DPX 4

User Guide

Version 1.3

ECRM®
imaging systems

Preface

DPX 4 User Guide v. 1.3,
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Chapter 1 – Using this guide

This section includes the following topics:

Note The instructions in this section are for Acrobat Reader v7.0.

Navigating this guide in Acrobat Reader

If you are using Acrobat Reader to view this guide, we recommend you make use of the following Acrobat navigation buttons:


Go to the first page of the guide


Go back one page


Go forward one page


Go to the last page of the guide


Go back to previous view

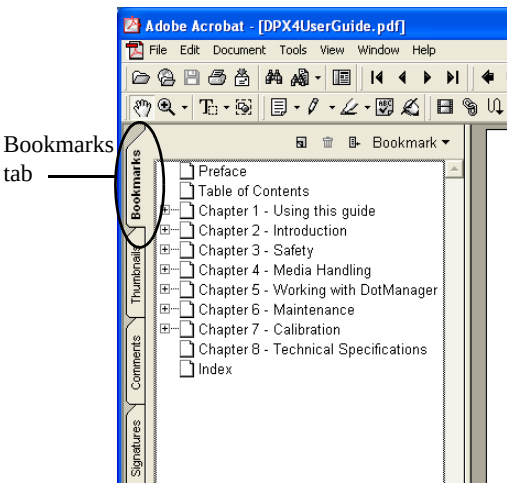

Go forward to next view


Fit whole page in window


Close bookmarks

Bookmarks

You can use Bookmarks window to quickly navigate to a specific chapter or section of this manual. If the bookmarks are not visible, click on the **Bookmarks** tab (see below) to display them:



Click on a link to move to the relevant chapter. Click on a ⊞···· link to view the sub-sections within a chapter.

Using hot links

You can use Acrobat Reader's 'hot links' to move quickly to the section you want (when you place the mouse cursor over a hot link it turns into a hand icon).

There are three types of hot link:

- On the Contents page: click on the entry to take you to the relevant section.

- Cross references: you will find these throughout the manual, for example, refer to *"Printing this guide" on page 1.2* for instructions. Click on the section reference to take you to the relevant page.
- On the Index page: click on the index entry to take you to the relevant page.

Warnings and notes

Warnings

The warnings in this manual are intended to protect you from injury and/or to protect the DPX 4 engine and your plates from damage. Read all warnings carefully and follow any instructions they include.

Warnings appear in **bold print**, like this:

WARNING: When working with the DPX 4 system you must protect yourself from injury and protect the DPX 4 engine from damage.

Notes

The notes in this manual give additional information on using the DPX 4 system.

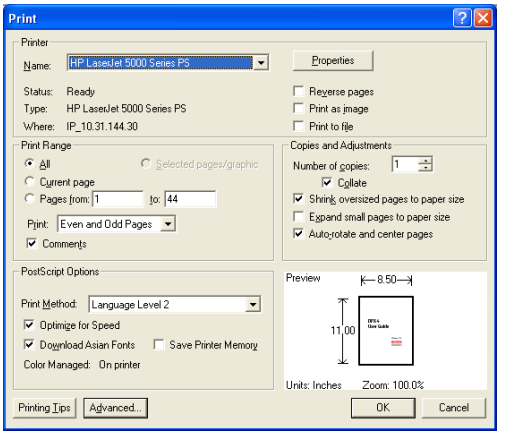
Notes appear in *italics*, like this:

Note The instructions in this manual are for the DPX 4 system.

Printing this guide

To print this guide:

1. In Acrobat Reader select **Print…** from the **File** menu. A dialog similar to the one shown below appears:



2. Select the required printer from the **Name** pull-down menu.
3. Click on the **Properties** button and select the **Portrait** orientation on the **Layout** tab.
4. Click on **OK** to return to the Print dialog.
5. Set the other options, such as the page range, then click on **OK** to print this guide (or the specified pages).

Chapter 2 – Safety

General

Although every precaution has been made to produce a safe product, we strongly recommend you comply with the following.

- The equipment must be properly grounded when connected to electrical outlets.
- Turn off power:
  - before connecting or disconnecting cables, and
  - before carrying out service or adjustment operations.
- Use non-reflective tools while working in the drum area with the laser turned on.
- Do not remove covers or shielding.
- Do not install/use the equipment close to inflammable gases and vapors.
- Do not make any unauthorized modifications of the equipment.
- Wear protective gloves when handling chemistry and avoid spilling the fluids.
- Always check that the actual media width in Media Management corresponds to the actual media being used.
- The spinner in the platesetter cannot be started in an ambient temperature of less than 15 degrees Celsius.

Laser

This system is classified as a Class one (I) laser product that contains a Class 3B (IIIb) laser system. This classification means that the operator is exposed to no hazardous laser light during operation and maintenance. The laser itself, however, is a Class 3B (IIIb) laser device, and it emits visible laser light which is considered hazardous by FDA published limits.

When the panels are removed, an interlock system automatically switches off the laser and optics unit to insure against the risk of radiation.

IMPORTANT WARNING:Modifications to the machine or performance of procedures other than those specified in this guide may result in hazardous laser light exposure.

Regulatory Information

Electromagnetic Emissions

DOC- Canada

The Canadian Department of Communications requires compliance with the Radio Interference Regulations, ICES -003.

This digital apparatus does not exceed the Class A limits for radio noise emissions from digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications.

EMC Directive - Europe

Complies with EN 55011: 1998

This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

FCC - USA

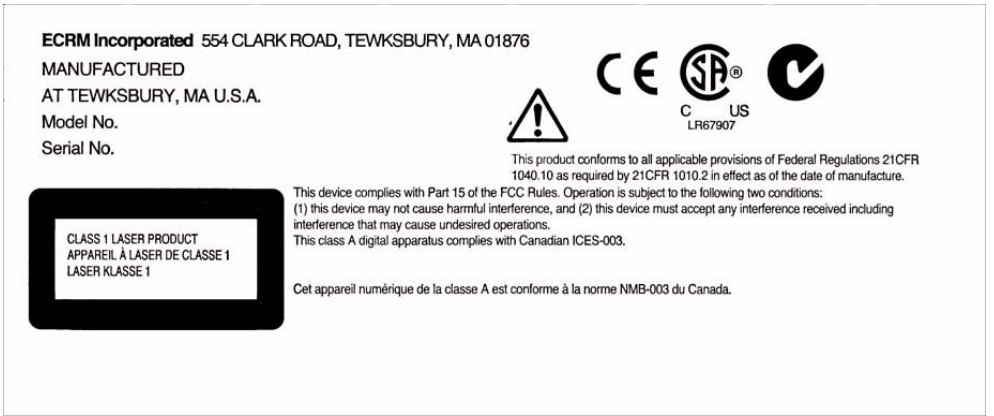
The standards for electromagnetic emissions are Part 15, Subpart J of the FCC rules. The system was tested to Class A limits. The following statements are required by the FCC:

Changes or modifications to this unit not expressly approved by the party responsible for compliance could void your authority to operate the equipment.

