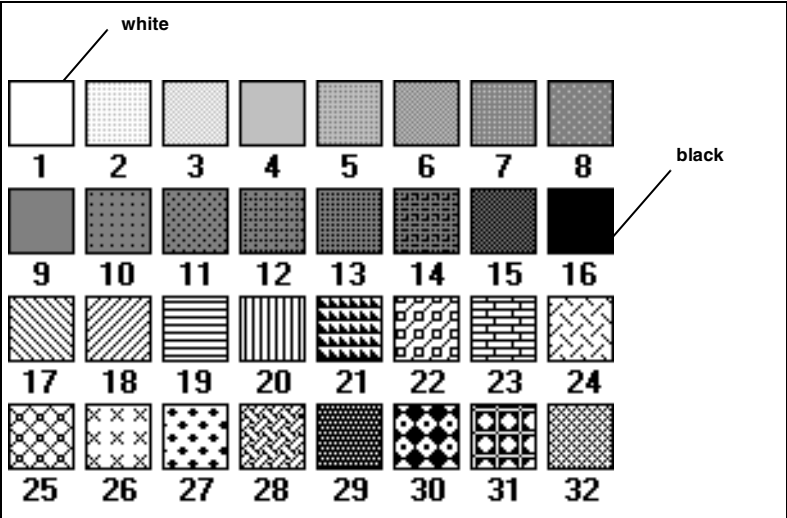


# Defining pen settings

When printing files, the pen settings can be changed in the pen menu. You can change the default width and pattern for each pen number. These settings apply to all vector languages: HP-GL, HP-GL/2 CalComp.

Pen width can be defined from 0.08 up to 10.75 mm (0.0031" to 0.423"). By default all pen widths are set to 0.25 mm (0.009"). Adjustment can be made in steps of 0.01 mm.

A pen can be selected by the plot file to draw a line or to fill a polygon. All lines or polygons on the plot can be drawn with a predefined pattern or shade of grey. Default is pen pattern 16. The following pen patterns are available.



[28] Available pen patterns





## Defining the pen settings

- 1 Press 'Program' to enter the main menu.
- 2 Select the 'CONFIGURATION' item using the ◀ or ▶ button.
- 3 Press 'next/select' to enter the 'CONFIGURATION' menu.
- 4 Select the 'PEN MENU' option using the ◀ or ▶ button.
- 5 Press 'next/select' to enter the 'PEN MENU'.

For each pen to set up perform as follows:

- 6 Select the 'PEN NUMBER' item using the ◀ or ▶ button.
- 7 Press 'next/select' to enter the 'PEN NUMBER' menu.
- 8 Select the required 'PEN NUMBER' using the ◀ or ▶ button.
- 9 Press 'next/select' to confirm the selected pen number.
- 10 Press 'previous' to re-enter the pen menu.

From this menu:

- 11 Select the 'PEN WIDTH' item using the ◀ or ▶ button.
- 12 Press 'next/select' to enter the 'PEN WIDTH' menu.
- 13 Select the required pen width using the ◀ or ▶ button.
- 14 Press 'next/select' to confirm the selected pen width.
- 15 Press 'previous' to re-enter the pen menu.
- 16 Select the 'PEN PATTERN' item using the ◀ or ▶ button.
- 17 Press 'next/select' to enter the 'PEN PATTERN' menu.
- 18 Select the appropriate pen pattern using the ◀ or ▶ button.
- 19 Press 'next/select' to confirm the selected pen pattern.

Having programmed all pen settings:

- 20 Press 'Program' to leave the main menu.

---

# Defining language settings

The Océ 9400-II accepts print files in various data formats (languages). You can change the settings for PostScript, HP-GL, HP-GL/2, HP-RTL, CalComp, CALS, TIFF or EDMICS.

---

## Automatic language sensing

Automatic language sensing (ALS) is the mechanism which the system uses to detect the language (data format) of a file for which the format has not been specified in the file header. ALS scans the file contents for clues about the data format. Automatic language sensing can be switched on/off. By default ALS is on.

ALS enables the printer to switch between:

- Languages PostScript, HP-GL, HP-GL/2, HP-RTL, CalComp, CALS, TIFF or EDMICS.

Use the ALS formats parameter to define which data formats are to be searched for in the print files.

**Note:** *When using ALS, it is very important that every print file terminates with an end of print instruction.*

### ▼ **Activating ALS**

- 1 Press 'Program' to enter the main menu.
- 2 Select the 'CONFIGURATION' item using the ◀ or ▶ button.
- 3 Press 'next/select' to enter the 'CONFIGURATION' menu.
- 4 Select the 'DATA FORMAT' item using the ◀ or ▶ button.
- 5 Press 'next/select' to enter the 'DATA FORMAT' menu.
- 6 Select the 'SELECT FORMAT' item using the ◀ or ▶ button.
- 7 Press 'next/select' to enter the 'SELECT FORMAT' menu.
- 8 Select the 'AUTO' item using the ◀ or ▶ button.
- 9 Press 'next/select' to set up this mode.
- 10 Press 'Program' to leave the main menu.

---

## Data format recognition

To optimize your printer's language recognition and reduce the risk of errors, each of the above mentioned data formats can be individually set 'ON' or 'OFF'. Default is 'ON'.

### ▼ **Optimizing data format recognition**

- 1 Press 'Program' to enter the main menu.
- 2 Select the 'CONFIGURATION' item using the ◀ or ▶ button.
- 3 Press 'next/select' to enter the 'CONFIGURATION' menu.
- 4 Select the 'DATA FORMAT' item using the ◀ or ▶ button.
- 5 Press 'next/select' to enter the 'DATA FORMAT' menu.
- 6 Select the 'AUTO MENU' item using the ◀ or ▶ button.
- 7 Press 'next/select' to enter the 'AUTO MENU' menu.  
For each graphics language to set up perform as follows:
- 8 Select the required 'GRAPHICS LANGUAGE' item using the ◀ or ▶ button.
- 9 Press 'next/select' to enter the required language menu.
- 10 Select 'YES' or 'NO' using the ◀ or ▶ button.
- 11 Press 'next/select' to confirm the selected setting.
- 12 Press 'previous' to re-enter the 'GRAPHICS LANGUAGE' menu.  
Having programmed all languages:
- 13 Press 'Program' to leave the main menu.

---

## Manual data format selection

If required one of the data formats can be selected manually.

**Note:** *ALS is not active.*



### Setting manual data format

- 1 Press 'Program' to enter the main menu.
- 2 Select the 'CONFIGURATION' item using the ◀ or ▶ button.
- 3 Press 'next/select' to enter the 'CONFIGURATION' menu.
- 4 Select the 'DATA FORMAT' item using the ◀ or ▶ button.
- 5 Press 'next/select' to enter the 'DATA FORMAT' menu.
- 6 Select the 'SELECT FORMAT' item using the ◀ or ▶ button.
- 7 Press 'next/select' to enter the 'SELECT FORMAT' menu.
- 8 Select the required language using the ◀ or ▶ button.
- 9 Press 'next/select' to confirm the selected language.
- 10 Press 'Program' to leave the main menu.

**Note:** *When PostScript is selected no RCF header is recognized.*

---

# HP-GL

With this function you can define the settings for the HP-GL file types.

---

## HP-GL print origin

The starting position of the print on the paper depends on the print origin. You can choose between: upper right, upper left, center, lower right and lower left. Default is Center.



### Defining the HP-GL print origin

- 1 Press 'Program' to enter the main menu.
- 2 Select the 'CONFIGURATION' item using the ◀ or ▶ button.
- 3 Press 'next/select' to enter the 'CONFIGURATION' menu.
- 4 Select the 'DATA FORMAT' item using the ◀ or ▶ button.
- 5 Press 'next/select' to enter the 'DATA FORMAT' menu.
- 6 Select the 'HP-GL SETUP' item using the ◀ or ▶ button.
- 7 Press 'next/select' to enter the 'HP-GL SETUP' menu.
- 8 Select the 'ORIGIN' item using the ◀ or ▶ button.
- 9 Press 'next/select' to enter the 'ORIGIN' menu.
- 10 Select the required origin using the ◀ or ▶ button.
- 11 Press 'next/select' to confirm the selected origin.
- 12 Press 'Program' to leave the main menu.

---

## HP-GL page advance

In HP-GL the Select Pen Zero (SP0) command can be interpreted in two ways:

If 'PAGE ADVANCE' is set to **yes**, the printer responds to the HP-GL instruction SP0 as an indication of end of print.

If 'PAGE ADVANCE' is set to **no**, the printer responds to the HP-GL instruction SP0 as select pen zero. Any vectors following the SP0 will be printed with the defined pen attributes (width and pattern). Default is Yes. Also refer to 'Defining pen settings' on page 80.



### Setting the HP-GL page advance

- 1 Press 'Program' to enter the main menu.
- 2 Select the 'CONFIGURATION' item using the ◀ or ▶ button.
- 3 Press 'next/select' to enter the 'CONFIGURATION' menu.
- 4 Select the 'DATA FORMAT' item using the ◀ or ▶ button.
- 5 Press 'next/select' to enter the 'DATA FORMAT' menu.
- 6 Select the 'HP-GL SETUP' item using the ◀ or ▶ button.
- 7 Press 'next/select' to enter the 'HP-GL SETUP' menu.
- 8 Select the required 'PAGE ADVANCE' item using the ◀ or ▶ button.
- 9 Press 'next/select' to enter the 'PAGE ADVANCE' menu.
- 10 Select 'YES' or 'NO' using the ◀ or ▶ button.
- 11 Press 'next/select' to confirm the selected setting.
- 12 Press 'Program' to leave the main menu.

---

## Merge mode

This option determines what happens when two or more colours intersect at the same point of a plot, especially in area fills. Default setting is On.

**Merge Off** Only the last colour specified is printed for a given line or area. The other colours specified for the same line or area are transparent.

**Merge On** All the specified colours are blended together.



### Setting the merge mode

- 1 Press 'Program' to enter the main menu.
- 2 Select the 'CONFIGURATION' item using the ◀ or ▶ button.
- 3 Press 'next/select' to enter the 'CONFIGURATION' menu.
- 4 Select the 'DATA FORMAT' item using the ◀ or ▶ button.
- 5 Press 'next/select' to enter the 'DATA FORMAT' menu.
- 6 Select the 'HP-GL SETUP' item using the ◀ or ▶ button.
- 7 Press 'next/select' to enter the 'HP-GL SETUP' menu.
- 8 Select the 'MERGE' item using the ◀ or ▶ button.
- 9 Press 'next/select' to enter the 'MERGE' menu.
- 10 Select 'YES' or 'NO' using the ◀ or ▶ button.
- 11 Press 'next/select' to confirm the selected setting.
- 12 Press 'Program' to leave the main menu.

---

# HP-GL/2

---

## HP-GL/2 print origin

The starting position of the print on the paper depends on the print origin. You can choose between: upper right, upper left, center, lower right and lower left. Default is Lower right.

### ▼ Defining the HP-GL/2 print origin

- 1 Press 'Program' to enter the main menu.
- 2 Select the 'CONFIGURATION' item using the ◀ or ▶ button.
- 3 Press 'next/select' to enter the 'CONFIGURATION' menu.
- 4 Select the 'DATA FORMAT' item using the ◀ or ▶ button.
- 5 Press 'next/select' to enter the 'DATA FORMAT' menu.
- 6 Select the 'HP-GL/2 SETUP' item using the ◀ or ▶ button.
- 7 Press 'next/select' to enter the 'HP-GL/2 SETUP' menu.
- 8 Select the 'ORIGIN' item using the ◀ or ▶ button.
- 9 Press 'next/select' to enter the 'ORIGIN' menu.
- 10 Select the required origin item using the ◀ or ▶ button.
- 11 Press 'next/select' to confirm the selected origin.
- 12 Press 'Program' to leave the main menu.

---

## HP-GL/2 page advance

In HP-GL the SP0 command can be interpreted in two ways, depending on the printer being emulated.

If 'PAGE ADVANCE' is set to **yes**, the printer responds to the HP-GL instruction SP0 as an indication of end of print.

If 'PAGE ADVANCE' is set to **no**, the printer responds to the HP-GL instruction SP0 as select pen zero. Any vectors following the SP0 will be printed with the defined pen attributes (width and pattern). Default is No. Also refer to 'Defining pen settings' on page 80.

## ▼ Setting the HP-GL/2 page advance

- 1 Press 'Program' to enter the main menu.
- 2 Select the 'CONFIGURATION' item using the ◀ or ▶ button.
- 3 Press 'next/select' to enter the 'CONFIGURATION' menu.
- 4 Select the 'DATA FORMAT' item using the ◀ or ▶ button.
- 5 Press 'next/select' to enter the 'DATA FORMAT' menu.
- 6 Select the 'HP-GL/2 SETUP' item using the ◀ or ▶ button.
- 7 Press 'next/select' to enter the 'HP-GL/2 SETUP' menu.
- 8 Select the 'PAGE ADVANCE' item using the ◀ or ▶ button.
- 9 Press 'next/select' to enter the 'PAGE ADVANCE' menu.
- 10 Select the required page advance using the ◀ or ▶ button.
- 11 Press 'next/select' to confirm the selected page advance.
- 12 Press 'Program' to leave the main menu.

---

## HP-GL/2 pen priority

You can define pen parameters within the print file, from the printer control panel or in a remote configuration file. The pen priority option allows you to define which pen parameter set you want to use.

If '**Language**' is selected, the pen parameters defined in the data file will be used. If '**Setup**' is selected, the pen parameter defined on the printer operating panel, or in the optional remote configuration file, will be used. Default is 'Language'.

