




User Guide

English

Dolev

800V+/800V²/800V³



Dolev 800V+/800V²/800V³

User Guide

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RE37,376	5,325,217	5,532,728	5,742,743	5,996,499	6,158,345	6,353,216
4,558,302	5,339,176	5,561,691	5,764,374	5,998,067	6,159,659	6,366,339
4,743,091	5,343,059	5,568,595	5,764,381	6,003,442	6,164,637	6,371,026
4,992,864	5,355,446	5,576,754	5,771,794	6,014,471	6,180,325	6,377,739
5,049,901	5,359,451	5,579,115	5,785,309	6,016,752	6,181,362	6,387,597
5,079,721	5,359,458	5,592,309	5,813,346	6,031,932	6,181,439	6,396,422
5,103,407	5,367,360	5,594,556	5,818,498	6,043,865	6,186,068	6,396,618
5,111,308	5,384,648	5,600,448	5,854,883	6,060,208	6,189,452	6,407,849
5,113,249	5,384,899	5,608,822	5,861,904	6,063,528	6,191,882	6,414,755
5,122,871	5,412,491	5,615,282	5,861,992	6,063,546	6,204,874	6,422,801
5,124,547	5,412,737	5,625,766	5,875,288	6,072,518	6,208,369	6,435,091
5,132,723	5,420,702	5,636,330	5,894,342	6,090,529	6,214,276	6,441,914
5,150,225	5,420,722	5,649,220	5,900,981	6,096,461	6,217,965	6,450,092
5,153,769	5,459,505	5,650,076	5,934,196	6,098,544	6,260,482	6,456,396
5,155,782	5,473,733	5,652,804	5,942,137	6,107,011	6,266,080	6,476,931
5,157,516	5,481,379	5,680,129	5,946,426	6,112,663	6,266,134	6,477,955
5,208,818	5,488,906	5,691,823	5,947,028	6,115,056	6,267,054	6,509,903
5,208,888	5,497,252	5,691,828	5,958,647	6,121,996	6,268,948	
5,247,174	5,508,828	5,696,393	5,966,504	6,130,702	6,283,589	
5,249,067	5,509,561	5,699,174	5,969,872	6,134,393	6,295,076	
5,283,140	5,517,359	5,699,740	5,973,801	6,136,509	6,299,572	
5,291,273	5,519,852	5,708,736	5,986,819	6,137,580	6,318,266	
5,323,248	5,526,143	5,713,287	5,995,475	6,147,789	6,352,816	

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Using This Manual

Who Should Use This Manualviii

Who Should Use This Manual

This guide describes the options available with the Dolev® 800V³/800V⁴ imagesetter. The Dolev 800V+/800V²/800V³ imagesetter is a high-speed large-format internal drum output device. The large exposure format is convenient for tradeshops and printers. In addition, the Dolev 800V+/800V²/800V³ imagesetter supports the preparation of plate-ready separation films using the Creo Imposition feature.

Chapter 1, Safety Precautions warns against laser, mechanical and electrical hazards.

Chapter 2, Introduction to Dolev 800V+/800V²/800V³, introduces the imagesetter, and explains the start up and shut down procedures. These are followed by the Control Panel description, and the imagesetter specifications.

Chapter 3, Media Management, explains how to unload the supply cassette, load film into it, and load it back into the imagesetter. The following sections explain the media setup functions, how the media is exposed, ejected into the output cassette and developed, and the last section explains how to remove stuck media.

Chapter 4, Res-Intensity Calibration, explains how to guarantee high quality exposures using a unique laser intensity for each plotting resolution.

Chapter 5, Data Configuration Setting, explains how to configure the imagesetter with the Brisque.



For further technical information refer to the *Dolev 800V+/800V²/800V³ Installation Guide*, 399Z1R556B.

For further information on error messages refer to the *Dolev 800V+/800V²/800V³ Troubleshooting Guide*, 653-00095B.

1

Safety Precautions

Read this chapter carefully before installing, operating, or maintaining the Dolev 800V+/800V²/800V³ imagesetter.

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Installation Safety Precautions



WARNING: Installation must be done by authorized service personnel only.



WARNING: To avoid the risk of fire, no connections to the supply are to be made before the service engineer sets the line voltage selector!

General Safety Precautions

Disconnection from the Mains Supply

Dolev 800V+/800V²/800V³ is equipped with a **Master circuit breaker**, located at the lower rear part of the imagesetter, and an **On/Off** switch, located near the Control Panel at the front part of the imagesetter.

To achieve complete disconnection from the mains supply, the **Master circuit breaker** must be disconnected (switched to 0 position).



WARNING: Switching off only the **On/Off** switch leaves several circuits of the imagesetter energized.

Lithium Battery

The Dolev 800V+/800V²/800V³ contains a Lithium battery in the CPU board.

The battery should be replaced by qualified service personnel. The battery must not to be replaced by the user.



DANGER: Danger of explosion if battery is incorrectly replaced.

Maintenance

The Dolev 800V+/800V²/800V³ imagesetter is installed and serviced exclusively by specialized technicians trained in the proper procedures for working with and adjusting the laser beam power and its optical path.

You are allowed to perform only one (1) maintenance procedure, that is, to remove film (supply media) stuck on the inside of the imagesetter drum area. For details, please refer to *Chapter 3, Media Management, Removing Stuck Film from the Imagesetter*.

Safety Interlocks

Upon opening a side door or taking out the loading assembly:

- Interlock switches are designed to disconnect power from the motors and deactivate the laser.
- It may take up to 30 seconds for the spinner motor to halt after a door is opened. Wait 30 seconds from the time the door is opened before you dismantle the internal side protective barrier.
- You are forbidden, under any circumstances, to open covers that need a screwdriver or any other tool to do so.
- Refrain from tampering with the electrical wiring inside the imagesetter.



WARNING: Some wiring, located inside the electrical boxes, will remain energized if the Master circuit breaker is not switched off.

- You are forbidden, under any circumstances, to defeat any of the interlock switches.

While the Imagesetter is switched on and the interlocks are defeated:

- There is power present in the electrical, optical and mechanical assemblies and inside the imagesetter.



DANGER: Electrical, laser and mechanical hazards exist!

Laser Safety Precautions



WARNING: Even brief exposure of the eyes to the laser beam or its reflections may cause permanent loss or permanent degradation of eyesight.



DANGER: Use of controls and/or adjustments, or performance of procedures other than those specified in this manual may result in hazardous radiation exposure.

Upon opening a side door or taking out the loading assembly:

- Interlock switches are designed to disconnect power from the motors and deactivate the laser.
- You are forbidden, under any circumstances, to defeat any of the interlock switches.
- You are forbidden, under any circumstances, to open covers that need a screwdriver or any other tool to do so.
- Refrain from tampering with the electrical wiring inside the imagesetter.

While the Imagesetter is switched on and the interlocks are defeated:

- There is power present in the electrical, optical and mechanical assemblies and inside the imagesetter.



DANGER: Electrical, laser and mechanical hazards exist!

For Dolev 800V+/800V²/800V³ (see Figure 1 on page 9 and Figure 2 on page 10):

- Up to 5 milliwatt of laser power at a wavelength of approx. 650 nm may be present in the Output optical connector of the Static optics assembly, Dynamic optics assembly, Optical fibers, Optical fibers connectors, and on the inside of the imagesetter drum.
- Up to **10** milliwatt of laser power at the same wavelength may be present inside the Static optics assembly.



WARNING: This laser radiation is hazardous to the eye and skin! Avoid exposure to the beam and its reflections.

Warning Labels

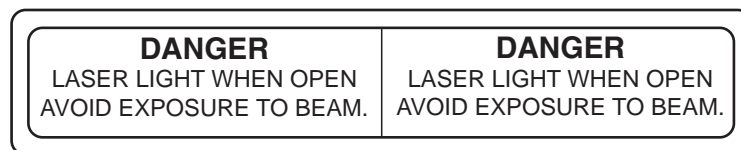
The following pages show the labels and their locations. Please notify Creo service personnel if any of them are missing or damaged.