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction guide, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his or her own expense.

Compliance with applicable regulations depends on the use of shielded cables, which the user may be responsible for procuring.Identification and Certification Label (ratings plate)

The identification and certification label shown below is attached to the cover of the platesetter unit, near the power entry receptacle.



Chapter 3 – Introduction

General

This section describes:

The DPX 4 is a Computer-to-Polyester Plate System that produces imaged, punched, dried and cut-to-size press-ready plates. The DPX 4 foot print is only 1370 x 1060 mm / 53.9" x 41.73" thus taking up very little space.

Advanced Internal Drum Design

The DPX 4 uses an extruded aluminum drum to achieve extremely high precision and accuracy.

Media Load System

DPX 4 has a twin-compartment media load system that is very easy to load. An auto-centering system ensures precise centering of new media on the shaft every time a new roll is loaded. During operation, the media is automatically advanced onto the drum where it is held in place by a unique vacuum system during exposure

The two media compartments permit the DPX 4 to simultaneously hold two different media sizes.

Knife and Punch System

The plate material is punched by a built-in punch system, exposed, and cut to size. This gives a precise and even registration from plate to plate and ensures minimum mounting time and easy registering of the plate on the press. The DPX 4 comes with a Bacher 425 mm punch as standard. It can be field upgraded with a Bacher 220 mm as well as Komori 550 mm custom punch.

The Laser and Spinner System

The construction of the laser system is crucial for high quality output. ECRM Imaging Systems uses fiber optic cables to transmit the dot directly into the optics and high-speed spinner.

Optical System

The optical system covers resolutions from 1000 to 3000 dpi in various steps ensuring the correct spot size and laser intensity for the selected resolution as well as automatic focus which ensures the optimized spot on the plate producing high quality four color print.

Integrated Processor and Dryer

The built-in processor is a twin-bath processor. There is one temperature control for the activator tank, and another temperature control for the fixer tank. Both tanks have sensors for controlling the chemistry level and active replenishment to ensure the correct level of new chemistry in the tanks and to achieve precise activation of the polyester plate.

A 30-liter waste container collects excess chemistry and indicates to the user when full. A drain pump allows easy emptying of the container by the user without interference with the chemicals.

Easy Maintenance and Monitoring of the Processor

The processor is mounted on wheels. A guide allows it to be rolled out easily for maintenance or chemistry replenishment.

The DotManager program controls and monitors the processor and displays real-time processor status information on the PC monitor.

Workflow

The DPX 4 is controlled by a Win2000 or WinXP-based RIP platform. The DotManager program controls the media, processor and ECRM WorkMates options and features. The interface between the DPX 4 and the RIP PC operates via a USB-2.0 port.

Chapter 4 – Media Handling

Media Load System

DPX 4 has a twin-compartment media load system that permits the system to image two plate sizes.

An auto-centering system ensures precise centering of new media on the shaft every time a new roll is loaded.

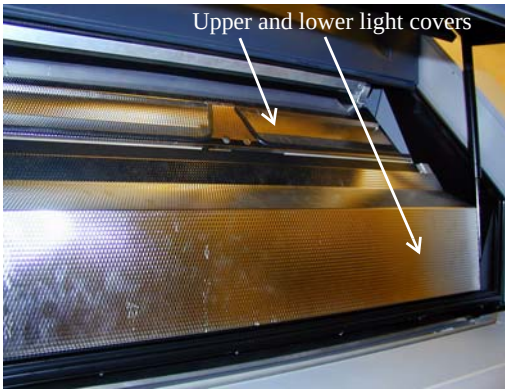
During operation the media is advanced automatically, positioned in the drum and held in place by a unique vacuum system during exposure.

Twin-compartment

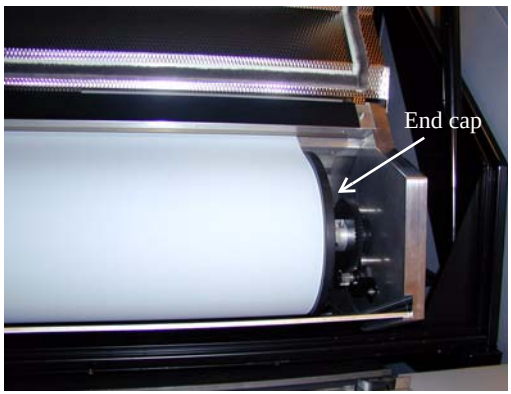
Inserting and Mounting Media

Removing the Media Roll

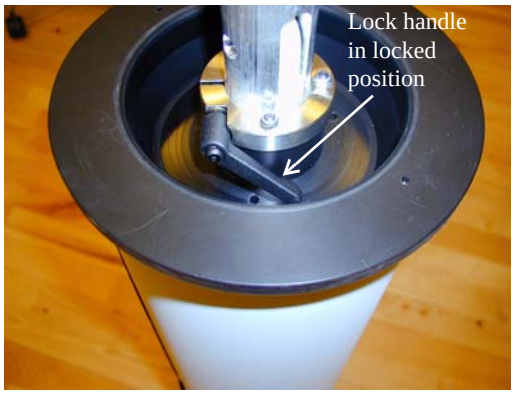
1. Make sure the media is unloaded (**Unload** button on DotManager's Platesetter Tab).
2. Lift up the top cover (see figure at right).