## ▼ Defining pen priority HP-GL/2

- 1 Press 'Program' to enter the main menu.
- 2 Select the 'CONFIGURATION' item using the ◀ or ▶ button.
- 3 Press 'next/select' to enter the 'CONFIGURATION' menu.
- 4 Select the 'DATA FORMAT' item using the ◀ or ▶ button.
- 5 Press 'next/select' to enter the 'DATA FORMAT' menu.
- 6 Select the 'HP-GL/2 SETUP' item using the ◀ or ▶ button.
- 7 Press 'next/select' to enter the 'HP-GL/2 SETUP' menu.
- 8 Select the 'PEN PRIORITY' item using the ◀ or ▶ button.
- 9 Press 'next/select' to enter the 'PEN PRIORITY' menu.
- 10 Select the required pen priority using the ◀ or ▶ button.
- 11 Press 'next/select' to confirm the selected pen priority.
- 12 Press 'Program' to leave the main menu.



---

## Designjet compatibility

If you print a colour data file on a black and white printer the result may be not sufficient. If you emulate the HP 650C the information which is defined in colour is printed in black; if you emulate to print on the HP 750C the information which is defined in colour will be printed in gray scale levels.

### ▼ Defining Designjet compatibility

- 1 Press 'Program' to enter the main menu.
- 2 Select the 'CONFIGURATION' item using the ◀ or ▶ button.
- 3 Press 'next/select' to enter the 'CONFIGURATION' menu.
- 4 Select the 'DATA FORMAT' item using the ◀ or ▶ button.
- 5 Press 'next/select' to enter the 'DATA FORMAT' menu.
- 6 Select the 'HP-GL/2 SETUP' item using the ◀ or ▶ button.
- 7 Press 'next/select' to enter the 'HP-GL/2 SETUP' menu.
- 8 Select the 'DESIGNJET' item using the ◀ or ▶ button.
- 9 Press 'next/select' to enter the 'DESIGNJET' menu.
- 10 Select the required designjet using the ◀ or ▶ button.
- 11 Press 'next/select' to confirm the selected designjet.
- 12 Press 'Program' to leave the main menu.

---

## Merge mode

This option determines what happens when two or more colours intersect at the same point of a plot, especially in area fills. Default setting is On.

**Merge Off** Only the last colour specified is printed for a given line or area. The other colours specified for the same line or area are transparent.

**Merge On** All the specified colours are blended together.

### ▼ Setting the merge mode

- 1 Press 'Program' to enter the main menu.
- 2 Select the 'CONFIGURATION' item using the ◀ or ▶ button.
- 3 Press 'next/select' to enter the 'CONFIGURATION' menu.
- 4 Select the 'DATA FORMAT' item using the ◀ or ▶ button.
- 5 Press 'next/select' to enter the 'DATA FORMAT' menu.
- 6 Select the 'HP-GL/2 SETUP' item using the ◀ or ▶ button.
- 7 Press 'next/select' to enter the 'HP-GL/2 SETUP' menu.
- 8 Select the 'MERGE' item using the ◀ or ▶ button.

- 9 Press 'next/select' to enter the 'MERGE' menu.
- 10 Select 'YES' or 'NO' using the ◀ or ▶ button.
- 11 Press 'next/select' to confirm the selected setting.
- 12 Press 'Program' to leave the main menu.

---

## HP-RTL

HP-RTL is a subset of HP-GL/2. Hence, all HP-RTL plot data files must start with ESC%-1BBPIN; or BPIN.

To use HP-RTL, the SELECT FORMAT should be set to AUTO or HP-GL/2 on the operating panel or HP-GL/2 must be selected via a remote control file.

**Note:** *HP-RTL plot data files must end with ESC%OB; PG; which will switch the printer back to HP-GL/2 format mode. Without this command, the plot results will be unpredictable and the printer will stop.*

The following HP-RTL statements have no meaning on the Océ 9400-II and will be treated as no-ops: ESC\*v#a, ESC\*v#b, ESC\*v#c, ESC\*v#i, ESC\*v#W[data], ESC\*b#l and ESC&b#V[data].

---

# CalComp

The Océ 9400-II offers compatibility with the CalComp graphics language.

---

## CalComp print origin

The starting position of the drawing position on the paper depends on the print origin: upper right, upper left, center, lower right and lower left.

Default CalComp origin is Lower right. This print origin is used for all CalComp files, no matter whether select format was set to CalComp or Auto or a remote control command for CalComp was sent.



### Defining the print origin

- 1 Press 'Program' to enter the main menu.
- 2 Select the 'CONFIGURATION' item using the ◀ or ▶ button.
- 3 Press 'next/select' to enter the 'CONFIGURATION' menu.
- 4 Select the 'DATA FORMAT' item using the ◀ or ▶ button.
- 5 Press 'next/select' to enter the 'DATA FORMAT' menu.
- 6 Select the 'CALCOMP SETUP' item using the ◀ or ▶ button.
- 7 Press 'next/select' to enter the 'CALCOMP SETUP' menu.
- 8 Select the 'ORIGIN' item using the ◀ or ▶ button.
- 9 Press 'next/select' to enter the 'ORIGIN' menu.
- 10 Select the required origin item using the ◀ or ▶ button.
- 11 Press 'next/select' to confirm the selected origin.
- 12 Press 'Program' to leave the main menu.

---

## Checksum parameter

The checksum parameter is significant in all cases when CalComp format is selected or auto-recognized when select format is set to Auto or a remote control command for CalComp was sent. Default is 'Yes'.

### ▼ Defining the checksum parameter

- 1 Press 'Program' to enter the main menu.
- 2 Select the 'CONFIGURATION' item using the ◀ or ▶ button.
- 3 Press 'next/select' to enter the 'CONFIGURATION' menu.
- 4 Select the 'DATA FORMAT' item using the ◀ or ▶ button.
- 5 Press 'next/select' to enter the 'DATA FORMAT' menu.
- 6 Select the 'CALCOMP SETUP' item using the ◀ or ▶ button.
- 7 Press 'next/select' to enter the 'CALCOMP SETUP' menu.
- 8 Select the 'CHECKSUM' item using the ◀ or ▶ button.
- 9 Press 'next/select' to enter the 'CHECKSUM' menu.
- 10 Select 'YES' or 'NO' using the ◀ or ▶ button.
- 11 Press 'next/select' to confirm the selected setting.
- 12 Press 'Program' to leave the main menu.

---

## CalComp pen priority

You can define pen parameters within the print file, from the printer control panel or in a remote configuration file. The pen priority option allows you to define which pen parameter set you want to use.

If '**Language**' is selected, the pen parameters defined in the data file will be used. If '**Setup**' is selected, the pen parameter defined on the printer operating panel, or in the optional remote configuration file, will be used. Default is Language.

- 1 Press 'Program' to enter the main menu.
- 2 Select the 'CONFIGURATION' item using the ◀ or ▶ button.
- 3 Press 'next/select' to enter the 'CONFIGURATION' menu.
- 4 Select the 'DATA FORMAT' item using the ◀ or ▶ button.
- 5 Press 'next/select' to enter the 'DATA FORMAT' menu.
- 6 Select the 'CALCOMP SETUP' item using the ◀ or ▶ button.
- 7 Press 'next/select' to enter the 'CALCOMP SETUP' menu.
- 8 Select the 'PEN PRIORITY' item using the ◀ or ▶ button.
- 9 Press 'next/select' to enter the 'PEN PRIORITY' menu.

- 10 Select the required pen priority using the ◀ or ▶ button.
- 11 Press 'next/select' to confirm the selected pen priority.
- 12 Press 'Program' to leave the main menu

---

## Merge mode

This option determines what happens when two or more colours intersect at the same point of a plot, especially in area fills. Default setting is 'On'.

**Merge Off** Only the last colour specified is printed for a given line or area. The other colours specified for the same line or area are transparent.

**Merge On** All the specified colours are blended together.



### Setting the merge mode

- 1 Press 'Program' to enter the main menu.
- 2 Select the 'CONFIGURATION' item using the ◀ or ▶ button.
- 3 Press 'next/select' to enter the 'CONFIGURATION' menu.
- 4 Select the 'DATA FORMAT' item using the ◀ or ▶ button.
- 5 Press 'next/select' to enter the 'DATA FORMAT' menu.
- 6 Select the 'CALCOMP SETUP' item using the ◀ or ▶ button.
- 7 Press 'next/select' to enter the 'CALCOMP SETUP' menu.
- 8 Select the 'MERGE' item using the ◀ or ▶ button.
- 9 Press 'next/select' to enter the 'MERGE' menu.
- 10 Select 'YES' or 'NO' using the ◀ or ▶ button.
- 11 Press 'next/select' to confirm the selected setting.
- 12 Press 'Program' to leave the main menu.

---

## End of Message parameter

The End of Message (EOM) parameter is significant in all cases where CalComp format is selected or auto-recognized when select format is set to Auto or a remote control command for CalComp was sent.

Possible values range from 0 to 31<sub>DEC</sub> inclusive. The selected value is the decimal equivalent of the byte indicating the end of the data sequence. It should be a unique character in the character set used for coding the data. The default EOM is 3.

### ▼ **Setting the End of Message parameter**

- 1 Press 'Program' to enter the main menu.
- 2 Select the 'CONFIGURATION' item using the ◀ or ▶ button.
- 3 Press 'next/select' to enter the 'CONFIGURATION' menu.
- 4 Select the 'DATA FORMAT' item using the ◀ or ▶ button.
- 5 Press 'next/select' to enter the 'DATA FORMAT' menu.
- 6 Select the 'CALCOMP SETUP' item using the ◀ or ▶ button.
- 7 Press 'next/select' to enter the 'CALCOMP SETUP' menu.
- 8 Select the 'END OF MESSAGE' item using the ◀ or ▶ button.
- 9 Press 'next/select' to enter the 'END OF MESSAGE' menu.
- 10 Select the required value using the ◀ or ▶ button.
- 11 Press 'next/select' to confirm the selected value.
- 12 Press 'Program' to leave the main menu.

---

## Synchronization code parameter

The synchronization code parameter is significant in all cases where CalComp format is selected or auto-recognized when select format is set to Auto or a remote control command for CalComp was sent.

Possible values range from 0 to 63<sub>DEC</sub> inclusive. The selected value is the decimal equivalent of the byte to be interpreted as the beginning of a block of print data. The default synchronization code is 2.

### ▼ **Setting the synchronization code parameter**

- 1 Press 'Program' to enter the main menu.
- 2 Select the 'CONFIGURATION' item using the ◀ or ▶ button.
- 3 Press 'next/select' to enter the 'CONFIGURATION' menu.
- 4 Select the 'DATA FORMAT' item using the ◀ or ▶ button.
- 5 Press 'next/select' to enter the 'DATA FORMAT' menu.
- 6 Select the 'CALCOMP SETUP' item using the ◀ or ▶ button.
- 7 Press 'next/select' to enter the 'CALCOMP SETUP' menu.
- 8 Select the 'SYNC CODE' item using the ◀ or ▶ button.
- 9 Press 'next/select' to enter the 'SYNC CODE' menu.
- 10 Select the required sync code using the ◀ or ▶ button.
- 11 Press 'next/select' to confirm the selected sync code.
- 12 Press 'Program' to leave the main menu.

---

## Double synchronization code parameter

The synchronization code parameter is significant in all cases where CalComp format is selected or auto-recognized when select format is set to Auto or a remote control command for CalComp was sent.

The double synchronization parameter allows one or two synchronization characters to identify the beginning of a message of print data. If set to double synchronization, the same character is sent twice. Default is 'No'.

- 1 Setting the double synchronization code parameter
- 1 Press 'Program' to enter the main menu.
- 2 Select the 'CONFIGURATION' item using the ◀ or ▶ button.
- 3 Press 'next/select' to enter the 'CONFIGURATION' menu.
- 4 Select the 'DATA FORMAT' item using the ◀ or ▶ button.
- 5 Press 'next/select' to enter the 'DATA FORMAT' menu.
- 6 Select the 'CALCOMP SETUP' item using the ◀ or ▶ button.
- 7 Press 'next/select' to enter the 'CALCOMP SETUP' menu.
- 8 Select the 'DOUBLE SYNC' item using the ◀ or ▶ button.
- 9 Press 'next/select' to enter the 'DOUBLE SYNC' menu.
- 10 Select the required double sync using the ◀ or ▶ button.
- 11 Press 'next/select' to confirm the selected value.
- 12 Press 'Program' to leave the main menu.

---

## CalComp step size

If the data format type is set to CalComp (manual, auto selection or remote control command), seven steps are provided (100 dpi to 4064 dpi). The default is 2032.

### ▼ **Setting the appropriate step size**

- 1 Press 'Program' to enter the main menu.
- 2 Select the 'CONFIGURATION' item using the ◀ or ▶ button.
- 3 Press 'next/select' to enter the 'CONFIGURATION' menu.
- 4 Select the 'DATA FORMAT' item using the ◀ or ▶ button.
- 5 Press 'next/select' to enter the 'DATA FORMAT' menu.
- 6 Select the 'CALCOMP SETUP' item using the ◀ or ▶ button.
- 7 Press 'next/select' to enter the 'CALCOMP SETUP' menu.
- 8 Select the 'STEP SIZE' item using the ◀ or ▶ button.
- 9 Press 'next/select' to enter the 'STEP SIZE' menu.
- 10 Select the required value using the ◀ or ▶ button.
- 11 Press 'next/select' to confirm the selected value.
- 12 Press 'Program' to leave the main menu.



---

# Raster formats

---

## CALS

CALS (Computer Aided Acquisition and Logistics Support).  
The Océ 9400-II printer supports CALS type 1 files. (Untiled, compatible with CCITT Group 4 format).

---

## NIRS

NIRS is a sub-set of CALS. The data format consists of a CALS header followed by a NIRS header followed by TIFF raster data.