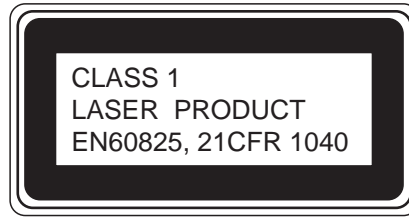
K2G954



K2G955



K2G956



K2G957



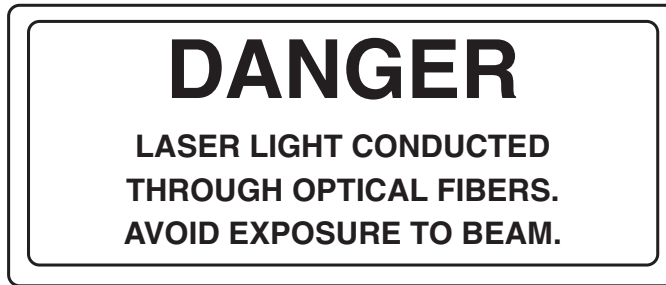
K2G958



K1F658



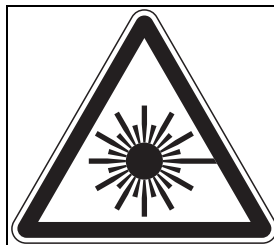
K8F711



K8F712



374A7B951 (374A30170)



374A2G961

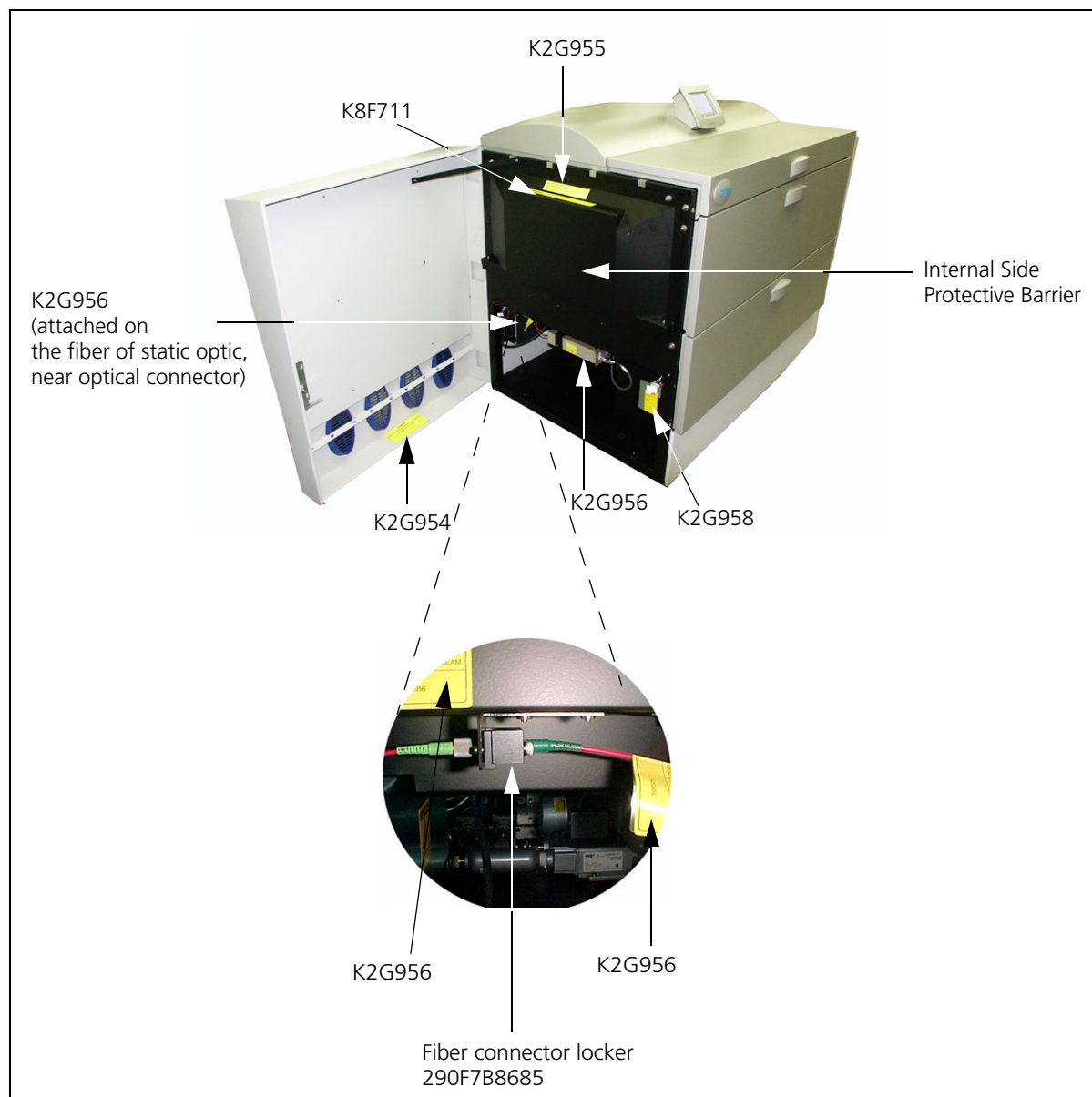


Figure 1: Dolev 800V³ - left side door open

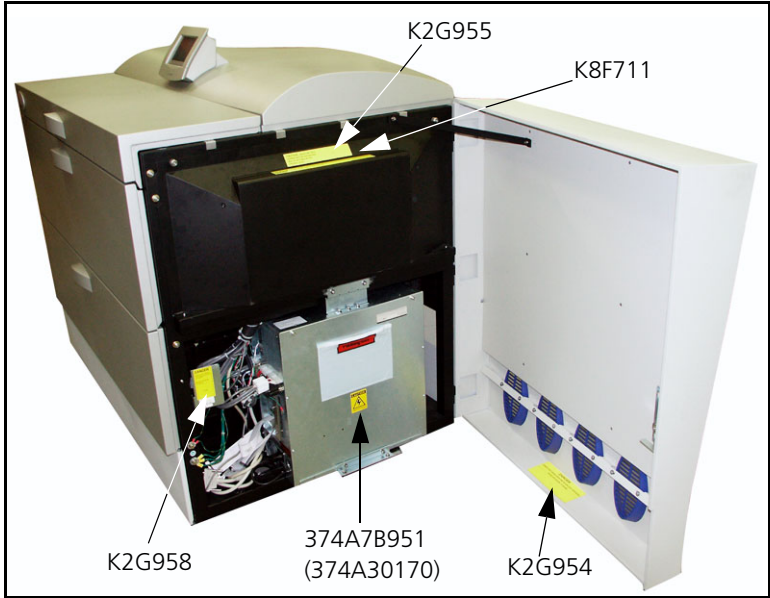


Figure 2: Right side door open



Figure 3: Right side, internal protective barrier removed



Figure 4: Rear view

2

Introduction to Dolev 800V+/800V²/ 800V³

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Introduction to the Imagesetter

The imagesetter uses laser optics to output onto film or polyester plates. Dolev 800V+/800V²/800V³ does not require computer experience to operate. During normal use, once exposure starts, there is no need for operator intervention since all functions are performed automatically.

The Dolev 800V+/800V²/800V³ handles high-volume film output of color and black-and-white pages of text and graphics, and processes this data to produce high-quality film output.

Media can be exposed in single or multiple runs continuously, without operator intervention.

Procedures for film exposure are controlled by the Dolev 800V+/800V²/800V³ micro controller.

A punch option allows you to define customized registration marks. This function is especially important when preparing film for impositioning.

The film is automatically cut, exposed and unloaded into a removable output cassette. At the completion of a work session, the cassette is taken to a film processor for development. An optional internal conveyor and inline processor can be used for continuous film development.

The Dolev 800V+/800V²/800V³ changes the way images for plate-imposition are prepared. Instead of using time consuming step-and-repeat machines, Dolev 800V+/800V²/800V³ prepares plate-ready separation films to copy directly to plate. Files are transferred from the workstation to the imagesetter and exposed to the film. The film is then transferred to the plate department.

Imagesetter Front View

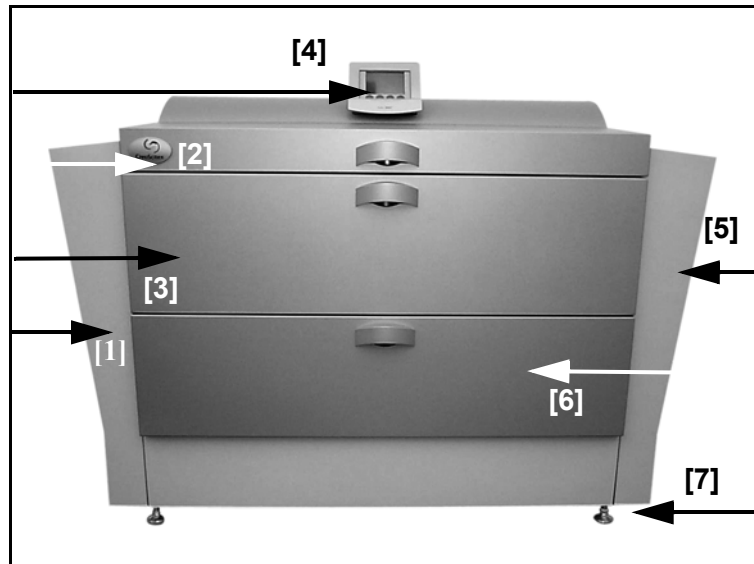


Figure 5: Dolev 800V+/800V²/800V³ Front View

[1] - Left service door

This door allows access to the Drum area. You may open this door to clear media stuck in the drum area. Service engineers access the electronics and optomechanics via the service doors.

[2] - Supply cassette compartment door

The small and medium supply cassettes are loaded via this door.

[3] - Large cassette door

The large supply cassette is loaded via this outer door.

Note: Another inner door is located behind this outer door.