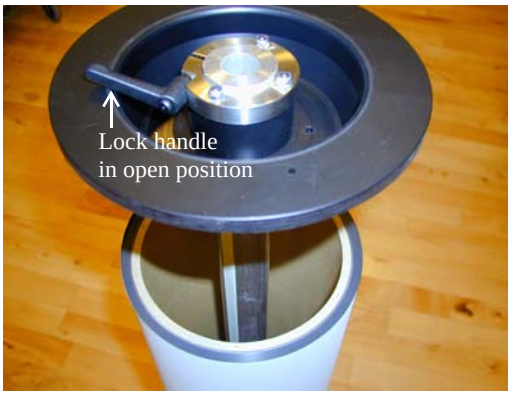
3. Lift the upper or (in this case) lower light protection cover.



4. Gently lift the media roll out of its compartment by the end caps.



5. Place the media roll vertically on the floor and loosen the end cap by pulling the lock handle upward.



6. Set foot on the left-hand end cap and lift the right-hand end cap off the media shaft.

7. Lift the media roll off the shaft.

Mounting a New Media Roll

Note Please make sure that any tape and/or remnants from tape on the new media roll is removed completely prior to inserting the roll into its compartment, as it may otherwise damage the inside of the drum in time.

1. Slide the media onto the shaft making sure it fits tightly against the left-hand end cap.
2. Push the right-hand end cap onto the shaft and and note that the media roll is centrered automatically on the shaft.
3. Push the lock handle forward.
4. Place the shaft with the media roll in the compartment.
5. Carefully remove the fastening tape from the media and advance the roll towards the input edge.
6. Press the **Preload** button to advance the media.
7. Close the light protection cover.

Chapter 5 – Working with DotManager

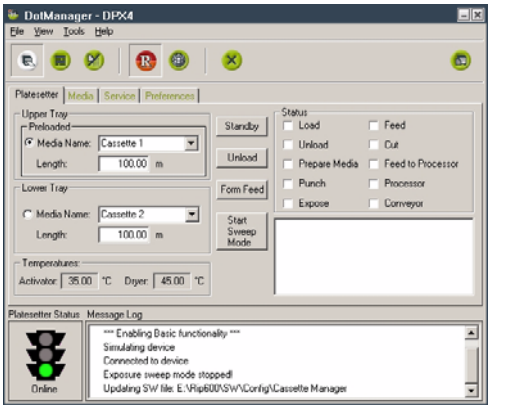
General

DotManager is the user interface for the DPX 4 and DPX 2 platesetter. It runs as a separate application on the RIP PC, and communicates with the platesetter through a USB interface.

The DotManager interacts with the Global Graphics-based RipMate or ECRM RIP by providing license management for the ECRM specific options, starting/stopping the RIP, and providing device services.

DotManager opens with the splash screen below:

which remains for a few seconds, then switches to the main screen below:



In this section:

Menus

The platesetter does not have a control panel. The user communicates with the machine through the DotManager program.

DotManager is installed with the RIP, from the CD.

DotManager has four menu items described below:

- File menu
- View menu
- Tools menu
- Help menu

File menu

Save Changes: Click to save any changes made to the current setup.

Exit: Click to exit the DotManager application.

View menu

Platesetter: Click to view Platesetter tab

Setup: Click to view Setup tab

Rip Management: Click to view Rip Management tab.

Tools menu

Start RipMate: Click to start the RipMate application (or WorkMates Admin, if PrintMate is installed).

Stop Ripmate: Click to stop the RipMate application (or WorkMates Admin, if PrintMate is installed).

Start Hyperterminal: Click to start the hyperterminal communication application used for debugging purposes.

Help menu

Online Help: Click to view the Online Help on-screen.

About Dotmanager: Opens a window displaying the current version of DotManager.

Buttons

Additionally, DotManager has seven buttons for accessing various parts of the setup, starting/stopping RipMate (or WorkMates Admin, if PrintMate is installed), starting the Hyperterminal, quitting DotManager, and saving changes (left to right):

DotManager buttons	
	view Platesetter tab
	view Setup tab

DotManager buttons	
	view Rip Management tab
	start/stop the RipMate application (or WorkMates Admin, if PrintMate is installed)
	start the Hyperterminal communication application
	exit the DotManager application
	save changes

Tabs

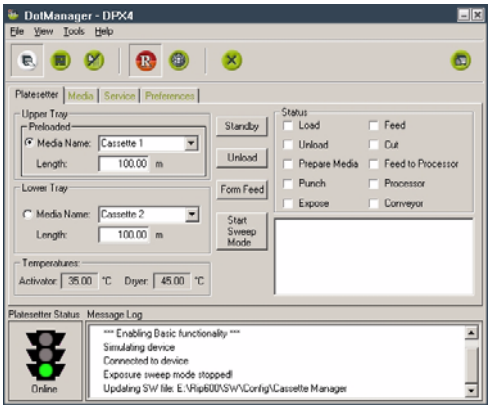
DotManager has tabs for accessing various functions as described below:

- Platesetter Tab, page 5.3
- Media Tab, page 5.4
- Service Tab, page 5.5
- Preferences Tab, page 5.6
- Setup Tab, page 5.7
- RipManagement Tab, page 5.8
    - License Tab, page 5.9
    - Spool Tab, page 5.9
    - Imagesetter Tab, page 5.10

Note In the following, all samples and screen views use metric measurement units. The measurement unit can be changed to imperial units on the Setup tab.

Platesetter Tab

The Platesetter tab pertains to the primary functions of the platesetter.



Upper and Lower Tray: The sections display the available media compartment(s). If your platesetter is not equipped with the extra optional compartment, the lower compartment will be greyed.

Preload/Unload: When a media roll has been inserted in the media compartment, click the **Preload** button to advance the media into the feed system. When the media is loaded, the button text changes to **Unload**, and the button is then used for pulling the media out of the feed system, e.g. in case of replacement.

Form Feed: Click the **Form Feed** button to advance the media 68 cm (maximum exposable film length).

Start/Stop Sweep Mode: Click this button to activate or deactivate the Exposure Sweep mode. The Exposure Sweep Mode provides for multiple RIP jobs to be exposed on one plate. The platesetter automatically feeds the plate out, when it is

full, or when the RIP does not supply new jobs within 15 seconds from the last completed job. See also Calibration in the RipMate User Manual.

Activate/Standby: Click Standby to switch the platesetter to Standby (Energy Save) mode. The spinner will be switched off and the processor will be put in energy-save mode. See the Main\Preferences tab for the specific processor Standby settings.