---

## TIFF

TIFF (Tagged Information File Format).

The Océ 9400-II printer supports the following TIFF 6.0 files.

- Uncompressed
- Compressed:
  - PACKBIT byte oriented, runlength
  - Modified Huffman (based on CCITT G3 1D)
  - CCITT Group 3 1 D and 2 D, runlength
  - CCITT Group 4.

---

## C4 (EDMICS)

C4 data format consists of a header followed by compressed CCITT 4 raster data.

**Note:** *For the above raster languages no specific settings are necessary.*

---

# PostScript level 2

The Océ PostScript level 2 printer option can be used to print PostScript files on the Océ 9400. Océ provides host software to print from Windows or Macintosh applications.

This enables your printer to become a true wide format printer, producing monochrome posters from Illustrator, Word, Excel, QuarkXpress, Powerpoint, Pagemaker etc. as well as CAD or electronic design applications, among others.

Your PostScript document can be printed on any PostScript printer and the output should look the same. The Océ 9400-II PostScript driver takes care of translating the application's internal data into PostScript, and it also makes sure you can select printer features in a simple way.

---

## PostScript data format selection

When the PostScript option is installed, your printer will automatically recognize the PostScript language sent to the printer, refer to 'Defining language settings' on page 82

**Note:** *It is very important that every print file terminates with an end of print instruction. The PostScript end of print instruction is "Ctrl D".*

*If there are files in the Media Saver, they will be flushed (printed) before the PostScript file is interpreted.*

*If your print is not recognized correctly, send it again with the appropriate data format selected on the control panel or in a remote control file.*

---

## PostScript page layout

The orientation of the printed page on the roll can be either landscape or portrait.



### Selecting the PostScript page layout

- 1 Press 'Program' to enter the main menu.
- 2 Select the 'CONFIGURATION' item using the ◀ or ▶ button.

- 3 Press 'next/select' to enter the 'CONFIGURATION' menu.
- 4 Select the 'DATA FORMAT' item using the ◀ or ▶ button.
- 5 Press 'next/select' to enter the 'DATA FORMAT' menu.
- 6 Select the 'PS SETUP' item using the ◀ or ▶ button.
- 7 Press 'next/select' to enter the 'PS SETUP' menu.
- 8 Select the 'PAGE LAYOUT' item using the ◀ or ▶ button
- 9 Press 'next/select' to enter 'PAGE LAYOUT' menu.
- 10 Select the required page layout using the ◀ or ▶ button.
- 11 Press 'next/select' to confirm the selected page layout.
- 12 Press 'Program' to leave the main menu.

---

## Default PostScript page size

This option indicates the dimensions of the paper on which your document will be printed. (For example D, A1, A4, etc.). This is useful only in the case where the format is not specified in the PostScript file.



### Selecting the default PostScript page size

- 1 Press 'Program' to enter the main menu.
- 2 Select the 'CONFIGURATION' item using the ◀ or ▶ button.
- 3 Press 'next/select' to enter the 'CONFIGURATION' menu.
- 4 Select the 'DATA FORMAT' item using the ◀ or ▶ button.
- 5 Press 'next/select' to enter the 'DATA FORMAT' menu.
- 6 Select the 'PS SETUP' item using the ◀ or ▶ button.
- 7 Press 'next/select' to enter the 'PS SETUP' menu.
- 8 Select the 'DEF PAGE SIZE' item using the ◀ or ▶ button.
- 9 Press 'next/select' to enter the 'DEF PAGE SIZE' menu.
- 10 Select the required page size using the ◀ or ▶ button.
- 11 Press 'next/select' to confirm the selected page size.
- 12 Press 'Program' to leave the main menu.

**Note:** *In case of conflict, the page size defined in the PostScript driver will have priority.*

*Manual feed and Autoscale-to-format are not supported by the PostScript driver. These functions can be activated in the normal way, from the printer's operating panel.*



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# Chapter 8

## Advanced printer menu functions

*This chapter describes the more advanced print functions.*



---

# Introduction

The Océ 9400-II offers the possibility to make use of advanced printer menu functions such as:

- Media saver (see page 103).
- Replot (see page 108).
- Quality Setup (see page 109).
- Transformation (see page 112).
- Password setting for display (see page 116).
- Dump configuration (see page 117).
- Service (see page 118).

---

# Selecting the media saver

The Océ 9400-II offers two options for optimizing media usage for printing: Nesting and Autoposition. This applies for vector and raster formats. The media saver can also be set off.

Media saver is flushed:

- after a time out
- when a copy job is interrupting the printing process
- when selecting another roll or manual feed
- by the flush media saver on the printer operating panel.

**Note:** *When automatic roll selection is used, the media saver is not active.*

To use the media saver the following conditions must be set:

- cut methods = synchro
- center = off
- leading- and trailing edge = 0.

---

## Nesting

When nesting is selected, prints are stored in queues in the printer's memory, according to their size: A4 or A, A3 or B, A2 or C and mixed A4/A3. When the queue is full, the drawings are printed across the full width of the media.

The minimum paper length is 420 mm, so when printing A3 landscape or A4, an extra white strip of paper appears at the end.

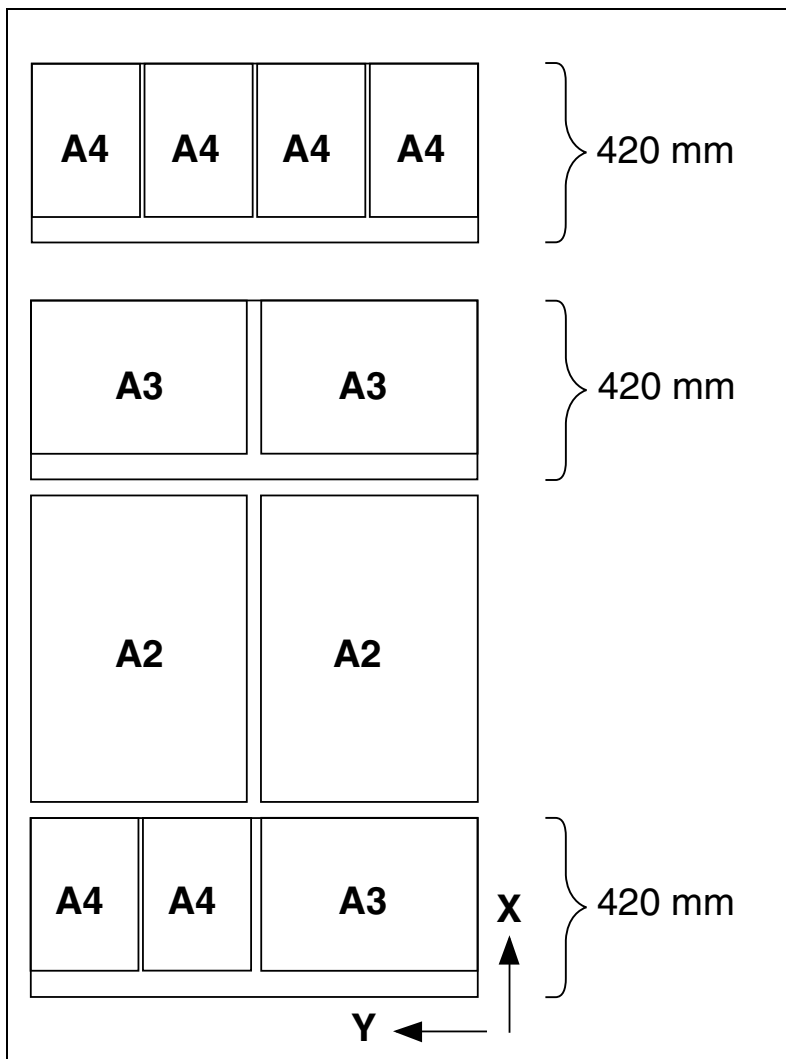
If the print is larger than A2 or C size it will not be stored in a queue, but will be printed normally. If prints are not standard ISO, ANSI or Architecture sizes, the next larger format will be used (see figure 29 on page 104).



### Selecting nesting

- 1 Press 'Program' to enter the main menu.
- 2 Select the 'CONFIGURATION' item using the ◀ or ▶ button.
- 3 Press 'next/select' to enter the 'CONFIGURATION' menu.
- 4 Select the 'PLOT MANAGER' item using the ◀ or ▶ button.
- 5 Press 'next/select' to enter the 'PLOT MANAGER' menu.
- 6 Select the 'MEDIA SAVER' item using the ◀ or ▶ button.

- 7 Press 'next/select' to enter the 'MEDIA SAVER' menu.
- 8 Select the 'M/S MODE' item using the ◀ or ▶ button.
- 9 Press 'next/select' to enter the 'M/S MODE' menu.
- 10 Select the 'NESTING' item using the ◀ or ▶ button.
- 11 Press 'next/select' to select the required setting.
- 12 Press 'Program' to leave the main menu.



[29] Media saver nesting

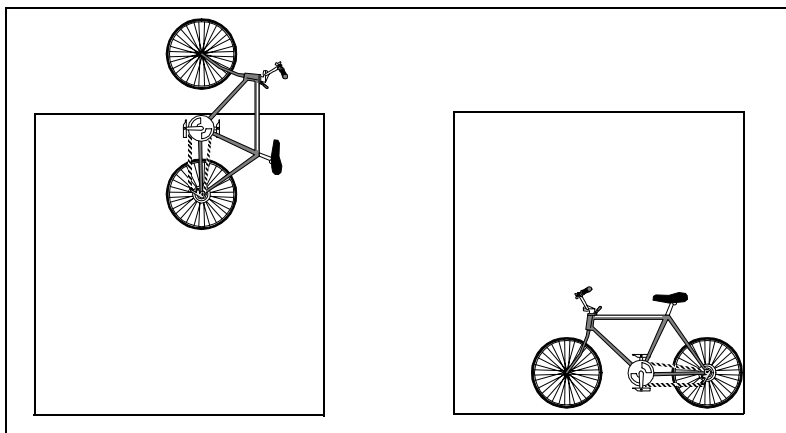


---

## Autoposition

This option ignores the origin declared in the print file and automatically shifts the print data to the lower right corner of the media. If necessary, prints are rotated 90 ° to better use the available media.

The autoposition feature is useful in reducing the clipping of a print and/or reducing wasted media.



[30] Auto position to save media



### Selecting autoposition

- 1 Press 'Program' to enter the main menu.
- 2 Select the 'CONFIGURATION' item using the ◀ or ▶ button.
- 3 Press 'next/select' to enter the 'CONFIGURATION' menu.
- 4 Select the 'PLOT MANAGER' item using the ◀ or ▶ button.
- 5 Press 'next/select' to enter the 'PLOT MANAGER' menu.
- 6 Select the 'MEDIA SAVER' item using the ◀ or ▶ button.
- 7 Press 'next/select' to enter the 'MEDIA SAVER' menu.
- 8 Select the 'M/S MODE' item using the ◀ or ▶ button.
- 9 Press 'next/select' to enter the 'M/S MODE' menu.
- 10 Select the 'AUTO POSITION' item using the ◀ or ▶ button.
- 11 Press 'next/select' to select the required setting.
- 12 Press 'Program' to leave the main menu.



### Deselecting the media saver

- 1 Use the above procedure and select the media saver off.

---

## Media saver time out

As already explained in the previous section, when the media saver queue is full the drawings are printed. However, to prevent unnecessary delays for prints in partially full queues, a time out of 1 to 60 minutes can be set, after which the contents of the queue is printed.

### ▼ **Setting the media saver time out**

- 1 Press 'Program' to enter the main menu.
- 2 Select the 'CONFIGURATION' item using the ◀ or ▶ button.
- 3 Press 'next/select' to enter the 'CONFIGURATION' menu.
- 4 Select the 'PLOT MANAGER' item using the ◀ or ▶ button.
- 5 Press 'next/select' to enter the 'PLOT MANAGER' menu.
- 6 Select the 'MEDIA SAVER' item using the ◀ or ▶ button.
- 7 Press 'next/select' to enter the 'MEDIA SAVER' menu.
- 8 Select the 'M/S TIME OUT' item using the ◀ or ▶ button.
- 9 Press 'next/select' to enter the 'M/S TIME OUT' menu
- 10 Select the required value using the ◀ or ▶ button.
- 11 Press 'next/select' to confirm the selected value.
- 12 Press 'Program' to leave the main menu.

---

## Flush media saver

If a print which is being held in the media saver memory is required, it can be printed immediately.

### ▼ **Setting the flush media saver**

- 1 Press 'Program' to enter the main menu.
- 2 Select the 'FLUSH M.SAVER' item using the ◀ or ▶ button.
- 3 Press 'next/select' to print the file being held.
- 4 Press 'Program' to leave the main menu.

---

## Media saver plot size

When the media saver is set to Nesting, you have three choices of paper size:  
**'STD NO CLIP'** The print is printed on the paper size selected. It is not clipped.

**'STD CLIPPED'** If necessary, the print is clipped to fit on the paper size selected.

**'NON STANDARD'** The print is drawn as defined in the print data file. Papersize depends on the size of the plot.

Default is 'NON STANDARD'.



### Setting the media saver plot size

- 1 Press 'Program' to enter the main menu.
- 2 Select the 'CONFIGURATION' item using the ◀ or ▶ button.
- 3 Press 'next/select' to enter the 'CONFIGURATION' menu.
- 4 Select the 'PLOT MANAGER' item using the ◀ or ▶ button.
- 5 Press 'next/select' to enter the 'PLOT MANAGER' menu.
- 6 Select the 'MEDIA SAVER' item using the ◀ or ▶ button.
- 7 Press 'next/select' to enter the 'MEDIA SAVER' menu.
- 8 Select the 'M/S PLOT SIZE' item using the ◀ or ▶ button.
- 9 Press 'next/select' to enter the 'M/S PLOT SIZE' menu
- 10 Select the required setting using the ◀ or ▶ button.
- 11 Press 'next/select' to confirm the selected setting.
- 12 Press 'Program' to leave the main menu.