[4] - Control Panel

Film loading and most basic operations are performed via the Control Panel. In addition, the **Reset** switch [a] is recessed behind the bezel at the top of the Control Panel. The **On/Off** switch [b] is also located next to the Reset switch. The imagesetter is turned **on/off** using this switch.

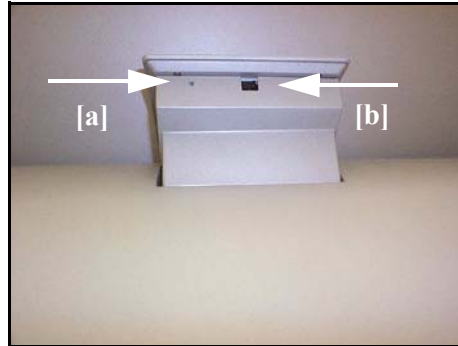


Figure 6: Reset and On/Off Switches

[5] - Right service door

This door allows access to the Drum area. You may open this door to clear media stuck in the drum area. Service engineers access the electronics and optomechanics via the service doors.

[6] - Output cassette door

The output cassette is located behind this door. Exposure media can be output either to the output cassette or to an in-line processor.

[7] - Adjustment legs

Four (4) adjustment legs are used to level the imagesetter. Before moving the unit, unlock the legs.

Wheels

Four (4) wheels allow easy positioning of the imagesetter. Once the machine is in place, the adjustment legs are locked into position and the wheels are ineffective.

Large supply cassette (#1)

This is a 34 inch wide cassette suitable for film widths from 10 to 34 inch in one inch step intervals.

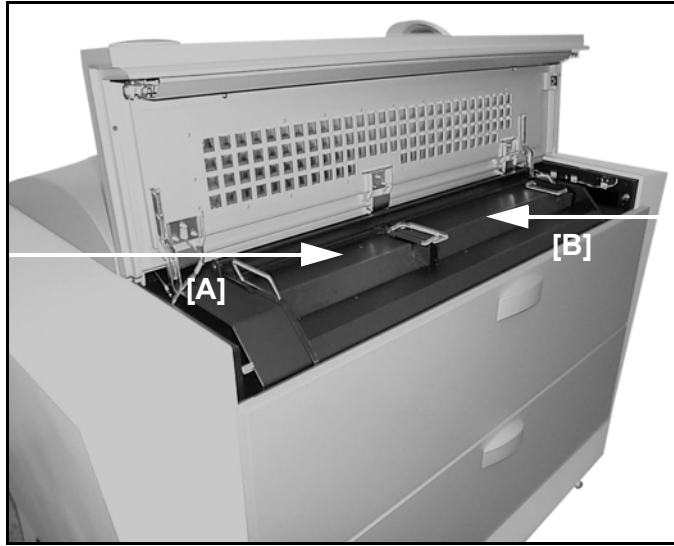


Figure 7: Dolev 800V+/800V²/800V³ Small and Medium Cassettes

[A] - Small supply cassette

This is a 12 inch wide cassette for film widths 10, 11 and 12 inch.

[B] - Medium supply cassette

This is a 20 inch wide cassette suitable for film widths from 10 to 20 inch in one inch step intervals.

Imagesetter Rear View

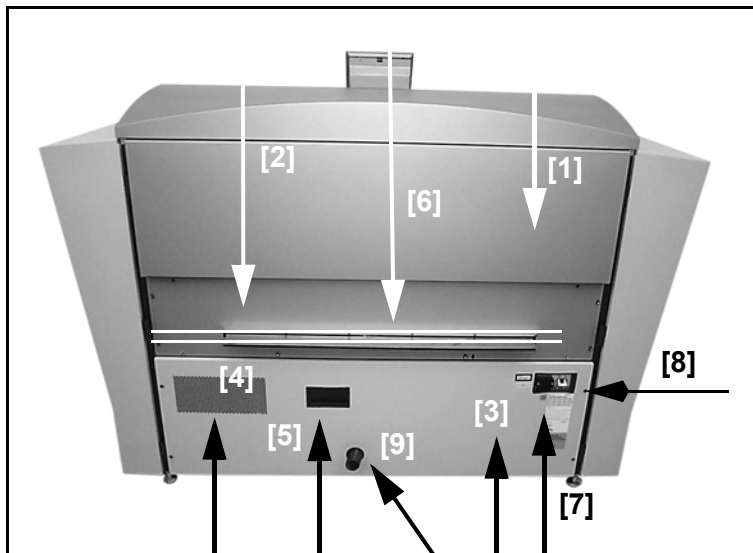


Figure 8: Dolev 800V+/800V²/800V³ Rear View

[1] - Upper service panel

The panel is not removed.

[2] - In-line processor panel (not shown)

Remove the panel if you connect to the in-line processor.

[3] - Lower service panel

Use the panel to access the power distribution unit, and the vacuum system.

[4] - Fan

The fan does not require maintenance. It does require that the imagesetter be kept at least 70 cm. from the wall.

[5] - Punch system (optional) pressure inlet

[6] - Connection to in-line processor

The in-line processor is an option for the Dolev 800V+/800V²/800V³.

[7] - Power inlet

The power cord is connected here.

[8] - Master circuit breaker

If a power surge or some other electrical problem has shorted power to the imagesetter, check the breaker.

[9] - Vacuum pump outlet

Outlet for vacuum pump.

Turbo Screening connection

The Turbo Screening board is connected via a host cable 30 meters long:
For Dolev 800V+/800V² - between the E-Box (SOMC) and the TSP inside the Brisque.

For Dolev 800V³ - between the E-box (MB-SOMC) and TSP 100 inside the Brisque.



For further information about Turbo Screening see the *TSP Board Installation Guide*.

Startup

To start up the imagesetter:

1. Make sure that the Master circuit breaker ([9] in the Imagesetter rear view above) is **UP**.



Figure 9: Master circuit breaker

2. Press the **On/Off** switch on the Control Panel.

Shutdown

Under normal conditions, leave the Dolev 800V+/800V²/800V³ working at all times (you do **not** need to turn **off** the power overnight).

If you intend to leave the imagesetter idle for 48 hours, turn off the imagesetter:

- Press the **On/Off** switch to turn **off** the imagesetter.



Note: During normal operation, do **not** shut down the power using the Master circuit breaker. In case a power surge or some other electrical problem has shorted power to the imagesetter, the circuit breaker may shut down the machine (that is, it will be in the **DOWN** position); to turn *on* the power, pull the circuit breaker upwards.

Reset Button

The **Reset** button is located on the right side of the Control Panel.

- In case of a software error (that is, when the Control Panel or the imagesetter is **not** responding to commands), depress the **Reset** button to resume work.

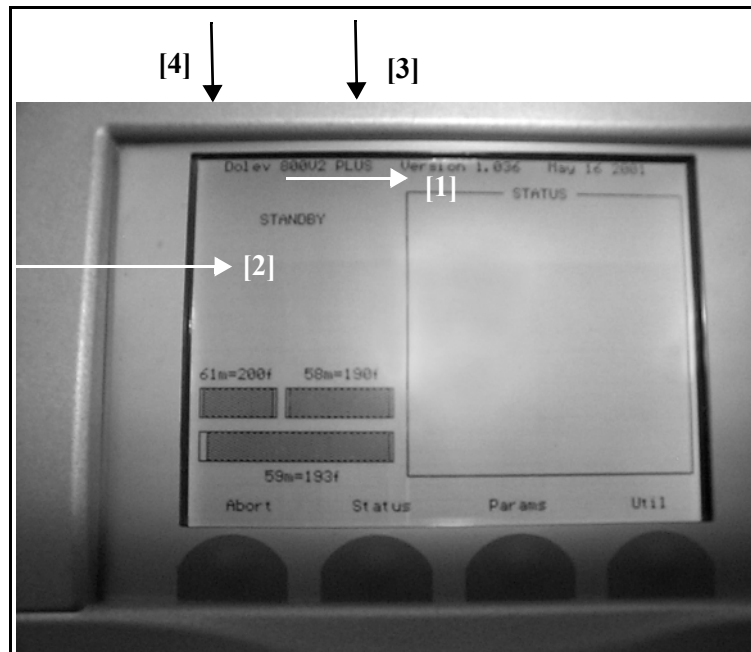


Note: Depressing the Reset button does **not** help in case of stuck media or media out.

Control Panel

The Dolev 800V+/800V²/800V³ sends the imagesetter options, status and error messages to the Control Panel.

The Control Panel is located on the middle of the upper part of the imagesetter.