Status: The Status section includes a number of status lamps for **Load, Unload, Prepare Media, Punch, Expose, Feed, Cut, Feed to Processor, Processor,** and **Conveyor** activities in the processor. Some signals from the lamps are accompanied by an additional message in the activity window below the lamps.

Temperatures: Displays the current temperatures of the Activator and Dryer.

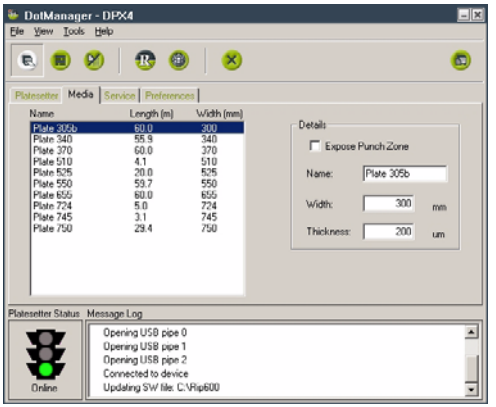
Platesetter Status: The traffic light indicates the current state of the platesetter at all times and responds to the colour indicators in the **Status** section.

- ***Red:*** Error
- ***Orange:*** Warning
- ***Green:*** OK

Message Log: The Message Log window next to the traffic light displays general messages relating to the data connection between the DotManager and the platesetter.

Media Tab

The Media window displays a list of cassettes with information about what media type is loaded in the cassette, length of remaining media, and media thickness.



It is possible to create new cassettes, and edit existing cassettes.

Media Drop Down list: Displays the list of media configured for the platesetter. Maximum 16 different media can be configured.

Name: Enter a name for the new media as you want it to appear in the drop down list.

Width: Enter the width in millimetres of the new media.

Thickness: Enter the thickness in mm of the new media.

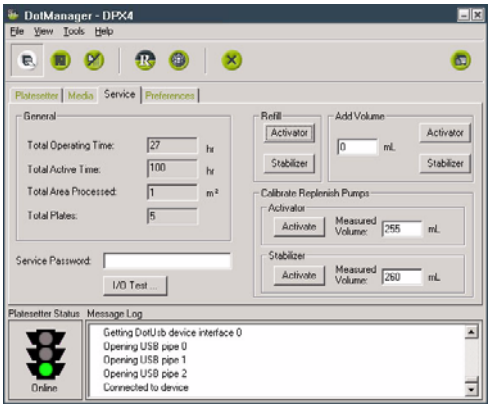
Expose Punch Zone: By clicking the check box you can choose to use the punch zone for exposure - however, the quality of exposure in this area cannot be guaranteed.

To change a media setup:

1. Select the correct media in the drop down list.
2. Change the appropriate settings.
3. Click the **Save** button.

Service Tab

The Service window displays some general info about the platesetter usage, tools to manage the activator- and stabilizer pumps.



The I/O test window is started from the Service window.

General

The General section displays some common statistics about the platesetter utilization. All these parametres are lifetime information of the platesetter.

Total Operating Time: Displays the total number of hours with power on.

Total Area processed: Displays the total number of hours activated (not counting standby time).

Total Black Area Processed: Displays the total number of square meters processed.

Total Plates: Displays the total number of plates processed.

Pump issues

Refill

Activator: Refill the activator rack until it is completely full.

Stabilizer: Refill the stabilizer rack until it is completely full.

Add Volume

Activator: Add the indicated volume to the activator rack.

Stabilizer: Add the indicated volume to the stabilizer rack.

I/O Test button

Opens the - service-password protected - I/O Test window.

This I/O Test window communicates with the relevant subsystems in the platesetter or processor and is meant for service personnel only.

Calibration of Replenishment Pumps

This adjustment ensures the replenish pumps are calibrated correctly, automatically replenishing the correct amount of activator and stabilizer during processing of the plates.

The pump calibration should be checked or carried out, if a pump has been replaced or if there is doubt about the automatic replenishing.

You need to have DotManager running and 1-litre measuring glass.

To calibrate the pumps:

1. Pull out the drawer with the chemistry.

2. Fill the measuring glass with at least 1 litre of activator and note the reading on the scale of the glass.
3. Remove the activator replenishment hose from its container and place it in the measuring glass.
4. Turn power on and enter the **DotManager** program.
5. Click on the **Main | Service tab**.
6. In the **Calibrate Replenish Pumps** section, click on **Activate** in the **Activator** section.

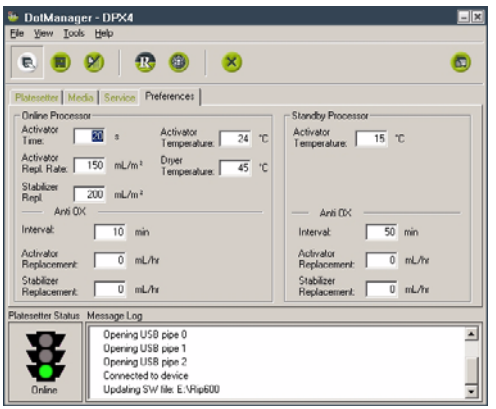
   The replenishment pump now starts running for one minute and stops automatically.
7. On the scale on the measuring glass, read the amount in ml. of activator that has been pumped out of the glass and enter this amount in the **Measured Volume** field of the **Activator** section.
8. Click on the **Save to Device** button to store the changes in the platesetter.
9. Now clean the measuring glass and fill with at least 1 litre of stabilizer and note the reading on the scale.
10. Remove the stabilizer replenishment hose from its container and place it in the measuring glass.
11. In the **Calibration** section, click on **Activate** in the **Stabilizer** section. The replenishment pump now starts running for one minute and stops automatically.
12. From the scale on the measuring glass, read the amount in ml. of **Stabilizer** that has been pumped out of the glass and enter this amount in the **Measured Volume** field of the **Stabilizer** section.
13. Click on the **Save to Device** button to store the changes in the platesetter.
14. Reposition both chemistry hoses in their relevant containers and close the chemistry drawer.

Note Note: You should wear protective gloves and clothing during this operation.

CAUTION: Only authorized service personnel may override the interlock system. Turn off the power, before connecting or disconnecting cables before carrying out service operations.

Preferences Tab

The Preferences tab displays a number of values all of which are derived directly from the platesetter processor.



Online Processor

Activator Time: Specifies the time (in seconds) the material is to be in the activator.