---

# Replot

Normally, once a file has been processed and printed it is discarded. The replot function overrules the discarding. To make extra copies/prints from the operating panel. You have to select 'REPLOT ENABLE'.

Default is 'off'.

## ▼ Enabling replot

- 1 Press 'Program' to enter the main menu.
- 2 Select the 'CONFIGURATION' item using the ◀ or ▶ button.
- 3 Press 'next/select' to enter the 'CONFIGURATION' menu.
- 4 Select the 'REPLOT' item using the ◀ or ▶ button
- 5 Press 'next/select' to enter the 'REPLOT' menu.
- 6 Select the required setting using the ◀ or ▶ button.
- 7 Press 'next/select' to confirm the setting.
- 8 Press 'Program' to leave the main menu.

---

## Setting the number of copies

This option enables you to print multiple prints of the file currently in the memory of the printer. Default is 0, maximum is 99 prints.

**Note:** *This option is only active if replotting is enabled.*

## ▼ Defining the number of prints

- 1 Press 'Program' to enter the main menu.
- 2 Select the '# COPIES' item using the ◀ or ▶ button.
- 3 Press 'next/select' to enter the '# COPIES' menu.
- 4 Select the required number of copies using the ◀ or ▶ button.
- 5 Press 'next/select' to confirm the number of copies.
- 6 Press 'Program' to leave the main menu.

---

# Quality setup

Quality setup includes:

- Poster mode, to print documents with large black areas.
- Rendering, to change the first 16 pen patterns into another 16 gray-shaded pen patterns.
- Image type, to use the correct scaling method.

---

## Poster mode

It is advisable to enable the Poster mode when you have to make prints which contain large black areas.

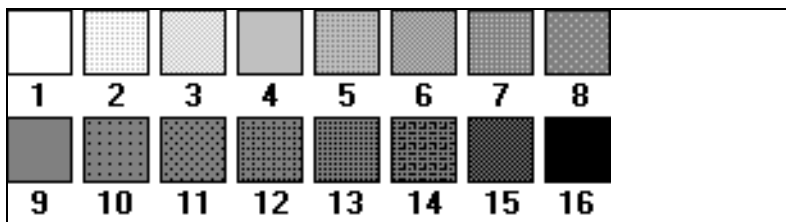
### ▼ **Enabling Poster mode**

- 1 Press 'Program' to enter the main menu.
- 2 Select the 'QUALITY' item using the ◀ or ▶ button.
- 3 Press 'next/select' to enter the 'QUALITY' menu.
- 4 Select the 'POSTER MODE' item using the ◀ or ▶ button.
- 5 Press 'next/select' to enter the 'POSTER MODE' menu.
- 6 Select the Poster mode on/off using the ◀ or ▶ button.
- 7 Press 'next/select' to confirm the Poster mode.
- 8 Press 'Program' to leave the main menu.

**Note:** *This setting will be overruled by Plot Director, the drivers and the setting on the scanner operating panel.*

## Rendering

The rendering function can be divided into clustered or cloud. With this option you can change the first 16 pen patterns into another 16 gray-shaded pen patterns.



[31] The rendering function gray shaded patterns

**Attention:** *Clustered must be used if your originals contain big gray areas. Use cloud to get an optimal result with line drawings.*



### Defining rendering

- 1 Press 'Program' to enter the main menu.
- 2 Select the 'QUALITY' item using the ◀ or ▶ button.
- 3 Press 'next/select' to enter the 'QUALITY' menu.
- 4 Select the 'RENDERING' option using the ◀ or ▶ button.
- 5 Press 'next/select' to enter the 'RENDERING MENU'.
- 6 Select the required option clustered or cloud using the ◀ or ▶ button.
- 7 Press 'next/select' to confirm the selected option.
- 8 Press 'Program' to leave the main menu.

---

## Image type

The Océ 9400-II has an optimised quality mode for scaling down raster files in order to deliver the best possible quality. The default setting is CAD.

**CAD** will use scaling in order not to lose thin lines when scaling down raster files or converting the resolution of the file into the resolution of the printer (300 dpi).

**PHOTO** will use pixel scaling.



### Defining image type

- 1 Press 'Program' to enter the main menu.
- 2 Select the 'QUALITY' item using the ◀ or ▶ button.
- 3 Press 'next/select' to enter the 'QUALITY' menu.
- 4 Select the 'IMAGE TYPE' option using the ◀ or ▶ button.
- 5 Press 'next/select' to enter the 'IMAGE TYPE MENU'.
- 6 Select the required option CAD or PHOTO using the ◀ or ▶ button.
- 7 Press 'next/select' to confirm the selected option.
- 8 Press 'Program' to leave the main menu.

---

# Transformation

With the Océ 9400-II it is possible to change the position of the image on the print, such as: rotating and scaling of the image. This applies only for **vector** languages and when the media saver is switched off.

---

## Print rotation

This function allows you to set the rotation applied to a print. Four values are possible: 0°, 90°, 180° and 270°. Default is 0°. This function only applies for vector languages.

### ▼ Defining the print rotation

- 1 Press 'Program' to enter the main menu.
- 2 Select the 'CONFIGURATION' item using the ◀ or ▶ button.
- 3 Press 'next/select' to enter the 'CONFIGURATION' menu.
- 4 Select the 'PLOT MANAGER' item using the ◀ or ▶ button.
- 5 Press 'next/select' to enter the 'PLOT MANAGER' menu.
- 6 Select the 'TRANSFORM' item using the ◀ or ▶ button.
- 7 Press 'next/select' to enter the 'TRANSFORM' menu.
- 8 Select the 'ROTATION' item using the ◀ or ▶ button.
- 9 Press 'next/select' to enter the 'ROTATION' menu.
- 10 Select the required value using the ◀ or ▶ button.
- 11 Press 'next/select' to confirm the setting.
- 12 Press 'Program' to leave the main menu.

---

## Print scaling

The X-scale and Y-scale can be set individually to a value between 0.05 and 20.0. Default is 1.0. This function only applies for vector languages.

### ▼ Defining print scaling

- 1 Press 'Program' to enter the main menu.
- 2 Select the 'CONFIGURATION' item using the ◀ or ▶ button.
- 3 Press 'next/select' to enter the 'CONFIGURATION' menu.
- 4 Select the 'PLOT MANAGER' item using the ◀ or ▶ button.
- 5 Press 'next/select' to enter the 'PLOT MANAGER' menu.



- 6 Select the 'TRANSFORM' item using the ◀ or ▶ button.
- 7 Press 'next/select' to enter the 'TRANSFORM' menu.
- 8 Select the 'SCALING' item using the ◀ or ▶ button.
- 9 Press 'next/select' to enter the 'SCALING' menu.
- 10 Select the required scaling method using the ◀ or ▶ button.
- 11 Press 'next/select' to enter the appropriate menu.

For each scaling method follow the next procedure:

- 12 Select the required setting using the ◀ or ▶ button.
- 13 Press 'next/select' to confirm the setting.
- 14 Press 'Program' to leave the main menu.

**Note:** *If autoscale is selected, x-scaling and y-scaling are not applicable.*

---

## Autoscaling

The purpose of Autoscale is to get documents on exact ISO/ANSI/Architect formats. The scaling factor applied to the X and Y axis is the same. Before computing this scaling factor, an auto rotation could be performed to get the best autoscale.

The Media Saver and the Autoscaling Mode are controlled separately but do interact.

The Autoscale Mode can be activated in two ways;

- autoscale to a predefined format (ISO/ANSI/Architect)
- best fit.

The user can combine Autoscale and Autoposition: plots are first autoscaled (best fit or scale to format, if needed), and then autopositioned (if needed).

### **Fit to Format Mode:**

All the drawings regardless their sizes, are reduced/enlarged to one specific standard size. This option could be combined with the Media saver possibilities.

The list of predefined formats depends on the media format selected on the printer operating panel.

Users can enlarge drawings to poster size to make presentations to large audience. They can also reduce documents to easily mail them or archive them in standard A3 or A4 books.

**Best fit Mode:**

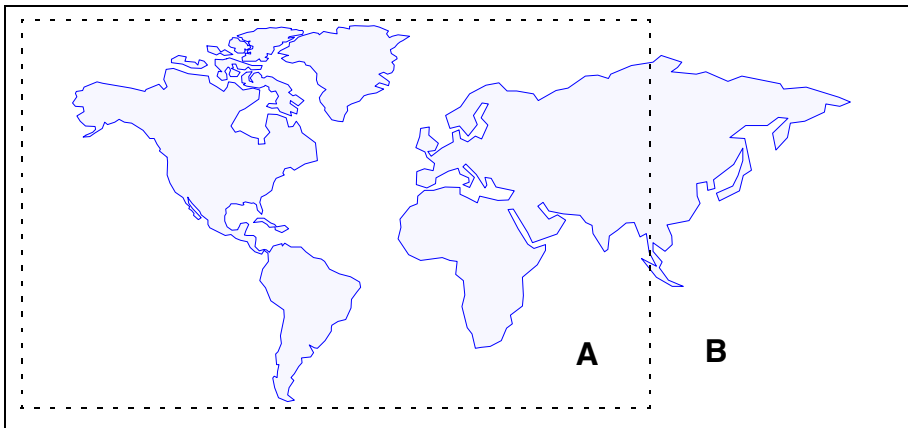
In this mode, the drawing will be reduced to fit in either the length or the width direction of the format loaded in the machine and as long no information is lost (no clipping). Only plots larger than the loaded paper size are scaled/rotated, and the others are printed without scaling.

**Note:** *This mode does not enlarge drawings, but only reduces them.*

This option makes no sense with the Nesting option. In fact, if the Nesting is On, it will never have any result.

This mode prevents clipping of any plot larger than the media loaded on the machine.

If 'AUTOSCALE' is off and if your drawing is larger than the physical dimensions of the media, the printer will automatically clip the area outside the margins. The 'CLIPPING' message appears on the display while the printer automatically compensates for the discrepancy. Clipping does not affect the position of the print origin.



[32] Print clipping

A: Only the left part of the drawing is plotted.

B: The part of the drawing outside the margins is clipped.



### **Defining autoscaling**

- 1 Press 'Program' to enter the main menu.
- 2 Select the 'CONFIGURATION' item using the ◀ or ▶ button.
- 3 Press 'next/select' to enter the 'CONFIGURATION' menu.
- 4 Select the 'PLOT MANAGER' item using the ◀ or ▶ button.
- 5 Press 'next/select' to enter the 'PLOT MANAGER' menu.
- 6 Select the 'TRANSFORM' item using the ◀ or ▶ button.
- 7 Press 'next/select' to enter the 'TRANSFORM' menu.
- 8 Select the 'SCALING' item using the ◀ or ▶ button.
- 9 Press 'next/select' to enter the 'SCALING' menu.
- 10 Select 'AUTOSCALE' on using the ◀ or ▶ button.
- 11 Press 'next/select' to enter the 'AUTOSCALE' menu.
- 12 Select 'OFF, BEST FIT, A4, A3, A2, A1' or 'A0' using the ◀ or ▶ button.
- 13 Press 'next/select' to confirm the required setting
- 14 Press 'Program' to leave the main menu.

---

# Password

As the printer can be operated in your work environment by users with different skill levels, three menu access levels can be set for security reasons. The display menu allows fully authorized users to access these different printer menu levels, from the locked level to the full menus levels, using passwords.

The short menus level allows access to the display, cancel plot, media settings and plot menus enabling users to setup outplot parameters, execute the printer test and demo plot, set the number of copies and cancel the plot in progress. The password for the short menu is: ◀ ◀ 'previous' ▶ ▶.

The full menus level allows access to the display, plot, configuration, cancel plot and number of copies menu and their sub-menus. The password for the full menu is: ◀ ▶ 'previous' ▶ ◀.

The locked level locks the entire printer. In this case the printer acts only as an output device, receiving commands from your workstation via remote control. While commands cannot be entered on the operating panel, informative messages are still displayed. The password for the locked menu is: 'previous' ◀ ▶ 'previous' ◀.

## ▼ **Setting the menu access level**

- 1 Press 'Program' to enter the main menu.
- 2 Select the 'DISPLAY' item using the ◀ or ▶ button.
- 3 Press 'next/select' to enter the 'DISPLAY' menu.
- 4 Select the required menu level using the ◀ or ▶ button.
- 5 Press 'next/select' to confirm.
- 6 Depending on the selected menu level, a password must be entered.
- 7 Press 'next/select' to confirm the password.
- 8 Press 'Program' to leave the main menu.

---

# Dump configuration

Dumping the configuration is an easy way to obtain a list of the current print settings on paper.

**Note:** *The dump configuration cannot be performed while a file is being processed.*



## Dumping the configuration

- 1 Press 'Program' to enter the main menu.
- 2 Select the 'CONFIGURATION' item using the ◀ or ▶ button.
- 3 Press 'next/select' to enter the 'CONFIGURATION' menu.
- 4 Select the 'UTILITIES' item using the ◀ or ▶ button.
- 5 Press 'next/select' to enter the 'UTILITIES' menu.
- 6 Select the 'DUMP CONFIG' item using the ◀ or ▶ button.
- 7 Press 'next/select' to confirm 'DUMP CONFIG'.
- 8 Press 'Program' to leave the main menu.

---

# Service

This menu is only meant for the Océ service technician.

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# Chapter 9

## Solving problems

*This chapter describes the problems that may occur while using the Océ 9400-II.*



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# Problem solving printer

This chapter documents problems that may occur with the Océ 9400-II and how to solve them.