The Control Panel contains the following:

[1] - LCD screen

[2] - 4 soft buttons

[3] - On/Off Switch

[4] - Reset Button

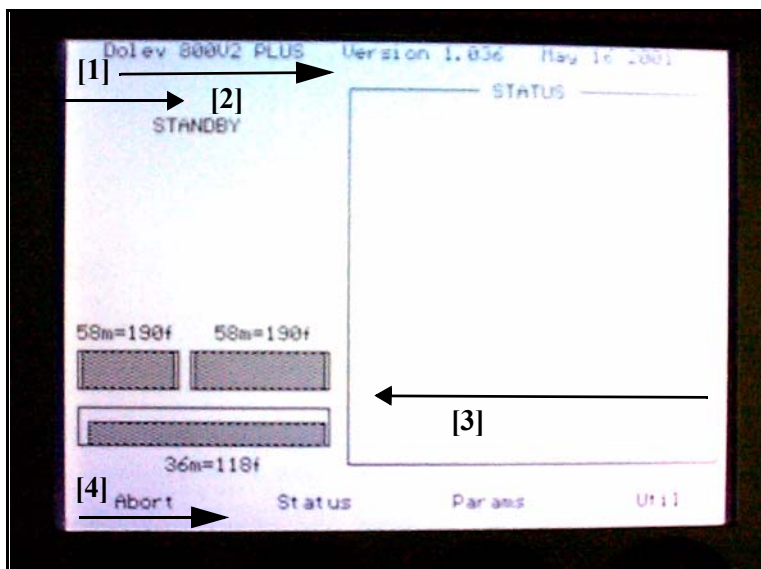
For details on the **On/Off** Switch and **Reset** Button, refer to the *Startup, Shutdown and Reset* section on the previous page.

LCD Screen

The LCD screen displays a variety of text (such as, messages) and graphical representations (such as, icons, and imagesetter views) that inform you of the current status of the imagesetter and of the cassettes.

In addition, it displays menus and windows through which you may perform both basic and advanced operations related to the machine and to the exposure media.

The LCD screen standby is shown below:



The display on the LCD screen consists of the following areas:

- [1]** - Imagesetter Micro Version
- [2]** - Current Process (or Progress Indicator)
- [3]** - Status of Loading Cassette
- [4]** - Soft Functions

Current Process/Progress Indicator

This area (on the top left part of the screen) displays the name of the process that is currently running, or the current state of the imagesetter.

The startup process includes 12 stages, some of which are indicated by StartUp # (# specifying a number), while others are indicated by the name of the task, for example, **Attach**.

STANDBY - appears when the imagesetter is ready to expose, i.e. film is already loaded, and both the Loading and Unloading drawers are closed.

NOT READY - appears when the imagesetter is not ready to expose (for example, film is not loaded or one of the drawers/doors is open).

HostOnLine - appears when communication between the Host and the imagesetter has been established (for example, at the beginning of the expose process or after selecting Get Params from Plotter).

Progress Indicator

When the imagesetter is exposing, a Progress indicator is displayed in the Current Process area.

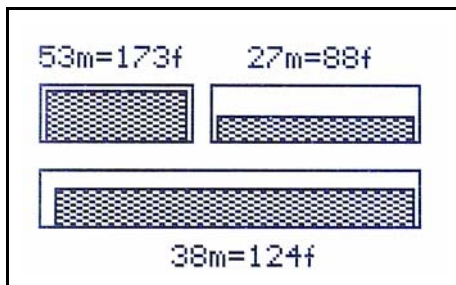
The pie chart fills from 0% to 100% when the exposing is completed.

Imagesetter Micro Version

This area (on the top of the screen) displays the number and the date of the imagesetter Micro software version that is currently installed on the Imagesetter PC.

Status of Loading Cassette

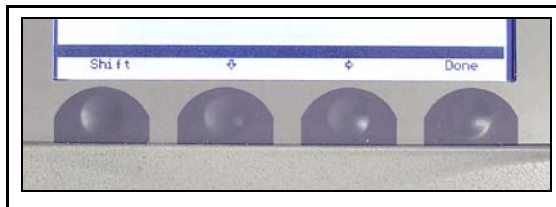
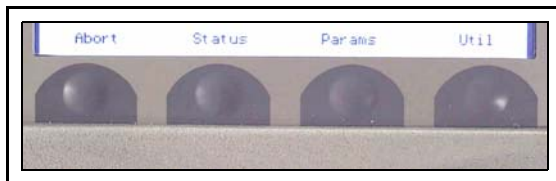
This area (on the left side of the screen) displays three (3) bars that represent the Loading cassettes.



Soft Buttons and Soft Functions

Four (4) soft **Buttons** are located below the LCD screen of the Control Panel. Press the requested soft button to activate the function that is indicated on the LCD screen directly above it.

Four (4) soft **Functions** are indicated on the bottom part of the LCD screen. Each soft function indicates the action that is activated when you press the corresponding soft button below it.



Note: The functionality of a specific soft button is variable and depends on the soft function that is currently indicated on the LCD screen.

- To return to the previous function, press the **SHIFT + ESC** soft buttons.

Main Screen Soft Functions

In **STANDBY** state the soft buttons function as follows:

Press the soft button	To...
Abort	Stop the current process
Status	View system messages.
Params	View the parameters of the last/current exposure that the Host sent to the Imagesetter.
Util	Perform various functions related to the exposure media, and to get information on the media.

Utilities

Set Loading

Use this option to automatically cut the section of the media that was exposed to light, and dispose of it in the unloading cassette/inline processor.

- Move the **Cassette field** to **LRG**, **MED**, or **SML** (the default), according to the size of cassette currently used.



Note: If the machine does not work properly at 0 parameter, the engineer must change it. To do this, go to: **Tools > Operation > Setup > Factory Table > Conveyor Delay Time.**



Note: If you are using 2 large cassettes, toggle the field to **LWR** (lower) or **UPR** (upper).

Update Cst Mode

Use this option to indicate whether you wish to use one or two large cassettes.

After you select **Update CasMode** from the menu, the **Update CasMode** form appears.

- Toggle the **Large Csts Mode** field to **1 cst** (the default) for 1 large cassette (together with one small cassette and one medium cassette), or to **2 cst** for 2 large cassettes.

Media Info

Use this option to set the parameters of the selected cassette. After you select the Cassette from the menu, the **Media Info table** appears:

Small Cassette

Current Length

61

Material

Film

[Film]

Media Thickness

4

[4]

Media Width

304

[304]

Res/Int Table #

1

[1]

Full Length

61

[61]

Vendor

Other

[Other]

Parameter	Range	Default	Do the following...
Current Length	0 - 61	61	The default (61 m) specifies that the loaded film is a full roll. If you did not load a full roll of film, enter the current length (in meters). This is the only field that updates during exposure.
Material	Film, Plate, Paper	Film	Toggle this field to Film (the default), Plate, or Paper, according to the media you loaded.
Media Thickness	4 - 7	4	Toggle this field to 4 mil (the default) or to 7 mil, according to the media you loaded.
Media Width	254 - 838	304	Enter the width of the media you loaded.
Res/Int Table #	-	1	<div>Toggle this field to 1 (the default) to automatically select a Res/Intensity table to suit the vendor (if such is indicated in the Vendor field).</div> <div>If the loaded film is not of the same type as the one previously loaded, toggle this field to the appropriate Res/Intensity table number.</div>

Parameter	Range	Default	Do the following...
Full Length	0 - 63	61	Enter the length of a full roll of film. Note: If you loaded a full roll of film, this value is identical to that of Current Length.
Vendor	-	None	Toggle this field to None (the default) in order to use the table specified in the Res/Int Table field. Toggle this field to the name of the vendor of the loaded media to use the Res/Int table that is specified in the Res/Int Table # field. Note: If the Res/Int Table specifies 0, the system automatically selects a Res/Int table to suit the specified vendor.

Mechanical Startup

This function will activate the mechanical start up procedure.

Use the function after opening one of the doors or if you want to set back the machine to standby.

Active Task Operation

This function will show the parameters during the active task.

Slave Board Statuses

This function will show the status of the boards.

Messages

This function will show the messages from the machine.

Tools Operation

The tools operation are tools for service engineer.

Specifications

Table 1: Technology

	Dolev 800V+	Dolev 800V²	Dolev 800V³
Structure	Large-format, Internal Drum	Large-format, Internal Drum	Large-format, Internal Drum
Light Source	Laser Diode 650 nm wavelength Light Power 5 milliwatts	Laser Diode 650 nm wavelength Light Power 5 milliwatts	Laser Diode 650 nm wavelength Light Power 5 milliwatts
Spot Size	variable, 10-25 microns	variable, 10-25 microns	variable, 10-25 microns
Repeatability	±5µm over the full format of successively imaged films, disregarding any distortion caused by temperature, humidity and film material.	±5µm over the full format of successively imaged films, disregarding any distortion caused by temperature, humidity and film material.	±5µm over the full format of successively imaged films, disregarding any distortion caused by temperature, humidity and film material.
Spinner	Air bearing up to 24,000 rpm	Air bearing up to 45,000 rpm	Air bearing up to 45,000 rpm
Raw Imaging Speed @100 lpmm/ 2540 dpi @ 80 lpmm/ 2032 dpi @ 50 lpmm/ 1270 dpi	37.27 cm ² /second (346 in ² /min) 89.3 cm ² /second (831 in ² /min)	60.7 cm ² /second (564 in ² /min) 94.9 cm ² /second (882 in ² /min)	4995 / 774 6283 / 974 10053 / 1558
Throughput	(full formats per hour)	(full formats per hour)	(full formats per hour)
@100 lpmm/ 2540 dpi	10 full formats/hr (80 A4 pages/hr)	16.2 full formats/hr (130 A4 pages/hr)	23 full formats/hr
@ 80 lpmm/ 2032 dpi	12 full formats/hr (96 A4 pages/hr)	21.4 full formats/hr (171 A4 pages/hr)	27 full formats/hr