Activator Replenishment Rate: Specifies the volume of activator fluid that has to be replenished in millilitre per square meter of developed plate.

Stabilizer Replenishment Rate: Specifies the volume of stabilizer fluid that has to be replenished in millilitre per square meter of developed plate.

Dryer Temperature: Specifies the temperature of the dryer air in centigrades (°C).

Activator Temperature: Specifies the temperature of the activator fluid in centigrades (°C).

Anti Oxidant

Interval: Specifies the interval in minutes in which the fluid has to be replenished to avoid oxidation.

Activator Replacement: Specifies the volume of activator fluid that has to be replenished in millilitre per hour.

Stabilizer Replacement: Specifies the volume of stabilizer fluid that has to be replenished in millilitre per hour.

Standby (Energy Save mode) Processor

Activator Temperature: Specifies the temperature of the activator fluid in centigrades (°C).

Standby (Energy Save mode) Anti Oxidant

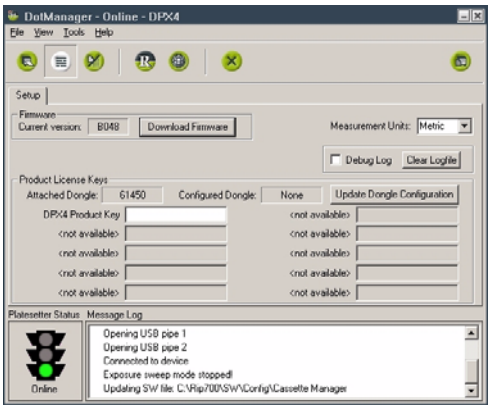
Interval: Specifies the interval in minutes in which the fluid has to be replenished to avoid oxidation.

Activator Replacement: Specifies the volume of activator fluid that has to be replenished in millilitre per hour.

Stabilizer Replacement: Specifies the volume of stabilizer fluid that has to be replenished in millilitre per hour.

Setup Tab

The Setup Window displays a series of platesetter related settings.



Firmware

Current Firmware version: Displays the current firmware version in the platesetter.

Download Firmware: Use this button to download or update the platesetter firmware to your platesetter. The program will guide you through the download process. (To update your platesetter firmware, first shut down RipMate.)

Measurement Units: Click to open and choose between Metric and Imperial units.

Clear log: Click the button to delete the dotmanager.log-file.

Debug Log: Enable/disable a debug log: When debugging is enabled, DotManager will record all information about the communication with the platesetter and processor into a plain textfile. This file can be consulted at \Ripxxx\DotManager.log.

Product LicenseKeys

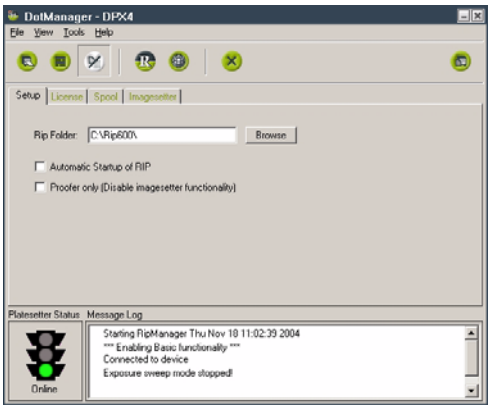
Attached Dongle: Serial number of the USB dongle plugged in the RIP PC.

Configured Dongle: Serial number of the USB dongle which is configured in the platesetter firmware.

License Keys input fields: Enter the appropriate license key to activate certain extra (license protected) platesetter functions.

Update Dongle Configuration: After entering the license key(s) click the Update Dongle Configuration button to save the new license(s) in the platesetter firmware.

RipManagement Tab



Rip Folder: DotManager needs to be able to find RipMate on your hard disk, so that it can send instructions and launch RipMate when it needs to. If you move RipMate to a new folder, you must enter the new path in the Rip Folder directory field by either typing it directly or using the **Browse** button to find it.

Automatic startup of RIP: DotManager must run before RipMate. This enables DotManager to establish communication with RipMate and to control the media management features. Therefore, when you want to start running RipMate, you must begin by running DotManager. For convenience, DotManager can start RipMate automatically thereafter. To activate this feature, mark the **Automatic Startup of RIP** check box.

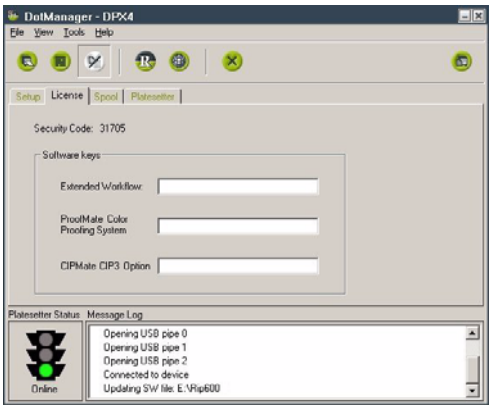
Proofer only (disable platesetter functionality): Disables the platesetter-only features of RipMate so that you can use it simply to drive a proof printer. If you are using RipMate only to drive a proof printer (possibly using the ProofMate option), then you should mark this check box to

prevent RipMate from generating an error message when it does not find an platesetter attached to your computer.

The RipManagement tab displays the additional sub-tabs:

- License Tab, page 5.9
- Spool Tab, page 5.9
- Imagesetter Tab, page 5.10.

License Tab



The License tab enables the ECRM specific WorkMates options by entering the appropriate password.

Note This tab is not available if WorkMates Administrator is installed.)

These options are:

Extended Workflow: The Extended Workflow option provides extra support for larger, multi-user installations. It adds RipSpool, a dedicated input plug-in.

Note For RipMate 7.1and higher this option is no longer license-protected.

ProofMate: The ProofMate proofing option lets you use any low- or high-end printer or plotter as a proofing device. The only thing you need is a standard Windows printer driver. With ProofMate, any of thousands of printers can be used for proofing at the cost of just one printer driver.