For the printer we distinguish three types of warnings/errors:

- Warnings
- Operator recoverable errors printer
- Printer recoverable errors

---

## Printer warnings

The warning appears in the display. The printer will continue to print but the print quality may decrease.

Warnings	Description
<i>CONDITIONING</i>	The printer doses toner
<i>SHEET TOO SHORT</i>	The sheet for the manual feed is shorter than the print
<i>SHEET NOT FED</i>	Within the specified time-out no sheet has fed into the manual feed, the plot is cancelled



---

## Operator recoverable errors (printer)

When the printer detects an error, the printer stops immediately. An error message will be displayed on the panel. The user has to take action to solve the problem.

<b>Message</b>	<b>Description</b>
<i>ERROR FEED TABLE</i>	Paper in feed table or feed table not closed Remove the paper and/or close the feed table
<i>PAPER REMOVED</i>	The paper is removed from the feed table during a print
<i>PAPER TOO SHORT</i>	The print material is too short Remove the print material out of the engine
<i>PAPER JAM</i>	Paper jam in the print engine Remove the paper out of the engine
<i>FEED TABLE OPEN</i>	The feed table is not closed properly Close the feed table
<i>CUTTER ERROR</i>	The printer material is not properly cut Remove the print material
<i>ROLL EMPTY</i>	The selected roll is empty Remove the print material and place a new roll into the rollunit
<i>PAPER JAM ROLL</i>	Paper jam in the rollunit Remove the print material
<i>ROLLUNIT OPEN</i>	The rollunit is open Close the rollunit
<i>REFILL TONER</i>	User has to add toner
<i>OPEN ROLLUNIT</i>	Open roll unit to remove the paper
<i>CHECK OUTPUT-TRAY</i>	Paper am in the compact output stacker Remove the paper and press Continue

---

## Clearing paper jams

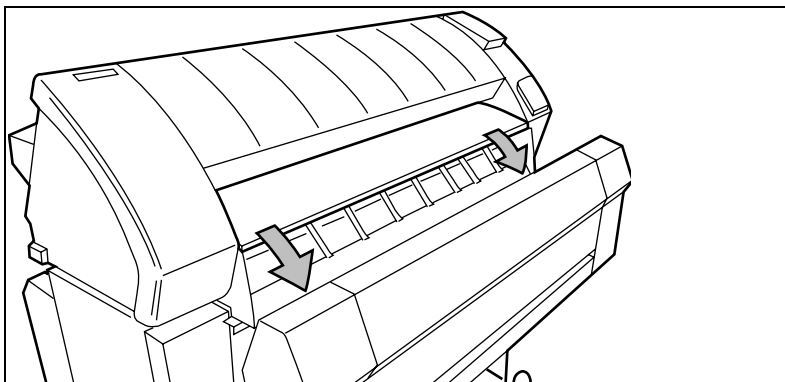
If a jam occurs a message will be displayed on the operating panel. If paper misfeeds occurs frequently, check if:

- The roll(s) are loaded correctly and the media is fed as indicated.
- The correct media is used (see 'Copy material that can be used' on page 137).
- No scraps of material are blocking the paper path.



### Clearing a paper jam in the material feed section

- 1 Switch off the printer.
- 2 Open the upper drawer.
- 3 Lower the feed table, using the two catches on the front underneath the feed table (see figure 33).



[33] Lowering the feed table

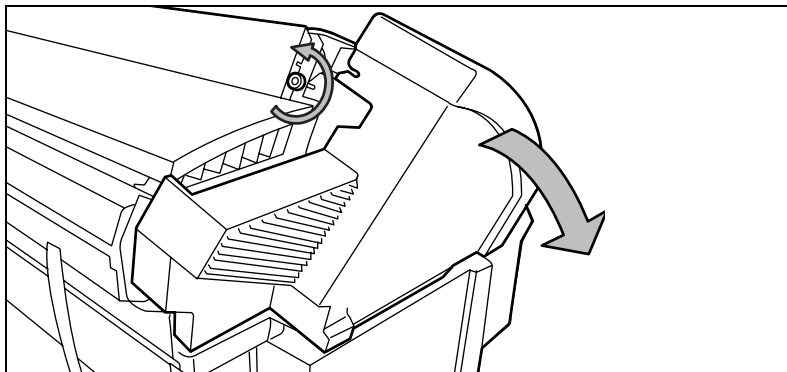
- 4 Remove the jammed material.  
**Note:** Check thoroughly that no scraps of material are left behind.
- 5 Close the feed table.
- 6 Close the upper drawer.
- 7 Switch on the printer.

If the paper jam can not be cleared by opening the feed table than open the fusing section.



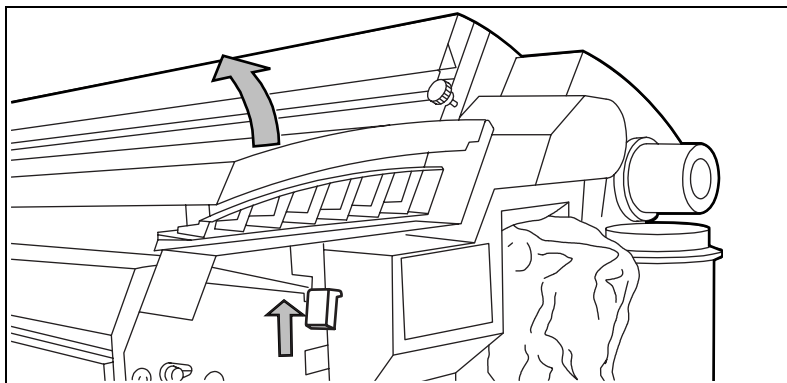
### **Clearing the paper jam in the fuser section**

- 1 Switch off the printer.
- 2 Unscrew the knurled nut at the left hand side of the machine and open the cover (see figure 34).



[34] Unscrewing the knurled nut and opening the cover

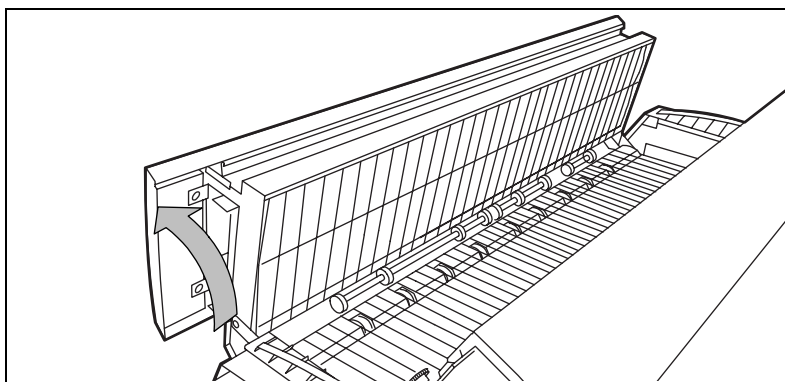
- 3 Lift the green handle (see figure 35).



[35] Lifting the green handle

- 4 Open the fuser unit (see figure 36).

**Caution:** *If the printer has been used recently, the fuser may still be hot.*



[36] Opening the fuser unit

- 5 Remove the jammed material.

**Attention:** *Be careful! The toner is not fused.*

- 6 Lift the green handle and close the fuser unit.
- 7 Close the left cover and screw the knurled nut.
- 8 Switch on the printer.

## Printer recoverable errors

In case of a printer recoverable error, a message with a 4-digit error code appears in the display.



### Solving a printer error

- 1 Switch off the printer and check the complete paper path refer to 'Clearing paper jams' on page 122.
- 2 Then switch the printer on again.

If no error number is shown in the display, you can continue printing.

If the printer error maintains, then call the key operator.

---

# Problem solving copier

When an error occurs, the scanner operating panel informs you about the nature of the problem.

- if the printer error indicator is on, a jam has occurred in the printer (see ‘Problem solving printer’ on page 120) on how to solve the problem.
- if the display shows an error code letter E followed by an error code number, an original jam has occurred in the scanner (see ‘Clearing original jam’ on page 126)
- if the display shows a flashing 3-digit error code, a machine error has occurred in the scanner (see ‘Operator recoverable errors scanner’ on page 125).

---

## Scanner error

When the scanner detects an error, the machine stops immediately. A flashing error code will be displayed on the scanner operating panel.

▼ **Solving a scanner error**

- 1 Switch off the scanner.
- 2 Then switch it on again.

If no error number is shown on the display, you can continue scanning.

---

## Operator recoverable errors scanner

Message	Description
E1	Original in scanner when switching on the scanner
E2	Original too long
E3	Stop/Correction button pressed during original transport

---

## Please wait

If the user wants to scan, but the printer is busy with printing files or a copy job, the please wait indication will light. If the printer is ready the indication goes out. The scanning will start.

---

## Printer error

If the printer detects an error, the printer error indication will light. If the error is solved the indication goes out. Scanning can be started.

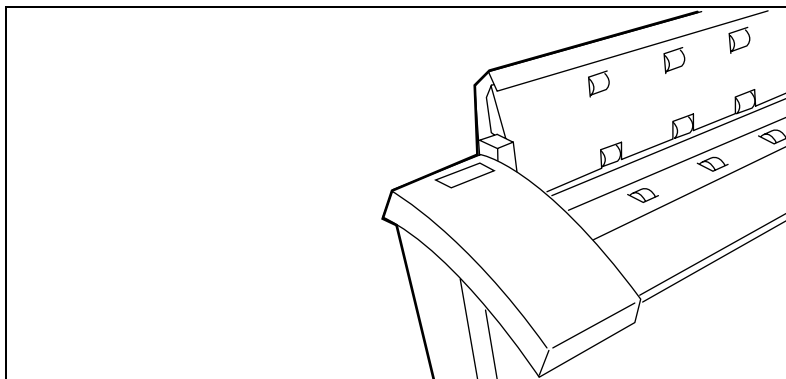
If during scanning a printer error occurs: the original will be fed in, and the scanning procedure will be finished. No copy will be made.

---

## Clearing original jam

When the scanner detects an error, the machine stops immediately. A flashing error code will be displayed on the scanner operating panel. This code consists of a letter E followed by an error code number. The user has to take action to solve the problem.

- ▼ **Clearing an original jam**
- 1 Unlock the top cover by pushing the front side of the cover down and pulling it towards.
  - 2 Raise the cover (see figure 37).



[37] Opening the top cover of the scanner

- 3 Remove the original.
- 4 Lower the top cover.
- 5 Lock the cover by pushing the front side of the cover down and pushing it back to the rear until you hear a click.  
**Note:** *Make sure that the cover is closed correctly, to ensure proper original transport.*
- 6 Press the 'stop/correction' button. The error message will disappear on the panel.

---

## Cleaning the glass platen

If the glass platen is dirty or static it should be cleaned to ensure top quality copies. At the same time you can clean the white pressure platen

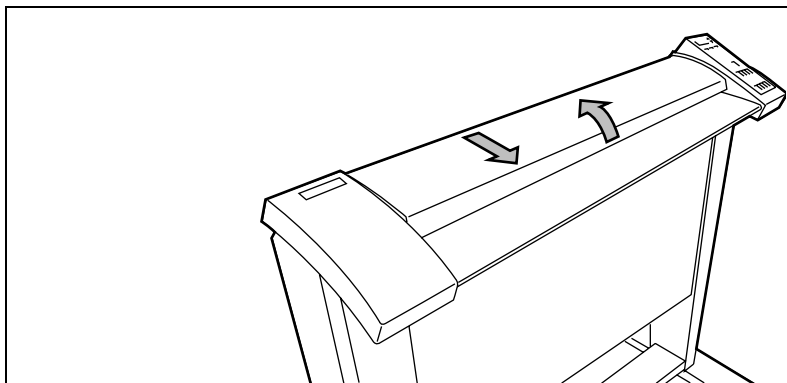
---

**Attention:** *To achieve the best results, we recommend the use of Océ cleaner 'A'. (Codennr. 1068117; Cleaner kit).*



### Cleaning the glass platen and the pressure platen

- 1 Switch off the scanner.
- 2 Unlock the top cover by pushing the front side of the cover down and pulling it towards.
- 3 Raise the cover (see figure 37).
- 4 Clean the glass platen and the white pressure platen gently with a soft cloth moistened with a small quantity "Cleaner A" (see figure 38).  
For safety information see the safety data sheet in Appendix B.



[38] Cleaning the glass and the pressure platen

- 5 Lower the top cover.
- 6 Lock the cover by pushing the front side of the cover down and pushing it back to the rear until you hear a click.  
**Note:** *Make sure that the cover is closed correctly, to ensure proper original transport.*
- 7 Switch on the scanner.



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# Appendix A

## Overview and tables



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# Product specifications printer

The Océ 9400-II is a wide format low to mid volume copying and printing system.

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## Printer

<i>Technology</i>	electrophotography (LED head)
<i>Photoconductive drum</i>	organic photoconductor (OPC)
<i>Printing speed</i>	3m/min
<i>Warm up time</i>	none, once the printer is switched on
<i>Media feed</i>	manual and 1- or 2 roll automatic
<i>Toner system</i>	closed
<i>Maximum printable area</i>	max. printable area depends on size of installed memory and file complexity, but possible up to 15 metres
<i>Poster mode</i>	increases the density of the copy

---

## Controller

<i>Standard memory</i>	64 MB
<i>Vector data formats</i>	HP-GL, HP-GL/2, CalComp 906/907, Edmics
<i>Raster data formats</i>	HP-RTL, Cals type 1, TIFF 6.0 G3 & G4, NIRS, C4-G4
<i>Language sensing</i>	automatic and via display panel
<i>Multicopy</i>	up to 99
<i>Interfacing</i>	automatic switching: Centronics parallel Ethernet
<i>Ethernet</i>	Ethernet TCP/IP

## ■ Optionals

- Automatic 2 roll-unit
- Memory upgrade to 128 or 256 Mb
- PostScript level 2
- Printserver for Novell and Ethertalk
- Scanner
- Scan to file software
- High capacity delivery tray
- Compact Output Stacker
- Repro Desk print management software

The optionals can vary per country.