Table 1: Technology

	Dolev 800V+	Dolev 800V²	Dolev 800V³
@ 50 lpmm/ 1270 dpi	17 full formats/hr (136 A4 pages/hr)	28.6 full formats/hr (229 A4 pages/hr)	36 full formats/hr
Brisque	TSP / VLSI	TSP	TSP 100

Table 2: Image Features

	Dolev 800V+	Dolev 800V²	Dolev 800V³
Maximum Net Image Area	838 x 1117 mm (33 x 44 in)	838 x 1117 mm (33 x 44 in)	838 x 1117 mm (33 x 44 in)
Page Formats Capability	Up to 8*A4, 4*A3, 2*A2, 8*B4, 4*B3, 2*B2, 1*B1	Up to 8*A4, 4*A3, 2*A2, 8*B4, 4*B3, 2*B2, 1*B1	Up to 8*A4, 4*A3, 2*A2, 8*B4, 4*B3, 2*B2, 1*B1
Press Formats Capability	Heidelberg GTO, SM52, SM74, SM102 MAN Roland 100, 200. 600 Komori 26, 28, 44	Heidelberg GTO, SM52, SM74, SM102 MAN Roland 100, 200. 600 Komori 26, 28, 44	Heidelberg GTO, SM52, SM74, SM102 MAN Roland 100, 200. 600 Komori 26, 28, 44
Resolution	50-200 pixels/mm, 1270-5080 dpi; continuously variable. Optional lower and higher resolutions	50-200 lpm, 1270-5080 dpi; continuously variable. Up to 400 lpm (10,000 dpi) for security printing models (UHR)	50-200 lpm, 1270-5080 dpi; continuously variable. Up to 400 lpm (10,000 dpi) for security printing models (UHR)
Screen Technology	Creo Turbo Screening including conventional dot shapes: round, square, diamond, gravure. Creo composite, GeometricDOT and FM.	Creo Turbo Screening including conventional dot shapes: round, square, diamond, gravure. Creo composite, GeometricDOT and FM.	Creo Turbo Screening including conventional dot shapes: round, square, diamond, gravure. Creo composite, GeometricDOT and FM.

Table 2: Image Features

	Dolev 800V+	Dolev 800V²	Dolev 800V³
Screen Ruling	(frequency) 20-246 lpcm / 50-625 lpi	(frequency) 20-246 lpcm / 50-625 lpi	(frequency) 20-246 lpcm / 50-625 lpi
Screen Angles	User-selectable from a variety of preset angles.	User-selectable from a variety of preset angles.	User-selectable from a variety of preset angles.

Table 3: Media and Related Features

	Dolev 800V+	Dolev 800V²	Dolev 800V³
Types of Media	Roll, medium to high contrast, red sensitive, film or polyester plates	Roll, medium to high contrast, red sensitive, film or polyester plates	Roll, medium to high contrast, red sensitive, film or polyester plates
Media Width	254-863 mm in steps of 25.4 mm 10–34 in. in steps of 1 in	254-863 mm in steps of 25.4 mm 10–34 in. in steps of 1 in	254-863 mm in steps of 25.4 mm 10–34 in. in steps of 1 in
Media Length (inside Drum)	Min. 420 mm (15 in); Max. 1200 mm (47 in)	Min. 450 mm (16 in); Max. 1200 mm (47 in)	Min. 450 mm (16 in); Max. 1200 mm (47 in)
Thickness and Capacity	60 m/200 ft at 0.1 mm/4 mil 30 m/100 ft at 0.2mm/8 mil	60 m/200 ft at 0.1 mm/4 mil 30 m/100 ft at 0.2mm/8 mil	60 m/200 ft at 0.1 mm/4 mil 30 m/100 ft at 0.2mm/8 mil

Table 3: Media and Related Features

	Dolev 800V+	Dolev 800V²	Dolev 800V³
Load/ Unload System	Fully automatic from three selectable loading cassettes. Vacuum film hold-down. Dual unload options: unload cassette or inline processor.	Fully automatic from three selectable loading cassettes. Vacuum film hold-down. Dual unload options: unload cassette or inline processor.	Fully automatic from three selectable loading cassettes. Vacuum film hold-down. Dual unload options: unload cassette or inline processor.
Loading Cassette	Three different size cassettes for rolls, including daylight film. Sizes up to: 304, 508, 863 mm (12, 20, 34 in) or Two optional large (863 mm/ 34 in) cassettes instead of three cassettes.	Three different size cassettes for rolls, including daylight film. Sizes up to: 304, 508, 863 mm (12, 20, 34 in) or Two optional large (863 mm/ 34 in) cassettes instead of three cassettes.	Three different size cassettes for rolls, including daylight film. Sizes up to: 304, 508, 863 mm (12, 20, 34 in) or Two optional large (863 mm/ 34 in) cassettes instead of three cassettes.
Unloading Cassette	One, accumulating cut sheet type, 12 sheets capacity for 0.1 mm/4-mil film.	One, accumulating cut sheet type, 12 sheets capacity for 0.1 mm/4-mil film.	One, accumulating cut sheet type, 12 sheets capacity for 0.1 mm/4-mil film.
Inline Processor	Optional (refer to recommended list)	Optional(refer to recommended list)	Optional(refer to recommended list)
Punch System	Customized head punch up to 10 holes. Optional, Bacher and Stasser standard.	Customized head punch up to 10 holes. Optional, Bacher and Stasser standard.	Customized head punch up to 10 holes. Optional, Bacher and Stasser standard.

Table 4: Environment

	Dolev 800V+	Dolev 800V²	Dolev 800V³
Electrical Requirements	200/220/240 VAC, ± 10% Europe: Single Phase, 50/60 Hz ± 2 Hz USA/Japan: 2 Phase 50/60 Hz ± 2 Hz Power Less than 3 KVA	200/220/240 VAC, ± 10% Europe: Single Phase, 50/60 Hz ± 2 Hz USA/Japan: 2 Phase 50/60 Hz ± 2 Hz Power Less than 3 KVA	200/220/240 VAC, ± 10% Europe: Single Phase, 50/60 Hz ± 2 Hz USA/Japan: 2 Phase 50/60 Hz ± 2 Hz Power Less than 3 KVA
Operating Environment			
Temperature:	23°C ± 3°C 73.4°F ± 5.4°F	23°C ± 3°C 73.4°F ± 5.4°F	23°C ± 3°C 73.4°F ± 5.4°F
Relative Humidity:	55% ± 5% RH	55% ± 5% RH	55% ± 5% RH
Audible Noise:	<55dbA	<55dbA	<55dbA
Heat Dissipation:	2500 BTU/hr	2500 BTU/hr	2500 BTU/hr
Area Requirements	6.7 square meters	6.7 square meters	6.7 square meters

Table 5: Physical Dimensions

	Dolev 800V+	Dolev 800V²	Dolev 800V³
Dimensions	Height: 1230 mm (48 in) Width: 1650 mm (65 in) Depth: 1000 mm (39 in)	Height: 1230 mm (48 in) Width: 1650 mm (65 in) Depth: 1000 mm (39 in)	Height: 1230 mm (48 in) Width: 1650 mm (65 in) Depth: 1000 mm (39 in)
Weight	550 kg (1210 lb)	550 kg (1210 lb)	550 kg (1210 lb)

Table 6: RIP

	Dolev 800V+	Dolev 800V ²	Dolev 800V ³
Brisque	<p>Processor: Power PC 604</p> <p>Type: Software</p> <p>Operating System: AIX</p> <p>Architecture: CPSI with composite workflow and Turbo Screening</p> <p>CPU Speed: 332 MHz and up</p> <p>Interpreter: Postscript Levels 2 and 3</p> <p>DataFormats: PDF, Postscript, EPS, DCS1, DCS2, TIFF/IT-PI, CopyDot (scanned film), (N)LW, CT, ICF (Imposition Control File), Brisque Page.</p> <p>Communication Formats: Built-in Helios EtherShare, NFS, TCP/IP.</p>	<p>Processor: Power PC 604</p> <p>Type: Software</p> <p>Operating System: AIX</p> <p>Architecture: CPSI with composite workflow and Turbo Screening</p> <p>CPU Speed: 332 MHz and up</p> <p>Interpreter: Postscript Levels 2 and 3</p> <p>DataFormats: PDF, Postscript, EPS, DCS1, DCS2, TIFF/IT-PI, CopyDot (scanned film), (N)LW, CT, ICF (Imposition Control File), Brisque Page.</p> <p>Communication Formats: Built-in Helios EtherShare, NFS, TCP/IP.</p>	<p>Dual Processor: Power PC 604</p> <p>Type: Software</p> <p>Operating System: AIX</p> <p>Architecture: CPSI with composite workflow and Turbo Screening</p> <p>CPU Speed: 332 MHz and up</p> <p>Interpreter: Postscript Levels 2 and 3</p> <p>DataFormats: PDF, Postscript, EPS, DCS1, DCS2, TIFF/IT-PI, CopyDot (scanned film), (N)LW, CT, ICF (Imposition Control File), Brisque Page.</p> <p>Communication Formats: Built-in Helios EtherShare, NFS, TCP/IP.</p>