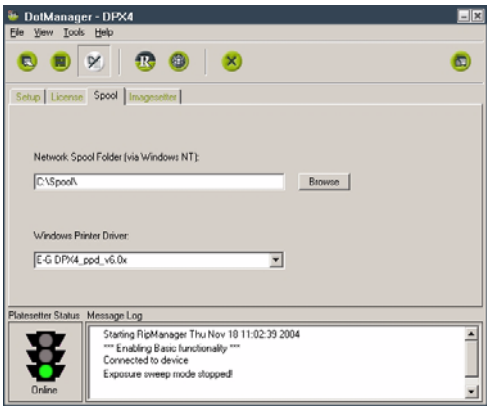
ProofMate allows simultaneous output to a proofer and to any other output device, such as an platesetter. While you are sending one job to the proofer, you can be sending another job to the platesetter, thus greatly improving your output productivity. ProofMate makes use of industry-standard ICC profiles to provide precise color reproduction and final press color emulation.

CIPMate: CIP3 files are used to link printing and post-printing processes closer to the prepress phase. With the CIPMate option, RipMate generates CIP3 files on the fly as the platesetter is driven, using exactly the same screened data.

This means that the PostScript job only has to be processed once, compared with systems that use a separate output driver for CIP3. Thus, only half as much time is required, and the cost and inconvenience of maintaining a duplicate CIP3 setup for each platesetter setup is avoided.

Spool Tab

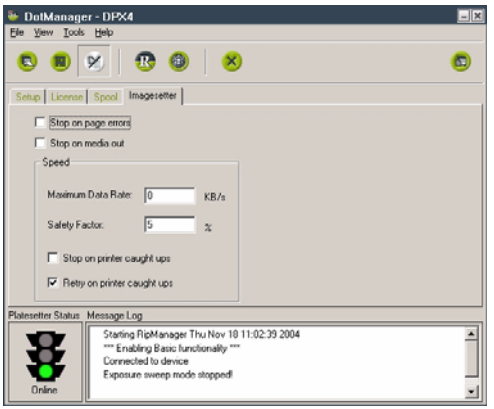
The Spool tab displays information about spooler settings.



Network Spool Folder: Enter the complete path for the folder to use for spooling, or use the **Browse**-button for locating the folder.

Windows Printer Driver: Click to open the drop-down list box and select the appropriate Windows printer driver installed on the RIP PC.

Imagesetter Tab



Stop on page errors: This check box determines how RipMate will react to a page that contains errors, such as incorrect margins or corruption. If this check box is marked, all further output will be disabled from RipMate until it is explicitly re-enabled via the check box in the RipMate Output Controller/Monitor window.

If this check box is unmarked, all pages with errors will be moved to the **Held Queue** in the RipMate Output Controller/Monitor window. Other jobs will continue to print.

Stop on media out: This check box applies only to platesetters that have more than one input cassette (like the DotMate 5000). It controls what RipMate will do if one of the cassettes runs out of media.

If this check box is marked, all further output will be disabled from RipMate until the cassette is refilled and output it is explicitly reenabled via the check box in the RipMate Output Controller/Monitor window.

If this check box is unmarked, RipMate will move all jobs requesting out-put to the empty cassette into the **Held Queue.** However, if the Smart Cassette check box is marked, RipMate will output to the other cassette, provided it contains the correct media. Jobs requesting the other cassette will be processed as usual.

Maximum Data Rate: The first time you run RipMate, this field will be set to zero. RipMate will then test your system to find out how fast data can be sent to the platesetter. If you are having frequent problems with pages caught ups, you may need to set this field back to zero so that RipMate can recalculate a reasonable rate. Otherwise, you should never change the value of this field.

Safety Factor: The safety factor forces RipMate to assume communication will be slightly slower than the value found for **Maximum Data Rate**. A safety factor of 5% should be sufficient, but if

recalculating the **Maximum Data Rate**, as suggested above, does not help reduce page caught ups, try to raise this value slightly.

Stop on printer caught ups: When the RIP is unable to provide the platesetter with data at the correct speed (due, for example, to excessive loads on the processor or network), the output will be interrupted. In this case, the platesetter must stop output.

This check box determines what RipMate will do in the event of a caught up.

If this check box is marked, and the **Retry on printer caught ups** check box is unmarked, RipMate will disable all further output each time a caught up occurs. Output will remain disabled, until it is re-enabled in RipMate's Output Controller/Monitor window.

If this check box is marked, and the **Retry on printer caught ups** check box is also marked, RipMate will try to resend the page at half speed. If it catches up again, RipMate will try at one quarter speed. If it catches yet again, RipMate disables all further output.

If this check box is unmarked, and the **Retry on printer caught ups** check box is unmarked, RipMate will move the job into the **Held Queue**. Other jobs will print as usual.

If this check box is unmarked, and the **Retry on printer caught ups** check box is marked, RipMate will retry at the two slower speeds, but it output is still not possible, the job will be moved into the **Held Queue**. Other jobs will print as usual.

Retry on printer caught ups: This check box controls weather or not RipMate will try to output at a slower speed, if a caught up occurs at the usual speed. See the description for **Stop on printer caught ups** above for more information.

Chapter 6 – Maintenance

General

You must keep the DPX 4 clean to obtain high-quality output. As the media passes through chemistry, it inevitably leaves residue on the rollers in the processor rack. Thus:

- any part of the processor unit which is passed by the media should be cleaned at least once a week, or at regular intervals
- the processor should be cleaned at each change of chemistry
- the punch waste container located behind the left-hand side door should be emptied at regular intervals. The transparent part of the container can be unscrewed by turning it counter-clockwise.
- any chemical residue on the drain hose and hose coupling should be removed.

Cleaning procedures are covered below.

In this section:

Draining the Processor

You must drain the processor to clean the processor rack or replace the chemistry. Draining the processor involves draining the waste tank and emptying the processor.

Draing the Waste tank

1. Press on the area shown below to open the cover.

Waste drawer cover

2. Pull out the the cover and locate the processor lock handle, which is positioned horisontally when locked.

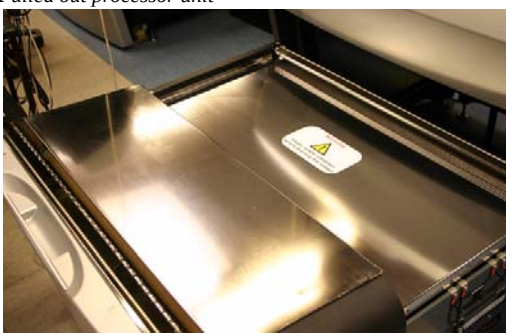
Processor door lock

3. To unlock the processor, turn the lock handle to vertical position.

Lock handle in vertical and open position

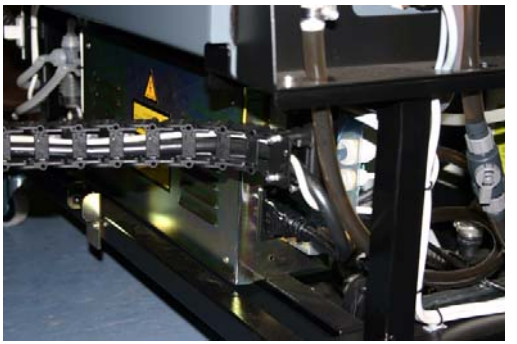
4. Pull out the processor unit as far as permitted by the cable chain - carefully to avoid spilling the fluids.