---

# Product specifications scanner

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## Scanner

<i>Free-standing unit</i>	can only be used in combination with printer engine
<i>Digital retention</i>	up to 19 copies from one scan
<i>Digital zoom</i>	25-400% in fixed steps or 1% increments
<i>Paper selection</i>	Roll1, Roll2 or Manual feed
<i>Automatic Background Compensation</i>	standard on but can be switched off
<i>Leading/trailing edge correction</i>	0 - 80 mm in steps of 5 mm 0 - 3" in steps of 0.25"
<i>Invert copy</i>	used to copy blue-prints (limited to single copy only and without ABC)
<i>Poster mode</i>	increases the density of the copy
<i>Image logic</i>	The Océ 9400-II makes use of Océ image logic technology. This technology ensures that the quality of every copy is automatically optimised.

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# Interfaces

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## Centronics protocol

Centronics supports P1284 compatible and ECP modes.

---

## SCSI-2 protocol

When the printer is attached to a SCSI-bus, it behaves itself as a standard SCSI tape device. SCSI tape commands are used to address the Océ 9400-II for upload.

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## Ethernet protocol

You can connect the printer to:

- TCP/IP
- NETBIOS (over TCP/IP).

**Note:** *Ethertalk/Novell can be supported by an external optional print server.*

For more details refer to 'Ethernet' on page 27

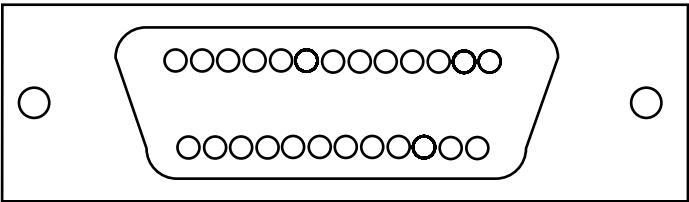
# Centronics port configuration

The Centronics parallel port is located at the rear of the printer. It is a DB25 female connector.

The following table describes the Centronics port pin assignment. For further details, refer to the IEEE P1284 standard.

Printer Pin No.	Name of the signal	
1	STROBE	
2	Data 1	Data 1 (LSB)
3	Data 2	Data 2
4	Data 3	Data 3
5	Data 4	Data 4
6	Data 5	Data 5
7	Data 6	Data 6
8	Data 7	Data 7
9	Data 8	Data 8 (MSB)
10	ACKN	Acknowledge
11	BSY	Busy
12	PAPEROUT	Paper error
13	SELECT	Select
14	AUTOLF	
15	FAULTN	Fault
16	INITN	Initialize
17	SELECTINN	Select in
18 - 25	GND	Ground

STROBE is the dialog signal.



[39] Centronics connector

# SCSI-2 port configuration

The SCSI-2 connector is located on the optional SCSI-board at the rear of the printer. It is a mini Subd 50 pin female connector.

The following table describes the SCSI port pin assignment. For further details, refer to the ANSI X3.131 standard.

Printer Pin No.	Name of the signal
1 - 25	GND
26 - 34	SD10_N
35 - 37	GND
38	TERM_PWR
39	GND
40	GND
41	ATNO_N
42	GND
43	BSYO_N
44	ACKO_N
45	SELI_N
46	MSGO_N
47	SELO_N
48	CDO_N
49	REQO_N
50	IOO_N



[40] SCSI connector

# Ethernet port configuration

The Ethernet connector is a 10/100 base T connector (RJ45). The following table describes the Ethernet RJ45 pin assignment.

Printer Pin No.	Name of the signal
1	TD+
2	TD-
3	RD+
4	Common mode Term
5	Common mode Term
6	RD-
7	Common mode Term
8	Common mode Term

The following table describes the AUI connector (DB15 female with locking mechanism).

Printer Pin No.	Name of the signal
1	GND
2	C+
3	T+
4	GND
5	R+
6	GND
7	No connect
8	GND
9	C-
10	T-
11	GND
12	R-
13	GND
14	+12VF
15	GND

# Originals that can be used

## Overview of originals

<i>Originals</i>	<i>Minimum</i>	<i>Maximum recommended</i>
Width	210 mm (8.5")	1020 mm (40") of which image width 914 mm (36") can be copied without loss of information
Length	210 mm (8.5")	Guaranteed copy quality 3 meters or 10 feet. Maximum length limited by the worst-case speed difference between scanner and printer; at least > 6m.

## Points of notice with regard to originals to be processed

<i>Curls</i>	<p>Originals with a curl diameter &gt; 75mm, can easily be scanned. If the diameter of the curl is &lt; 75 mm with help from the operator, it is advisable to uncurl the leading edge to prevent problems.</p> <p>Originals with a curl diameter &lt; 50 mm, a carrier sheet may be used (not thicker than 0.3 mm)</p> <p>Dog-ears should be straightened out, especially on originals with reinforcement borders.</p>
<i>Damaged originals</i>	<p>Torn originals should be repaired with tape.</p> <p>Badly damaged originals can be copied by inserting them into carrier sheets.</p>
<i>Miscellaneous</i>	<p>The leading edge of the original must be straight.</p> <p>The thickness of the original may be maximal 1.5 mm.</p> <p>Filing strips with a thickness 3 mm.</p> <p>Any paper clips, staples etc. should be removed from the original before feeding it into the scanner.</p> <p>Creased leading edges and trailing edges should be straightened out.</p> <p>Paste-ups should be taped down 100 % at all edge; a carrier sheet may be used (not thicker than 0.3 mm)</p> <p>Folded originals should be straightened out before feeding.</p> <p>Wrinkles and folds may be visible on the copy.</p> <p>Feed plotter originals in carrier sheets.</p>



---

# Copy material that can be used

Océ machines and materials are matched for optimal quality and performance. It is therefore recommended to use only approved Océ materials in the Océ 9400-II.

A full list of Océ materials suited for use in the Océ 9400-II, including plain paper, transparent paper, coloured papers and various polyester films is available from your Océ representative.

The maximum length of the print material is 175 m when you use 75 g/m<sup>2</sup> material and 140 m in case of 110 g/m<sup>2</sup>. The diameter of the roll holder equals 3 inch.

<b>Paper formats</b>	<b>Width</b>
<i>A0</i>	841 mm
<i>A1</i>	594 mm
<i>A2</i>	420 mm
<i>A3</i>	297 mm
<i>E</i>	34"
<i>D</i>	22"
<i>C</i>	17"
<i>B</i>	11"
<i>E+</i>	36"
<i>D+</i>	24"
<i>C+</i>	18"
<i>B+</i>	12"
<i>30"</i>	30"
<i>500 mm</i>	500 mm
<i>700 mm</i>	700 mm
<i>B1</i>	707 mm

---

## Overview of copy material

<i>Copy material</i>	<i>Recommended</i>	
Plain paper	75 g/m <sup>2</sup>	
Transparent paper	110 g/m <sup>2</sup>	
Vellum	20 lbs	
Polyester film	3.5 mil	
ECO papers	75 g/m <sup>2</sup>	
	<i>Minimum</i>	<i>Maximum</i>
Width	279 mm (11")	914 mm (36")
Length	420 mm (A3)	Guaranteed print quality ca. 3 meter or 10 feet. This is also the limit for prints and multiple copies made on the Océ 9400-II. For single copies/prints made on the Océ 9400-II printer or hybrid, the maximum length may be up to 15 meter, but the operator has to accept that the copy/print quality may not conform to all quality aspects.

---

**Attention:** *Paper and transparent materials are sensitive to high humidity. To ensure optimal copy quality, it is advisable (especially overnight) to keep all copy materials in their original packaging.*

---

**Attention:** *If sheets of print material are curled, feed them in with the curl facing down, otherwise you will damage the drum.*

# Overview of standard zoom formats

## Standard zoom fixed steps ISO

<i>Original</i>	<i>Copy</i>				
	<i>A0</i>	<i>A1</i>	<i>A2</i>	<i>A3</i>	<i>A4</i>
<i>A0</i>	100	71	50	35	25
<i>A1</i>	141	100	71	50	35
<i>A2</i>	200	141	100	71	50
<i>A3</i>	283	200	141	100	71
<i>A4</i>	400	283	200	141	100

## Standard zoom fixed steps ANSI

<i>Original</i>	<i>Copy</i>				
	<i>34</i>	<i>22</i>	<i>17</i>	<i>11</i>	<i>8<sup>1</sup>/<sub>2</sub></i>
<i>34</i>	100	65	50	32	25
<i>22</i>		100		50	
<i>17</i>	200	129	100	65	50
<i>11</i>		200		100	
<i>8<sup>1</sup>/<sub>2</sub></i>	400	259	200	129	100

## Standard zoom fixed steps Architectural

<i>Original</i>	<i>Copy</i>				
	<i>36</i>	<i>24</i>	<i>18</i>	<i>12</i>	<i>9</i>
<i>36</i>	100	67	50	33	25
<i>24</i>		100		50	
<i>18</i>	200	133	100	87	50
<i>12</i>		200		100	
<i>9</i>	400	267	200	133	100

# Order of standard sizes for using standard cut

ISO		ANSI		ARCH	
A0	(841x1189 mm)	34"	(34x44")	36"	(36x48")
A1	(594x841 mm)	22"	(22x34")	24"	(24x36")
A2	(420x594 mm)	17"	(17x22")	18"	(18x24")
A3	(297x420 mm)	11"	(11x17")	12"	(12x18")
34"	(34x44")	36"	(36x48")	34"	(34x44")
22"	(22x34")	24"	(24x36")	22"	(22x34")
17"	(17x22")	18"	(18x24")	17"	(17x22")
11"	(11x17")	12"	(12x18")	11"	(11x17")
36"	(36x48")	30"	(30x42")	30"	(30x42")
24"	(24x36")	A0	(841x1189 mm)	A0	(841x1189 mm)
18"	(18x24")	A1	(594x841 mm)	A1	(594x841 mm)
12"	(12x18")	A2	(420x594 mm)	A2	(420x594 mm)
30"	(30x42")	A3	(297x420 mm)	A3	(297x420 mm)
500 mm	(500x707 mm)	500 mm	(500x707 mm)	500 mm	(500x707 mm)
700 mm	(700x1000 mm)	700 mm	(700x1000 mm)	700 mm	(700x1000 mm)
B1	(707x1000 mm)	B1	(707x1000 mm)	B1	(707x1000 mm)

**Note:** This table represents the order of standard sizes displayed on the scanner when using standard cut. The order depends on the setting which is set on the printer operating panel refer to ‘The printer operating panel’ on page 11.

---

# Appendix B

## Controller firmware upgrade



# Controller firmware upgrade

**Note:** Please refer to the Océ website ([www.oce.com](http://www.oce.com)) for obtaining the most recent firmware.

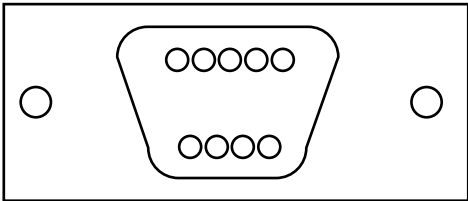
The Océ 9400-II offers you the ability to upgrade the firmware version of the controller by uploading the firmware through the Centronics port. You must connect a terminal to the controller port **Com 1**. On this terminal you will have explicit messages on the procedure to follow.

The displayed messages are only in English, although your printer is setting up to another language.

## ▼ Connecting to the printer controller

- 1 Switch off the machine.
- 2 Connect a centronics cable between the controller and your host.
- 3 Connect a serial cable between the controller and your host. The controller has a DCE (COMM) port, thus if your host is a PC/Workstation you have to use a crossed cable.

Com 1	Printer description
Sub-DB9	MALE
Pin 1	DCD
Pin 2	RXD
Pin 3	TXD
Pin 4	DTR
Pin 5	GND
Pin 6	DSR
Pin 7	RTS
Pin 8	CTS
Pin 9	RI



[41] Com 1 connector

- 4 Open a terminal session on your host (e.g. WINDOWS terminal) with the following settings:

<i>baud rate</i>	9600
<i>data bit</i>	8
<i>stop bit</i>	1
<i>parity</i>	none
<i>flow control</i>	none

- 5 Switch on the printer.
- 6 You will be prompted to press the CTRL-P key with the following message:  
“Press CTRL-P to update the application / fls/EPC-M1.....”

You have 5 seconds to press this key, otherwise the controller will not update the firmware.

- 7 When CTRL-P is pressed, you are prompted to confirm your choice.  
“You have pressed CTRL-P key”  
“Do you confirm to update the file application /fls/EPC-M1?”  
“Y confirm / N cancel”

- 8 If you press N, the controller will start with its current firmware version.

- 9 If you press Y, you are prompted to send the new firmware file through Centronics:  
“Transfer controller software through the Centronics port”.

- 10 On your host send the new firmware file, e.g. on a DOS session on a PC:  
copy /b EPC-M1\_1.0.ld lpt1

- 11 You can monitor the progress on the terminal window with the following messages:

“Loading file”  
“Transfer progress xx%”  
“Transfer successful, checksum 0x.....”  
“Writing to Flash”  
“Erase Flash ..... done”  
“Writing progress: xx%”  
“Done”  
“Operation Complete”  
“Transfer success”  
“Turn machine OFF then ON to take into account modifications”

- 12 Switch off the printer.

- 13** Disconnect the terminal and the serial cable.
- 14** Switch on the machine. The new firmware is operational.