Table 6: RIP

	Dolev 800V+	Dolev 800V ²	Dolev 800V ³
PS/M	<p>Macintosh platform: Power Macintosh 604, 604e with Apple OS 6 or 7.5.3 or higher</p> <p>RIP: Software type, Adobe CPSI with composite workflow and Turbo Screening</p> <p>Data Formats: PDF, Postscript, EPS, DCS1, DCS2, TIFF/IT-PI, CopyDot (scanned film), LW CT, ICF (Imposition Control File).</p> <p>Communication Formats: Appletalk, TCP/IP.</p>	<p>Macintosh platform: Power Macintosh 604, 604e with Apple OS 6 or 7.5.3 or higher</p> <p>RIP: Software type, Adobe CPSI with composite workflow and Turbo Screening</p> <p>Data Formats: PDF, Postscript, EPS, DCS1, DCS2, TIFF/IT-PI, CopyDot (scanned film), LW CT, ICF (Imposition Control File).</p> <p>Communication Formats: Appletalk, TCP/IP.</p>	<p>Macintosh platform: Power Macintosh 604, 604e with Apple OS 7.5.3 or higher</p> <p>RIP: Software type, Adobe CPSI with composite workflow and Turbo Screening</p> <p>Data Formats: PDF, Postscript, EPS, DCS1, DCS2, TIFF/IT-PI, CopyDot (scanned film), LW CT, ICF (Imposition Control File).</p> <p>Communication Formats: Appletalk, TCP/IP.</p>
Prinergy		<p>CS Xpose with</p> <p>DataFormats: PDF, Postscript, EPS, DCS1, DCS2, TIFF/IT-PI, CopyDot (scanned film), LW CT, ICF (Imposition Control File).</p> <p>or Direct connectivity through 1-bit tiff</p>	<p>CS Xpose with</p> <p>DataFormats: PDF, Postscript, EPS, DCS1, DCS2, TIFF/IT-PI, CopyDot (scanned film), LW CT, ICF (Imposition Control File).</p> <p>or Direct connectivity through 1-bit tiff</p>

Table 7: Specification Performance

Class 1 Laser Product according to IEC Standard 825-1

3

Media Management

The Dolev 800V+/800V²/800V³ imagesetter accepts film or polyester plates. The media is loaded onto a supply cassette and inserted into the imagesetter. You can select one of three supply cassettes: a small (12in), medium (20in) or large (33in) cassette.

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Overview

The Dolev 800V+/800V²/800V³ imagesetter accepts film or polyester plates. The media is loaded onto a supply cassette and inserted into the imagesetter. You can select one of three supply cassettes: a **small** (12 inch), **medium** (20 inch) or **large** (34 inch) cassette.

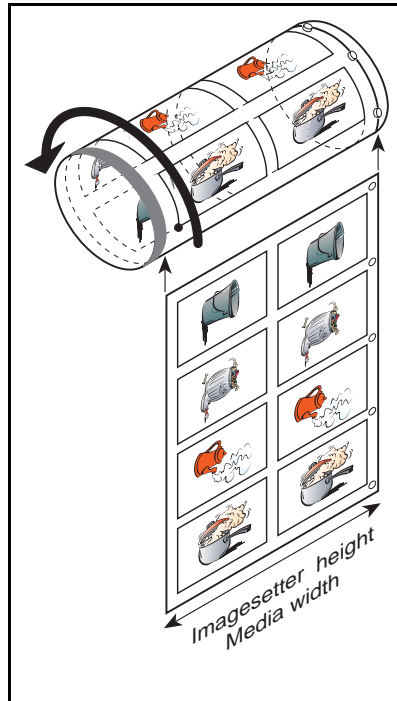


Figure 10: Dolev 800V+/800V²/800V³ Film

You access the media setup functions by moving through a tree-like series of menus on the host computer screen. All the functions can also be accessed through the imagesetter Control Panel.

The Dolev 800V+/800V²/800V³ has an automatic media setup mechanism. Once the supply cassette is inserted, performing the Set Loading procedure (via the Control Panel or the workstation) starts film loading.

The media is pulled between a set of rollers onto the exposure drum. The media is cut, and a vacuum system ensures that the media is held down on the inner drum surface.

During setup, the imagesetter cuts and ejects the first piece of media. This is done since a small piece of media was exposed to light when the cassette was carried from the darkroom.

The next step is to expose the media. You choose the file, the file resolution, and layout (these topics are covered in the user guide of the relevant host workstation).

The media is exposed and ejected. The ejected media is sent to the output cassette, or to an optional inline processor.

The following figure shows the media path in the imagesetter.

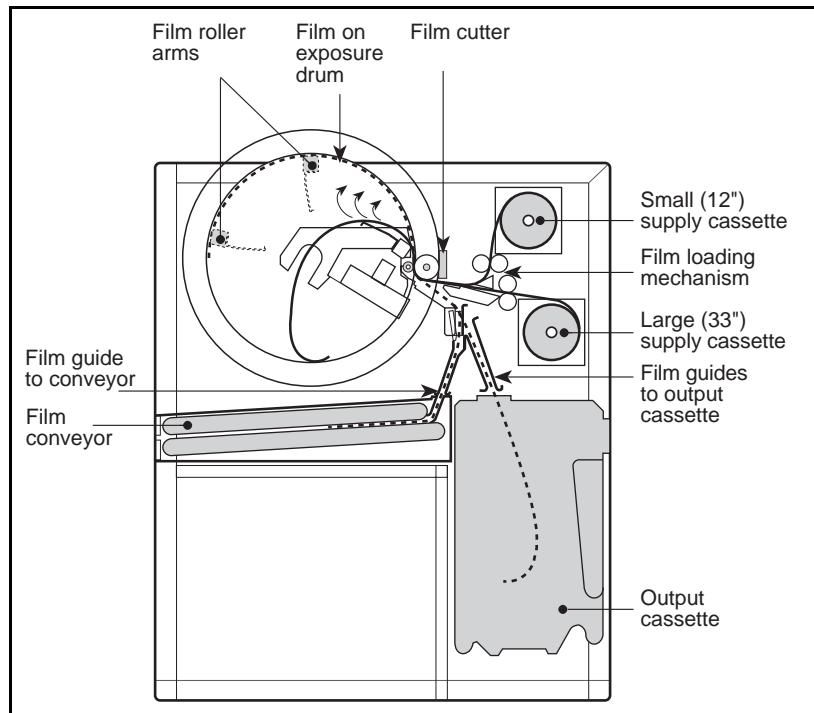


Figure 11: Dolev 800V+/800V²/800V³ media path (left-side view)



Note: Since the medium cassette is located to the right of the small cassette, it is **not** seen in the figure.

The Supply Cassettes

The three (3) Dolev 800V+/800V²/800V³ supply cassettes are used with medium to high contrast red sensitive light or line film, paper, or polyester plates.

The steps you follow when loading new exposure media:

- Unloading the supply cassette and taking it to the darkroom.
- Mounting media onto the supply cassette.
- Loading the supply cassette into the imagesetter.
- Performing **Set Loading** and **Cassette Sign In**.

Using Two Large Cassettes

The option to use two Large cassettes enables higher efficiency.

To use 2 large cassettes, do the following:

- Remove the small and medium cassettes as well as the separator plate in between them.
- Load film into another large cassette.
- Place new large cassette where the small and medium cassette were.
- Change the mode in the machine to **Two Large Cassettes**.
- From the workstation, configure the Dolev again.

Unloading the Supply Cassette

1. To unload either the **small** (12 inch) or **medium** (20 inch) cassette, open the Supply cassette compartment door **[1]**, and push back the locking bar **[2]**.

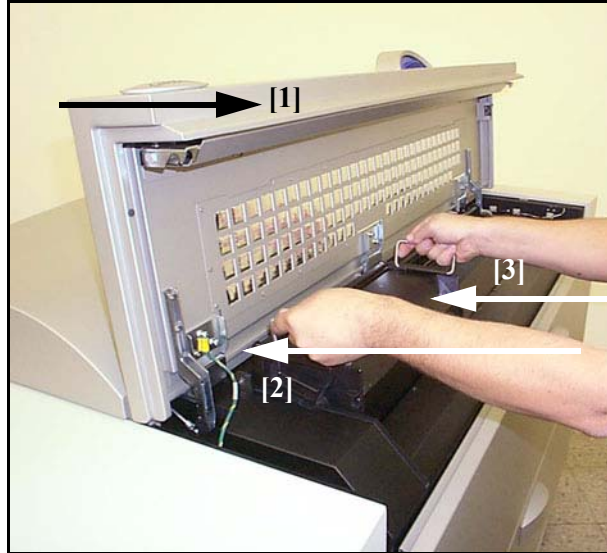


Figure 12: Unloading the Small or Medium Supply Cassette

2. Remove the cassette **[3]** and take it to the darkroom.

3. To unload the **large** (34 inch) cassette [1], open the Large cassette door [2] (located on the front on the imagesetter) and then open the additional **inner** door [3].