Pulled out processor unit



Note The processor unit is supported by rails while in position and by wheels when pulled out.

Cable chain



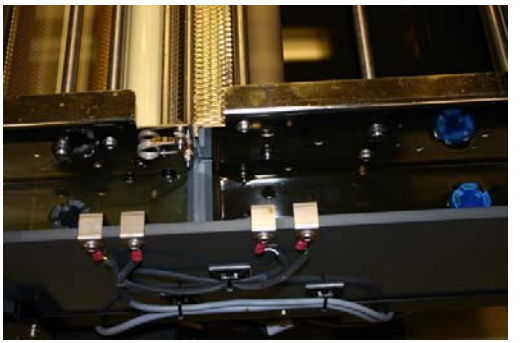
5. Push the drain hose onto the outlet, until it locks.

Drain hose

6. Press and hold the green switch to activate the Waste Pump . Release the green switch when the tank is empty.

Green switch

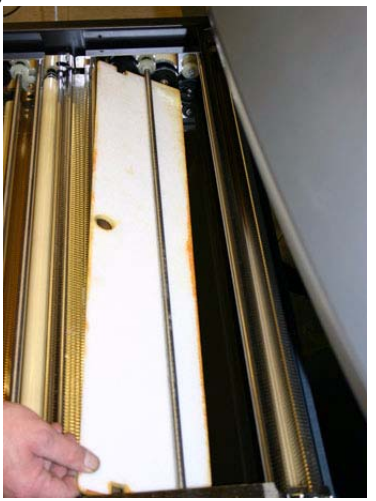
Empty tanks and clean prior to re-filling



Emptying the Processor

1. Remove the white floating cover.

Floating cover



2. Unscrew the drain pipes to allow the chemicals flow into the waste tank.

Note The empty tanks should be cleaned prior to re-filling.

Cleaning the Processor Unit

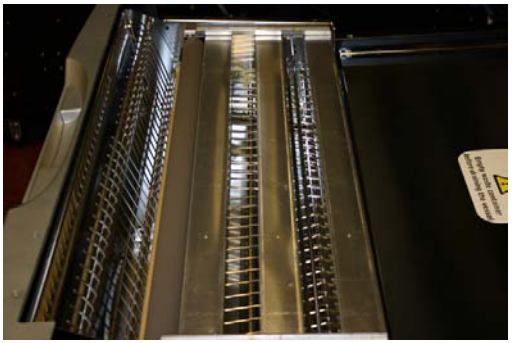
The processor unit should be cleaned every time the chemistry is changed. First, the processor unit must be drained (see Draining the Processor, page 6.1).

1. Lift off the tank covers.

Tank covers

2. Lift off the air ducts and media guides in the dryer section.

Dryer section: Lift off air ducts and media guides

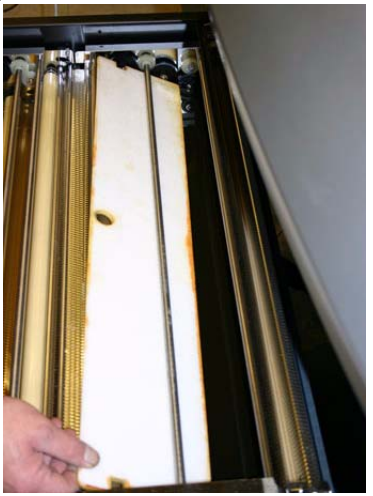


3. Lift off the media guide on the processor section.

Processor section: Lift off media guide

4. Lift off the white floating cover.

Floating cover



5. Lift off the processor rack from the side shown below and clean it with a soft brush and lukewarm water.

Processor rack

6. Clean the activator and stabilizer tanks by pouring clean water into the tanks, cleaning with Ph-neutral soap and a soft brush, and rinsing with clean water.

7. Let the water run off the rack before putting it back in position.

8. Finish by draining the cleaning water from the waste tank.

Note Make sure to remove any chemical residue on the drain hose and hose coupling.

Filling the Processor Unit

1. Press to open the cover.

Press the cover to open it

2. After opening the cover you can access the processor lock handle, which is positioned horisontally when locked.

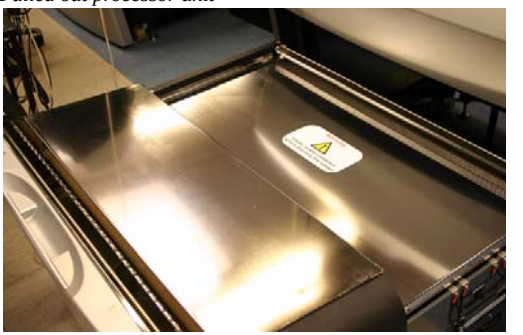
Lock handle in horisontal and locked position

3. To unlock the processor, turn the lock handle to vertical position.

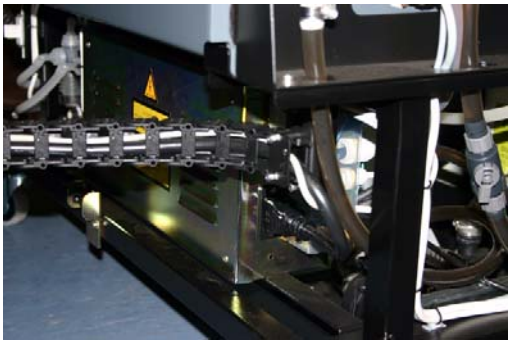
Lock handle in vertical and open position

4. Pull out the processor unit as far as permitted by the cable chain - carefully to avoid spilling the fluids.

Pulled out processor unit



Cable chain



Note The processor unit is supported by rails while in position and by wheels when pulled out.