---

## Troubleshooting

If you do not send the correct file, if the file is corrupted or if you switch off the printer during the upgrade procedure, you will be prompted with an error message and you are asked to upgrade again, refer to step 9 of the above procedure.



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# Appendix C

## Safety information



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# Instructions for safe use

Océ machines and materials have been developed and tested in accordance with the strictest international safety standards. To ensure safe working with these products it is important that you observe the following safety rules:

- Do not remove any screws from fixed panels.
- The machine is not user-serviceable except for the components and maintenance materials mentioned in this manual.
- Do not place any liquids on the machine.
- Use maintenance materials or other materials for their original purpose only. Keep maintenance materials away from children.
- Do not mix cleaning fluids or other materials.
- To avoid risks, all modifications to Océ equipment are strictly reserved for Océ service personnel. It is recommended to use attachment cables specified by Océ.
- The printer has been fitted with an ozone filter.
- Do not bridge any mechanical or electrical circuit breakers.
- Do not use an extension lead to connect the machine.
- Locate the machine close to a wall socket that is easily accessible.
- The switch in the fixed connection (if any) should be easily accessible.
- This machine has not been designed for connection to an IT power system. (An IT power system is a voltage network in which the neutral wire is not connected to earth).
- Do not block the ventilation openings of the machine.
- Ensure that the machine is placed on a level, horizontal surface of sufficient strength. See the Océ 9400-II safety data sheet in this appendix for information about the weight of the machine.
- Ensure there is sufficient space around the machine. This facilitates reloading materials as well as maintenance.
- Do not place the machine in rooms which are subject to excessive vibration.
- Do not place the machine in rooms which are too small and insufficiently ventilated. See the Océ 9400-II safety data sheet in this appendix for information about space and ventilation requirements.
- Always use materials recommended by Océ and developed for this Océ machine. Materials not approved by Océ may result in faults in your machine.
- Do not use the machine when it is emitting unusual sounds. Remove the plug from the power socket and contact Océ Customer Service.





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# Safety data sheets

**Disclaimer** The disclaimer below is valid for all safety data sheets in this manual.

These safety data sheets have been compiled to the best of our knowledge as a compact guide to safe handling of this product. We reserve the right to revise safety data sheets as new information becomes available. It is the user's responsibility to determine the suitability of this information for the adoption of safety precautions as may be necessary and to contact the company to make sure that the sheet is the latest one issued. If and in so far as limitation of liability is permitted under the applicable laws we do not accept liability for any inaccuracy that may occur in this information.


# Safety data sheet Océ 9400-II printer

PRODUCT SAFETY DATA SHEET			
		Number Date	E-661-I-UK March 1999
Model	Océ 9400/9400-II Printer		
Description	Electrostatic printer, instant printing, console model, plain paper, organic photoconductive drum, powder toner		
Max. process speed	3 m/min		
Dimensions	Width	1 roll 1352 mm	2 roll 1352 mm
	Depth	918 mm	918 mm
	Height	1251 mm	1251 mm
Weight		149 kg	159 kg
Voltage	230 V		
Frequency	50 Hz		
Current-rated	7,5 A		
Current-max	10 A		
Power consumption	1500 W at continuous operation		
Power consumption, stand by	45 W		
Mains connection	Cable with plug		
Safety class	I (IEC 536) Protective earth connection		
Protection class	IP 20 (IEC 529)		
Sound pressure level (at bystander position)	Standby 0 dB(A) In operation main body 51 dB(A) impulse Δ L <sub>i</sub> = 2 dB(A)		
Sound power level	0 dB(A) main body 61 dB(A)		
Radio interference	Complies with Directive 89/336/EEC		
Radiation	Below the Threshold Limit Values for UV, Visible and IR radiation (TLV list of ACGIH)		
Heat emission	Standby 45 W; at continuous operation 1500 W		
Ozone emission	0,02 mg/min at continuous operation		
Room volume	Recommendation: min. 25 m <sup>3</sup>		
Room ventilation	Recommendation: min. 12,5 m <sup>3</sup> /h (natural ventilation)		
Use simulation at random operation	With a room volume and ventilation as recommended and a daily volume of 100 m (much more than average) the use simulation at random operation gives the following ozone concentrations: - Time weighted average 0,002 mg/m <sup>3</sup> (0,001 ppm) - Peak 0,008 mg/m <sup>3</sup> (0,004 ppm)  Threshold Limit Value/Occupational Exposure Limit (Time Weighted Average) for ozone 0,2 mg/m <sup>3</sup> (0,1 ppm) Odour Perception Limit for ozone 0,04 mg/m <sup>3</sup> (0,02 ppm)		
Consumables	Océ OPC Drum (Océ Safety Data Sheet E-218) Océ B4 Toner (Océ Safety Data Sheet E-196) Océ D4 Developer (Océ Safety Data Sheet E-197) Océ Copying Materials. This apparatus is suitable for processing recycling paper which complies with the requirements of ENV 12281.		
Additional safety information	The ozone ?/liter does not have to be replaced to keep the ozone concentration in the workplace below 0,04 mg/m <sup>3</sup> (i.e. the life of the ?/liter equals that of the apparatus).		
CE-Compliance	Approved according to Low Voltage Directive 73/23/EEC	Approved according to EMC Directive 89/336/EEC	
			
			

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The contents of this safety data sheet is subject to the disclaimer on page 147 of this manual.

# Safety data sheet Océ 9400-II scanner

PRODUCT SAFETY DATA SHEET			
		Number Date	
		E-622-e-UK March 1999	
Model		Océ 9400/9400-II Scanner	
Description Max. process speed		Freestanding scanner, maximum original size 1020 mm x 3000 mm 3 m/min	
Dimensions	Width Depth Height	1240 mm 615 mm 1105 mm 60 kg	
Weight			
Voltage		230 V	
Frequency		50 Hz	
Current-rated		0,7 A	
Current-max		1 A	
Power consumption, operation		90 W at continuous operation	
Power consumption, stand by		3,5 W	
Mains connection		Cable with plug	
Safety class		I (IEC 536) Protective earth connection	
Protection class		IP 20 (IEC 529)	
Sound pressure level (at operator position)	Stand by 0 dB(A)	In operation main body 48 dB(A) impulse $\Delta L_p = 5$ dB(A)	
Sound power level	0 dB(A)	main body 60 dB(A)	
Radio interference	Complies with Directive 89/336/EEC		
Radiation	Below the Threshold Limit Values for UV, Visible and IR radiation (TLV list of ACGIH)		
Heat emission	Standby 3,5 W; at continuous operation 90 W		
Ozone emission	Not applicable		
Room volume	No special requirements		
Room ventilation			
Consumables	Not applicable		
Additional safety information	None		
CE-Compliance		Approved according to Low Voltage Directive 73/23/EEC	
		Approved according to EMC Directive 89/336/EEC	
			
			

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# Safety data sheet Océ 9400-II Printer and Scanner

## PRODUCT SAFETY DATA SHEET



Number  
Date E-685-b-UK  
March 1999

Model	Océ 9400/9400-II Printer - Océ 9400/9400-II Scanner			
Description	Multifunction device , instant copying/printing, consisting of an electrostatic printer, console model, plain paper, organic photoconductive drum, powder toner and a free standing scanner, maximum original size 1020 mm x 3000 mm.			
Max. process speed	3 m/min			
Dimensions	Printer		Scanner	
Width	1 roll	2 roll		
Depth	1352 mm	1352 mm	1240 mm	
Height	918 mm	918 mm	615 mm	
Weight	1251 mm	1251 mm	1105 mm	
	149 kg	159 kg	60 kg	
Voltage	230 V		230 V	
Frequency	50 Hz		50 Hz	
Current-rated	7,5 A		0,7 A	
Current-max	10 A		1 A	
Power consumption	1500 W at continuous operation		90 W at continuous operation	
Power consumption, stand by	45 W		3,5 W	
EPA Energy Star®				
* Power consumption,sleep mode	48,5 W (printer + scanner). Default time 1 minute.			
Mains connection	Cable with plug			
Safety class	I (IEC 536) Protective earth connection			
Protection class	IP 20 (IEC 529)			
Sound pressure level (at bystander/operator position)	Stand by	In operation	Stand by	In operation
	0 dB(A)	main body 51 dB(A) impulse $\Delta L_1 = 2$ dB(A)	0 dB(A)	main body 48 dB(A) impulse $\Delta L_1 = 5$ dB(A)
Sound power level	0 dB(A)	main body 61 dB(A)	0 dB(A)	main body 60 dB(A)
Radio interference	Complies with Directive 89/336/EEC			
Radiation	Below the Threshold Limit Values for UV, Visible and IR radiation (TLV list of ACGIH)			
Heat emission	Printer 1500 W, scanner 90 W at continuous operation			
Ozone emission printer	0,02 mg/min at continuous operation			
Room volume	Recommendation: min. 25 m³			
Room ventilation	Recommendation: min. 12,5 m³/h (natural ventilation)			
Use simulation at random operation	With a room volume and ventilation as recommended and a daily volume of 100 m (much more than average) the use simulation at random operation gives the following ozone concentrations:			
	- Time weighted average		0,002 mg/m³	(0,001 ppm)
	- Peak		0,008 mg/m³	(0,004 ppm)
	Threshold Limit Value/Occupational Exposure Limit (Time Weighted Average) for ozone			
			0,2 mg/m³	(0,1 ppm)
	Odour Perception Limit for ozone			
			0,04 mg/m³	(0,02 ppm)
Consumables	Océ OPC Drum (Océ Safety Data Sheet E-218) Océ B4 Toner (Océ Safety Data Sheet E-196) Océ D4 Developer (Océ Safety Data Sheet E-197) Océ Copying Materials. This apparatus is suitable for processing recycling paper which complies with the requirements of ENV 12281.			
Additional safety information	The ozone ?liter does not have to be replaced to keep the ozone concentration in the workplace below 0,04 mg/m³ (i.e. the life of the ?liter equals that of the apparatus).			
CE-Compliance	Approved according to Low Voltage Directive 73/23/EEC	Approved according to EMC Directive 89/336/EEC	EPA MFD Compliance	
				

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# Safety data sheet B4 toner

## MATERIAL SAFETY DATA SHEET

(93/112/EEC and ISO 11014-1)

Number  
Date  
Page

E-196-a-UK  
October 1997  
1 of 2



### Océ B4 Toner

#### 1. Product and company identification

**Product name** Océ B4 Toner  
**Packing** Polyethylene bottle, contents 0,45 kg/1.1 lb  
**Company** Océ (UK) Ltd.  
**Address** Langston Road, Loughton, Essex IG10 3SL  
**Telephone** 0181-508 5544 (contact product safety coordinator)  
**Telefax** 0181-508 6689

#### 2. Composition / information on ingredients

Ingredients	CAS No.	Classification	Weight %
Polyester resin	170831-75-1		25-50
Phenoxoy resin	PMN P-95-461		25-50
Iron oxide	1317-61-9		10-25
Carbon black	1333-86-4		1-5
Amorphous Silica	68611-44-9		<1
Pigment			<1

#### 3. Hazards identification

In a toner dust cloud the formation of an explosive dust-air mixture is possible.

Toner dust may cause discomfort for the eyes and respiratory tract, in the same manner as inert nuisance dust.

To our knowledge, with due observance of the recommended exposure limit and of normal hygiene this product presents no health hazard in normal use.

#### 4. First aid measures

**Eyes contact** Rinse with plenty of water.  
**Skin contact** Wash with cold water and soap.  
**Inhalation** Clean nose, mouth, throat. Cough up. Fresh air.  
**Ingestion** Rinse mouth with water. If large quantity swallowed seek medical advice.

For any medical advice take along this material safety data sheet.

#### 5. Fire fighting measures

**Extinguishing media** Dry chemical, carbon dioxide, water spray (fog), foam  
**Special fire fighting precautions** N.A.  
**Hazardous products of decomposition** N.A.

#### 6. Accidental release measures

Spills can be cleaned with a vacuum cleaner or a damp rag. Do not use warm water, because this makes the powder soft and sticky.

#### 7. Handling and storage

Keep bottle tightly closed to prevent dust formation. Handle carefully. Avoid breathing dust.  
No special technical measures for storage.

#### 8. Exposure controls / personal protection

No special technical measures. No personal protective equipment needed.  
Industrial hygiene: after skin contact wash with cold water and soap.

Threshold Limit Value for:

* nuisance dust	10 mg/m <sup>3</sup>
* carbon black	3,5 mg/m <sup>3</sup>
* amorphous silica	10 mg/m <sup>3</sup>

continued on next page

**MATERIAL SAFETY DATA SHEET**

(93/112/EEC and ISO 11014-1)

**Number**

E-196-a-UK

**Date**

October 1997

**Page**

2 of 2

**Océ B4 Toner****9. Physical and chemical properties**

<b>Explosion limits</b> (dust explosion)	LEL 60 g/m <sup>3</sup> . UEL U (= unknown)	<b>Flash point</b> (°C)	N.A. (=Not Applicable)
<b>Appearance and odour</b>	Black powder, faint odour	<b>Ignition temperature</b> (°C)	U.
<b>Boiling point</b> (°C)	N.A.	<b>Bulk density</b> (kg/m <sup>3</sup> )	Approx. 1400
<b>Vapour density</b> (air = 1)	N.A.	<b>Softening point</b> (°C)	Approx. 50
<b>Solubility in water</b>	Insoluble	<b>Evaporation rate</b> (butyl acetate = 1)	N.A.
<b>Vapour pressure</b>	N.A.	<b>% Volatile</b>	0
<b>Other characteristics</b>	N.A.	<b>pH (solution)</b>	N.A.