Figure 13: Unloading the Large Cassette

4. Remove the cassette and take it to the darkroom.

Mounting Media onto the Supply Cassette

1. Check that the film you intend to load on the cassette is in the darkroom before you lock the door and turn **off** the lights.



CAUTION: Dolev 800V+/800V²/800V³ requires a bright cyan light source for film development. Do not use red or yellow illumination!

2. Close and lock the door to the darkroom.
3. Turn **on** the bright cyan light.
4. Two latches secure the cassette lid. To open the supply cassette, push the latches horizontally toward the center of the cassette, and pull up the lid until it is in a resting position.

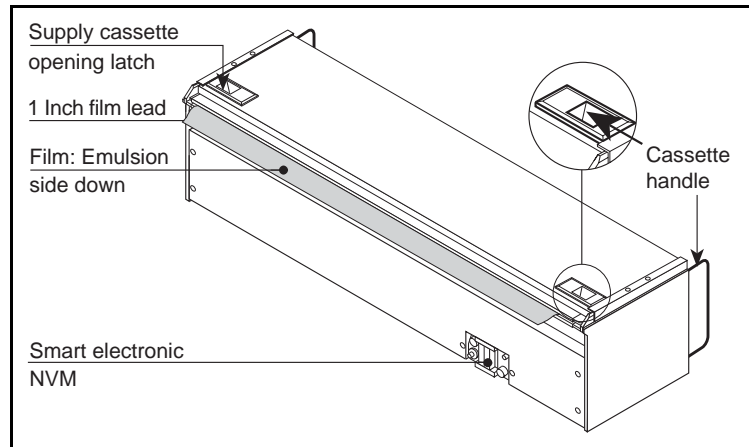


Figure 14: Opening the Supply Cassette

5. Grasp the outer surface of both flanges and lift the film spool out of the supply cassette.
Two flanges are attached to the spool, namely the **fixed** flange and the **removable** flange.

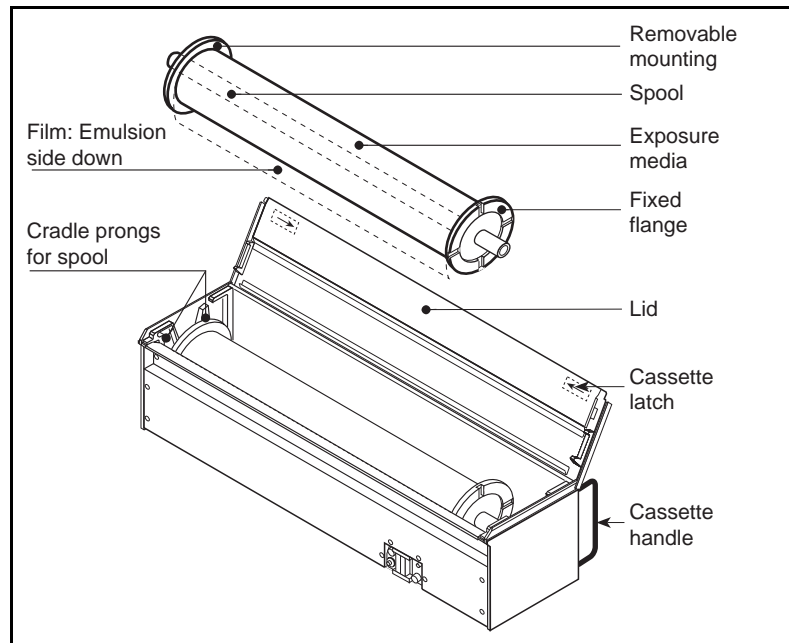


Figure 15: Lifting the Film Spool out of the Supply Cassette

6. Twist the **inner** rim of the **removable** flange and, using the supplied tool, remove it from the spool.
7. Place the new roll of film on the table.

Note the film position: rolled away from the cassette, emulsion down.



Note: If the cassette contains a film roll, remove it from the spool. Place any unexposed film in a film case or container, and mark it.

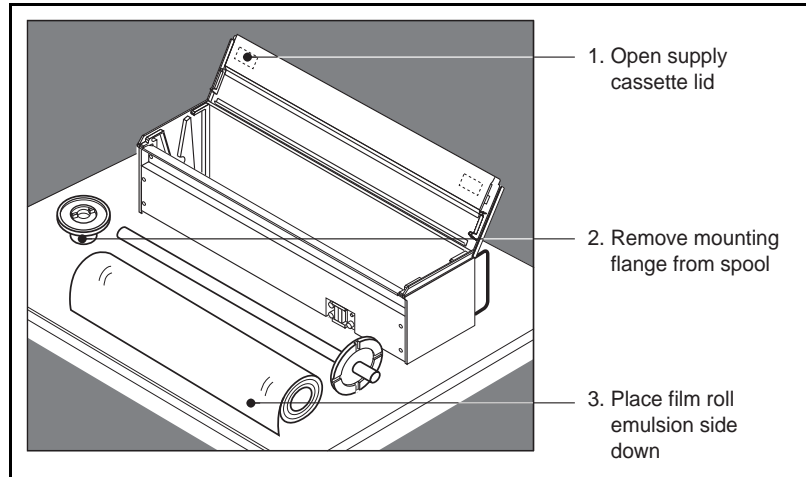


Figure 16: Removing the Film Spool

8. Grasp the spool by the **fixed** flange, and insert the spool through the film roll (film emulsion down).
9. Place the **removable** flange onto the spool, and twist it to tighten it on the spool.
10. Lower the spool into the cassette, so that its ends fit between the prongs of the cradle. Allow approximately 1 inch of film to stick out, over the edge of the cassette.



Note: If too much film sticks out, cut the excessive part (do not push it back).

11. Check that the film is straight (that is, parallel to the cassette lid), and shut the cassette lid.
12. Lead film cutter (supplied) can be used to trim the film to the required length.

Loading the Supply Cassette into the Imagesetter



Note: Before leaving the darkroom and loading the cassette, double-check that you have protected any unexposed film.

To load a small or medium cassette:

1. Open the Supply cassette compartment door [1], and push back the locking bar [2].
2. Load the cassette [3,4] so that the film extends from the bottom of the cassette toward the rear of the imagesetter (that is, away from you).
3. Fold down the cassette handles [5]. Pull the locking bar forward.

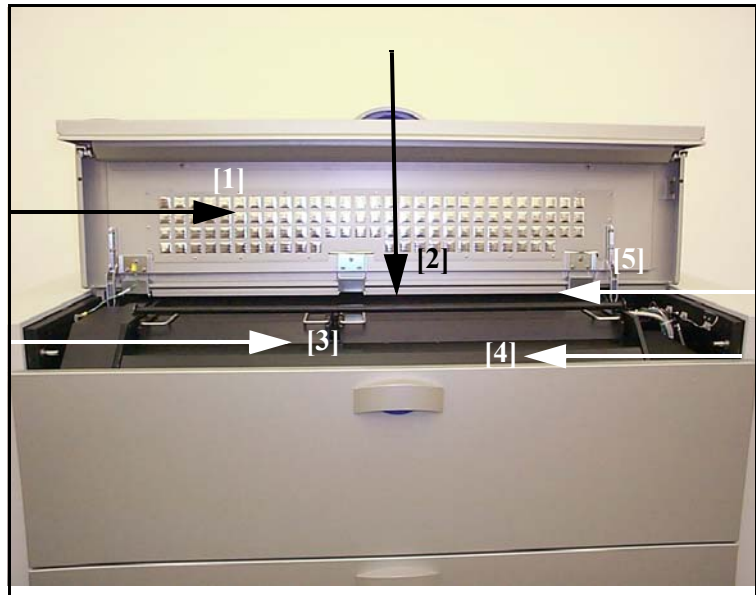


Figure 17: Loading the Small or Medium Cassette

4. Close the Supply cassette compartment door.

To load the large cassette:

1. Open the Large cassette door **[1]** (located on the front on the imagesetter) and then open the additional inner door **[2]**.
2. Place the cassette on the inner door and slide the cassette **[3]** into place.