5. Lift off the tank covers.

Make sure the drain pipes are in position.

IMPORTANT: Avoid any splashing into the Activator tank, as even small amounts of stabilizer may damage the activator.

Tank covers

6. Add new chemicals - 15 litres of Activator and 7.5 litres of Stabilizer.

Note New chemicals should be mixed in a separate container before adding it to the developer.

7. Put the cover back on.

8. Gently push the processor unit back into position.

9. Turn the processor lock handle to horisontal position to lock the processor.

The activator temperature is regulated by means of a computer-controlled heating element and must be between 20° C (68°F) and 30°C (86°F).

WARNING: Never turn on the power unless the processor unit is filled or the power plug for the heating element is removed, as this may cause overheating and damage to the processor unit.

Chapter 7 – Calibration

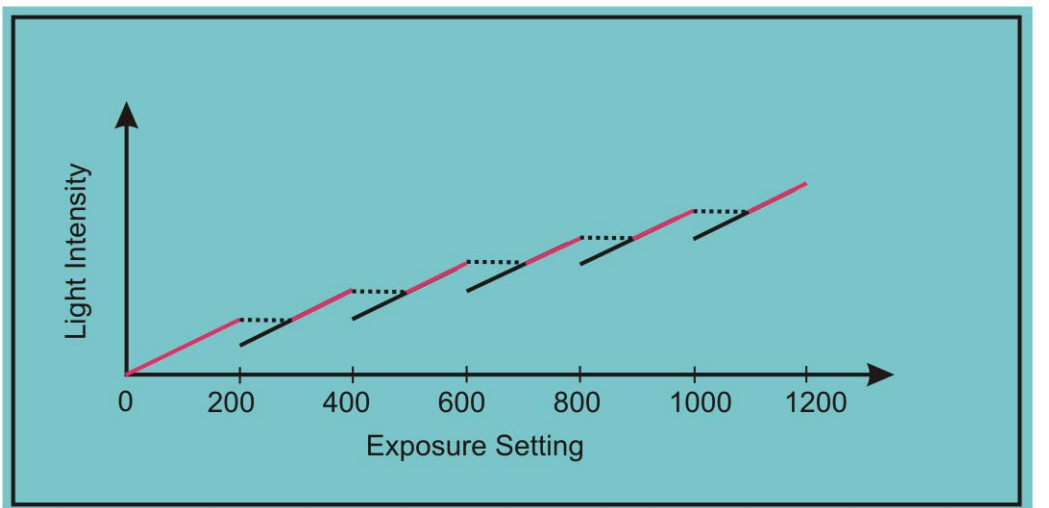
Why Is Calibration Necessary?

In order to compensate for dot gain and produce consistent output, a platesetter must be calibrated for linearity. An platesetter is "linear" when every tone specified in the input gives that same tone in the output, so that the curve comparing input and output is a straight line.

In four-color work, even small deviations from a linear curve can cause significant errors in the colors produced - for example, changes in color balance and contrast, loss of brightness, and loss of highlight or shadow detail. Even if the platesetter is very accurate, the output will still be affected by the type and brand of media used, so its calibration should be regularly checked.

Because of the way DPX 4 moderates its exposures, it is recommended that you sweep from 200 to 1200 at steps of 200. As illustrated below, the light intensity response is notched at intervals of 200, and to achieve optimum dynamic range you should use a setting near the top of one of the notches. By creating a sweep in steps of 200 that starts at 200, you will be testing at the top of each notch.

Calibration is described in the RIP's user documentation.



Light response of DPX 4 exposure settings

Chapter 8 – Technical Specifications

In this section:

PLATESETTER SPECIFICATIONS DPX 4	
Exposure technology	Internal drum
Max plate format	680 x 750 mm
Min plate format	305 x 305 mm
Optional Standard punches	Bacher 220 mm. Plate punch Bacher 425 mm. Plate punch Bacher 220/425 mm. Plate punch The gripper margin will be imageable
Custom punch	Punch is in one side of the plate only
Laser type	Red laser diode, 658 nm., min.10 mW
Resolution	1200 - 3000 dpi in steps of 1
Spinner speed	60.000 RPM
Performance	Approximately 28 full format plates pr. hour @2540 dpi
Integrated processor	2-bath Polyester plate processor with replenish control Integrated dryer section
Replenish capacity	min. 2 full size rolls of material
Waste capacity	Min. bath contents + full replenish capacity
Physical dimensions HxWxD	App. 1.100 x 1.300 x 1.050 mm
Weight	App. 500 kg
RIP Interface	USB 2.0
User Interface	DotManager software on the RIP PC

Power Requirements	210 -240 Volt, 50/60 Hz, 16 A
Working Environment	40 - 70% RH, non-condensing
Temperature	18 - 25 degrees C
Max temperature change	2 degrees C/hour
Installation requirements	80 cm wide door

MEDIA SPECIFICATIONS

Media	2 media rolls (2 is optional)
Media Type	DotPrint/ Mitsubishi Silver Digiplate, with polyester base material
Thickness	0.2 mm/8 mill FR/FRM on media widths from 305 - 750 mm
Core Size	6"/152.4 mm
Media width, large	305 - 750 mm
Media width, medium	305 - 550 mm
Output Tray Capacity	40 maximum format plates 0.2 mm media

PROCESSOR SPECIFICATIONS

Tank Capacity Activator	App. 15 litres
Tank Capacity Stabilizer	App. 7.50 litres
Replenishment pump, Activator	150 ml/m^2, SLM-AC: Water = 1:1
Replenishment pump, Stabilizer	200 ml/m^2 SLM-ST : Water = 1:3
Circulation	Mechanical stirring for activator only
Heater for Chemicals	Heating element, only activator 750 Watts
Working temperature, activator	28-30°C
Heating time	18°C to 28° C max. 20 min
Replenishment container	2 x 10 litres
Drain system	Overflowed chemicals to waste container, 30 litres

Pump to empty drain tank	10 litres/min
Dip to nip distance, Activator	App. 390 mm
Dip to nip distance, Stabilizer	App. 200 mm
Plate advance speed	15,6 mm/sec. (At 25 sec. development time)
Processing performance for 505 mm plate	65 plates/hour
Drying System Heaters	2.000 Watts
Temperature range settings	30°C - 50° C drying system

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