**10. Stability and reactivity**

<b>Thermal decomposition</b>	Above approx. 450 °C
<b>Hazardous decomposition products</b>	None at intended use
<b>Hazardous reaction</b>	None at intended use

**11. Toxicological information**

<b>Inhalation</b>	* At high concentration in air the powder may cause discomfort of upper respiratory system.
<b>Skin</b>	* No adverse health effects are expected.
<b>Eyes</b>	* Dust may cause discomfort in the same manner as nuisance dust.
<b>Ingestion</b>	* Considered relatively harmless.
<b>Mutagenicity</b>	No mutagenicity detected in Ames test of similar toners.
* These statements are based on toxicological literature on the ingredients of this product and test results of similar products.	

**12. Ecological information**

This product is not biodegradable.  
The ingredients are not classified as ecologically hazardous. No adverse environmental effects are expected.

**13. Disposal considerations**

Pack waste dustproof to prevent dusting. With due observance of local laws and regulations, dispose of by burial in a sanitary landfill or incineration. Do not throw in open fire, in order to prevent the risk of a dust explosion.

**14. Transport information**

This product is not classified as a dangerous substance according to the international transport regulations.

**15. Regulatory information**

This product is not classified as a dangerous preparation according to the European Directives 67/548/EEC and 88/379/EEC for the classification, packaging and labelling of dangerous substances and preparations.  
Therefore, indications of special risks or safety advice on the packing are not prescribed for this product.

**16. Other information**

Use: ink powder for printers.  
Room ventilation: see operator manual or safety data sheet for the machine.

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The contents of this safety data sheet is subject to the disclaimer on page 147 of this manual.



# Safety data sheet Océ D4 developer

## MATERIAL SAFETY DATA SHEET

(93/112/EEC and ISO 11014-1)

Number

E-197-a-UK

Date

October 1997

Page

1 of 2



### Océ D4 Developer

#### 1. Product and company identification

Product name	Océ D4 Developer
Packing	Polyethylene bottle, contents 1,75 kg/3.86 lb
Company	Océ (UK) Ltd.
Address	Langston Road, Loughton, Essex IG10 3SL
Telephone	0181-508 5544 (contact product safety coordinator)
Telefax	0181-508 6689

#### 2. Composition / information on ingredients

Ingredients	CAS No.	Classification	Weight %
Iron oxide	1317-61-9		50-100
Polyester resin	170631-75-1		1-5
Phenoy resin	PMN P-95-461		1-5
Carbon black	1333-86-4		< 1
Amorphous Silica	68611-44-9		< 1
Pigments			< 1

#### 3. Hazards identification

In a developer dust cloud the formation of an explosive dust-air mixture is possible.

Developer dust may cause discomfort for the eyes and respiratory tract, in the same manner as inert nuisance dust.

To our knowledge, with due observance of the recommended exposure limit and of normal hygiene this product presents no health hazard in normal use.

#### 4. First aid measures

Eyes contact	Rinse with plenty of water.
Skin contact	Wash with cold water and soap.
Inhalation	Clean nose, mouth, throat. Cough up. Fresh air.
Ingestion	Rinse mouth with water. If large quantity swallowed seek medical advice.

For any medical advice take along this material safety data sheet.

#### 5. Fire fighting measures

Extinguishing media	Dry chemical, carbon dioxide, water spray (fog), foam
Special fire fighting precautions	N.A.
Hazardous products of decomposition	N.A.

#### 6. Accidental release measures

Spills can be cleaned with a vacuum cleaner or a damp rag. Do not use warm water, because this makes the powder soft and sticky.

#### 7. Handling and storage

Keep bottle tightly closed to prevent dust formation. Handle carefully. Avoid breathing dust.

No special technical measures for storage.

#### 8. Exposure controls / personal protection

No special technical measures. No personal protective equipment needed.

Industrial hygiene: after skin contact wash with cold water and soap.

Threshold Limit Value for:

* nuisance dust	10 mg/m <sup>3</sup>
* carbon black	3,5 mg/m <sup>3</sup>
* amorphous silica	10 mg/m <sup>3</sup>

continued on next page

**MATERIAL SAFETY DATA SHEET**

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**Number**

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**Océ D4 Developer****9. Physical and chemical properties**

<b>Explosion limits</b> (dust explosion)	<b>LEL</b> U	<b>UEL</b> U (= unknown)	<b>Flash point</b> (°C)	N.A. (=Not Applicable)
<b>Appearance and odour</b>	Black powder, faint odour		<b>Ignition temperature</b> (°C)	U
<b>Boiling point</b> (°C)	N.A.		<b>Bulk density</b> (kg/m <sup>3</sup> )	Approx. 2500
<b>Vapour density</b> (air = 1)	N.A.		<b>Softening point</b> (°C)	Approx. 50
<b>Solubility in water</b>	Insoluble		<b>Evaporation rate</b> (butyl acetate = 1)	N.A.
<b>Vapour pressure</b>	N.A.		<b>% Volatile</b>	0
<b>Other characteristics</b>	N.A.		<b>pH (solution)</b>	N.A.

**10. Stability and reactivity**

<b>Thermal decomposition</b>	Above approx. 450 °C
<b>Hazardous decomposition products</b>	None at intended use
<b>Hazardous reaction</b>	None at intended use

**11. Toxicological information**

<b>Inhalation</b>	* At high concentration in air the powder may cause discomfort of upper respiratory system.
<b>Skin</b>	* No adverse health effects are expected.
<b>Eyes</b>	* Dust may cause discomfort in the same manner as nuisance dust.
<b>Ingestion</b>	* Considered relatively harmless.
<b>Mutagenicity</b>	No mutagenicity detected in Ames-test of similar products.
* These statements are based on toxicological literature on the ingredients of this product and test results of similar products.	

**12. Ecological information**

This product is not biodegradable.  
The ingredients are not classified as ecologically hazardous. No adverse environmental effects are expected.

**13. Disposal considerations**

Pack waste dustproof to prevent dusting. With due observance of local laws and regulations, dispose of by burial in a sanitary landfill or incineration. Do not throw in open fire, in order to prevent the risk of a dust explosion.

**14. Transport information**

This product is not classified as a dangerous substance according to the international transport regulations.

**15. Regulatory information**

This product is not classified as a dangerous preparation according to the European Directives 67/548/EEC and 88/379/EEC for the classification, packaging and labelling of dangerous substances and preparations.  
Therefore, indications of special risks or safety advice on the packing are not prescribed for this product.

**16. Other information**

Use: ink powder for printers.  
Room ventilation: see operator manual or safety data sheet for the machine.

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# Safety data sheet OPC drum

## MATERIAL SAFETY DATA SHEET

(93/112/EEC and ISO 11014-1)

Number

E-218-a-UK

Date

April 1998

Page

1 of 2



### Océ OPC Drum Part No. 2912571, Océ ES102 OPC Part No. 7069008

#### 1. Product and company identification

Product name	Océ OPC Drum Part No. 2912571, Océ ES102 OPC Part No. 7069008 OPC for Océ 705x, 707x, 9400 and 9600
Packing	Cardboard box
Company	Océ (UK) Ltd.
Address	Langston Road, Loughton, Essex IG10 3SL
Telephone	0181-508 5544 (contact product safety coordinator)
Telefax	0181-508 6689

#### 2. Composition / information on ingredients

Ingredients	CAS No.	Classification	Weight %
Aluminium	7429-90-5		>99
Resins			< 1
Pigments			< 1

#### 3. Hazards identification

To our knowledge this product presents no health hazard in normal use.

#### 4. First aid measures

Eyes contact	Not Applicable(=N.A.)
Skin contact	N.A.
Inhalation	N.A.
Ingestion	N.A.

For any medical advice take along this material safety data sheet.

#### 5. Fire fighting measures

Extinguishing media	Dry chemical, carbon dioxide, water spray (fog), foam
Special fire fighting precautions	N.A.
Hazardous combustion products	Carbon monoxide, carbon dioxide.

#### 6. Accidental release measures

N.A.

#### 7. Handling and storage

No special technical measures for storage.

#### 8. Exposure controls / personal protection

No special technical measures. No personal protective equipment needed.  
No special work hygiene practices needed.

continued on next page

**MATERIAL SAFETY DATA SHEET**

(93/112/EEC and ISO 11014-1)

**Number** E-218-a-UK**Date** April 1998**Page** 2 of 2**Océ OPC Drum Part No. 2912571, Océ ES102 OPC Part No. 7069008****9. Physical and chemical properties**

Explosion limits (dust explosion)	LEL N.A.	UEL N.A.	Flash point (°C)	N.A.
Appearance and odour	brown coloured aluminium cylinder		Ignition temperature (°C)	N.A.
Boiling point (°C)	N.A.		Density (g/cm <sup>3</sup> )	2.7
Vapour density (air = 1)	N.A.		Melting point (°C)	N.A.
Solubility in water	Insoluble		Evaporation rate (butyl acetate =1)	N.A.
Vapour pressure	N.A.		% Volatile	0
Other characteristics	N.A.		pH (solution)	N.A.

**10. Stability and reactivity**

Thermal decomposition	None at intended use
Hazardous decomposition products	None at intended use
Hazardous reaction	None at intended use

**11. Toxicological information**

Inhalation	N.A.
Skin	No adverse health effects are expected. (Based on toxicological literature on the ingredients of this product)
Eyes	N.A.
Ingestion	N.A.
Mutagenicity	No mutagenicity detected in Ames test. None of the ingredients is listed as mutagenic or carcinogenic.

**12. Ecological information**

This product is not biodegradable.  
The ingredients are not classified as ecologically hazardous. No adverse environmental effects are expected.

**13. Disposal considerations**

The drum will be returned to Océ for re-use.

**14. Transport information**

This product is not classified as a dangerous substance according to the international transport regulations.

**15. Regulatory information**

This product is an article and contains no dangerous substances. Therefore, indications of special risks or safety advice on the packing are not prescribed for this product.

**16. Other information**

Use: photoconductor for printers and copiers.

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The contents of this safety data sheet is subject to the disclaimer on page 147 of this manual.

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# EPA ENERGY STAR®

Océ-Technologies B.V. has joined the ENERGY STAR® Program of the United States Environmental Protection Agency (EPA). The purpose of the ENERGY STAR® Program is to promote the manufacturing and marketing of energy-efficient equipment, thereby potentially reducing combustion-related pollution.

Using the energy management features outlined below prevents unnecessary power consumption, which helps to prevent air pollution from electricity generating plants and saves money on your utility bills.

The Océ 9400-II is a multifunction device which includes the following separate units:

1. Océ 9400 series printer
2. Océ 9400 series scanner

As an ENERGY STAR® Partner, Océ-Technologies B.V. has determined that this multifunction device model meets the ENERGY STAR® guidelines for energy efficiency.

The EPA ENERGY STAR® criteria for this multifunction device involve the following features:

**sleep mode** The use of the sleep mode feature offers economic and environmental benefits. This multifunction device is shipped with the sleep mode default time set at 1 minute, which means that the device automatically enters the sleep mode 1 minute after the last copy/print is made. The sleep mode default time is a fixed value and cannot be adjusted. The sleep mode recovery time is less than 1 second, after which copying or printing can be resumed (“instant copying/printing”).

**recycled paper** The use of recycled paper also benefits the environment. This multifunction device is designed to use recycled paper. Product literature on recommended types of recycled copier paper can be obtained from your local Océ company or Océ Headquarters (Océ-Technologies B.V.) in Venlo, the Netherlands.

ENERGY STAR<sup>®</sup> is a U.S. registered mark



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# Appendix D

## Miscellaneous



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# Notation conventions

There are a number of notation conventions used in this manual. This consistent style enables you to quickly become conversant with the use of this manual and consequently the Océ 9400-II.

**Description** Each section or subsection contains a description of the feature or operation identified in the title. It might also include possible applications, as well as any guidelines that you should bear in mind.

**Procedures** A description is followed by a procedure. A procedure always begins with a phrase which briefly describes the procedure, followed by a series of numbered steps that take you, step by step, through all phases of performing the operation.

**Figures and tables** Figures and tables are titled and numbered sequentially throughout this manual. Figures include pictures of product components, screendumps, examples, and diagrams of concepts discussed in the description.

**Attention getters** There are several types of information to which we draw your attention. This information is classified as follows:

**Note:** *In a 'Note', information is given about matters which ensure the proper functioning of the machine or application, but useful advice concerning its operation may also be given.*

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**Attention:** *The information that follows 'Attention' is given to prevent something (your copy or original, the copier or printer, data files etc.) being damaged.*

---

**Caution:** *The information that follows 'Caution' is given to prevent you suffering personal injury.*



---

# Reader's comment sheet

Have you found this manual to be accurate?

- ☐ Yes
- ☐ No

Could you operate the product after reading this manual?

- ☐ Yes
- ☐ No

Does this manual provide enough background information?

- ☐ Yes
- ☐ No

Is the format of this manual convenient in size, readability and arrangement (page layout, chapter order, etc.)?

- ☐ Yes
- ☐ No

Could you find the information you were looking for?

- ☐ Always
- ☐ Most of the times
- ☐ Sometimes
- ☐ Not at all

What did you use to find the required information?

- ☐ Table of contents
- ☐ Index

Are you satisfied with this manual?

- ☐ Yes
- ☐ No

Thank you for evaluating this manual.

If you have other comments or concerns, please explain or suggest improvements overleaf or on a separate sheet.

7137086

**Comments:**

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**Date:**

This reader's comment sheet is completed by:  
*(If you prefer to remain unknown, please do fill in your occupation)*

**Name:**

**Occupation:**

**Company:**

**Phone:**

**Address:**

**City:**

**Country:**

Please return this sheet to:

Océ-Technologies B.V.  
For the attention of ITC User Documentation.  
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Send you comments by E-mail to : [itc-userdoc@oce.nl](mailto:itc-userdoc@oce.nl)

For the addresses of local Océ organizations see : [www.oce.com](http://www.oce.com)

---

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