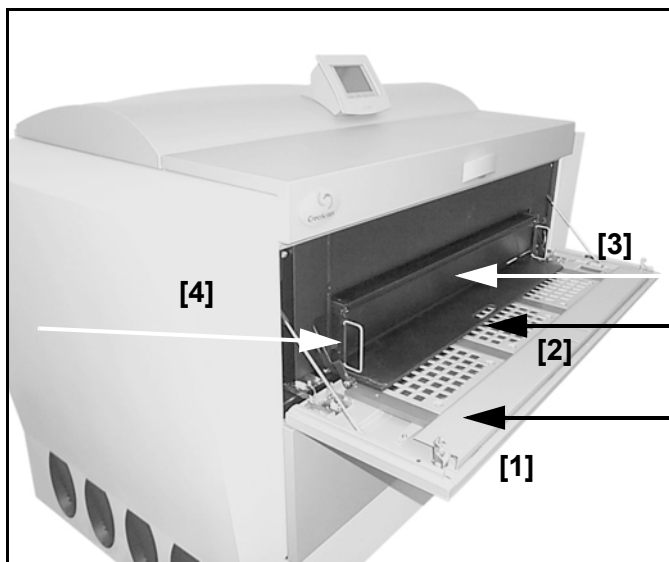


Figure 18: Loading the Large Cassette

3. Fold down the cassette handles **[4]** and close the inner cassette door.
4. Close the Large cassette door. The Media Info window appears on the Control Board.

At this stage you need to perform the Set Loading and Cassette Sign In procedures described below.

Set Loading (Automatic Media Loading)

The Set Loading procedure assists you during the loading process. During loading, the section of media exposed to light must be cut. **Set Loading** automatically loads a minimum length of media onto the drum, cuts the exposed media, and ejects it into the output cassette.

You must then unload and discard the length of film that was exposed to light. Do this before you begin your first exposure.

Set Loading may be performed via the Control Panel (as explained on the following page), or via the host workstation.

Performing Set Loading via the Control Panel

1. At **STANDBY**, press the <**Util**> soft button.
The **Utilities** menu appears; the pointer cursor points to **Set Loading**.
2. Press the **Done** soft button.
3. Press the **Next-Value** soft button to toggle the **SML** in the **Parameter** area to **MED** or **LRG** as desired.



Note: To cancel the selection, press the **Esc** operator button.

4. Press the **Done** soft button to confirm the selection of the desired supply cassette.
5. When loading is completed successfully, the following appears on the Control Panel:
PASS
6. Press the **ESC** soft button to return to the **Utilities** menu, or the **ERROR** soft button to see a list of errors (if such exist).

After performing Set Loading (via the Control Panel or the host workstation), proceed as follows:

1. Open the Output cassette door, and slide out the output cassette.
2. Open the output cassette, remove the exposed film, and dispose of the film.
3. Put the output cassette back in the imagesetter. You are now ready to expose film on the imagesetter.



For a detailed explanation, see *The Output Cassette* on page 48.

Cassette Sign In

Whenever you load a new supply cassette into the imagesetter, you must **Sign In** the cassette.

Cassette Sign In records the type of media, manufacturer, batch number, and the length of media on the cassette.

The information is used to automatically select the correct exposure values for your specific media type. It is very important that you provide as much information as possible about the cassette media. Once you record this information, it is stored on the cassette and used during media exposure.

Cassette Sign In may be performed via the Control Panel (as explained below), or via the host workstation.

Performing Cassette Sign In via the Control Panel

1. At **STANDBY**, press the **Util** soft button; the **Utility** menu appears.
2. Select the cassette you are registering in the **Media Info** menu:
Medium, Small, Lower or **Upper** (**Lower** and **Upper** refer to the large cassette):
 - a. Update the required parameters: **cassette size, media type, media thickness**, etc.
 - b. Select the media type: **film** or **polyester plate**.
 - c. Select the media thickness: 4 mil or 7 mil.



Note: The media catalog number contains the code for the media thickness.

Note: If you use the incorrect media thickness, it will cause misregistration.

- d. Register the initial length of the media on the cassette.
If the cassette contains less than a full roll of film, modify the length in the **Parameter** area.
 - e. Select the vendor (manufacturer).
3. Press the **Done** soft button.



Note: If the machine does not work properly at 0 parameter, the engineer must change it. To do this, go to: **Tools > Operation > Setup > Factory Table > Conveyor Delay Time**.

The Output Cassette

The output cassette is track mounted on the imagesetter door. If the cassette is installed, the film is ejected into the cassette.



Note: The imagesetter may output film to an output cassette, or through an internal conveyor directly to a processor. The following explanations describe the output cassette only.

Unloading the Output Cassette

- Press the handle [1] on the imagesetter Output cassette door [2], and open the door.



Tip: Grasp the cassette [3] by its handle, and pull the cassette towards you to remove it.

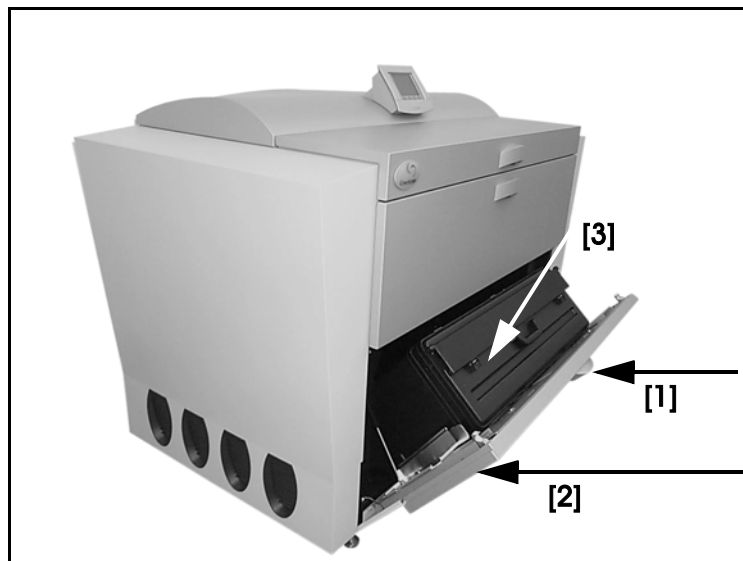


Figure 19: Unloading the Output Cassette

Developing Film with Off-line Processor



CAUTION: Do not open the output cassette until you are in the developing area and the door is **LOCKED**.

1. Carry the output cassette to a darkroom which is equipped with a bright cyan light.
2. Close the developing room door and lock it. Turn **on** the cyan light.
3. To open the output cassette, press the three (3) fasteners on the front of the cassette and open the cassette lid upwards.
4. Remove the exposed films one at a time, and feed each piece of film into the processor.



Note: You may find one narrow strip of film in the cassette (less than 4 inches wide). This is the piece of film that was exposed to light when a new supply cassette was loaded onto the imagesetter. Dispose of this waste film.

5. Depending on your processor, you receive a signal from the processor when you are allowed to feed each subsequent film. When you have fed the last film into the processor and received the signal that the feed is complete, you may unlock the door.



Note: Be sure to check the bottom and sides of the cassette carefully for any film that may have slid into the base of the cassette.

6. Load the output cassette back into the imagesetter, and close the output cassette door.

Developing Film (In-line Processor)

1. Align the imagesetter to the in-line processor with lips located on the back of the imagesetter.
2. Connect the communication cable between the processor and the imagesetter.
3. Change the selector position to **in-line** mode.
4. Send a **setloading** from each cassette: **Small, Medium and Large**.
5. Verify **normal feed** via the in-line processor.

The Punch System

Creo offers a leading edge, customer-defined punch system for the Dolev 800V+/800V²/800V³.

The punch system is used by printers to eliminate the need for mounting film to carrier sheets, manual registration and punching.

A maximum of 10 punch assemblies can be installed in the imagesetter width direction, on the right flange of the Dolev 800V+/800V²/800V³ drum.

To assist Creo and the customer in the punch system definition, Punched Film Layout form has been prepared. The customer and the Creo engineer should complete all requested values on this form.



Note: Since numerous configurations are available and some restrictions exist (such as, minimum hole distances, hole size, and hole placement relative to the exposed area), Creo assists in the punch system definition. This ensures that all details regarding the customer's punch system are transmitted to the local Creo experts.

Based on the information which is gathered, Creo prepares a confirmation drawing for customer approval. This drawing is subsequently used by the Creo engineer when installing the punch system.



Note: Although filling the form is not a pre-requisite for ordering a punch system, the system can not be installed without the customer-approved confirmation drawing supplied by Creo.

Punch System Design and Operation

The moving part of the punch assembly is the **unit**. It can be either in the **OUT** position or in the **IN** (punching) position.

The moveable cutting blade of the punch is the **rod**. Like the unit, it can be either in the **OUT** position or in the **IN** position.

Both rod and unit are activated by air cylinders. There are two double-action air cylinders (not spring-activated) per punch assembly. The punch system therefore requires a continuous, external air pressure supply for operation.

An additional operation of every punch assembly is the ejection of used film slugs from the system. Three blasts of compressed air are used to achieve this.

The film slugs are collected into a large black hose, located near the unloading cassette. You should empty this hose 2 to 4 times per month.



Note: This operation is performed following the film punch, and before moving the punch rod to its **OUT** position.

The following describes a typical punching sequence:

Sequence	leads to	Result
Unit IN◇	-->	brings unit to punching position
One (1) sec. delay◇	-->	allows pressure stabilization
Rod IN◇	-->	executes film punch
One (1) sec. delay ◇	-->	allows pressure stabilization
Three (3) blasts of air◇	-->	ejects used film slug
One (1) sec. delay◇	-->	releases pressure completely
Rod OUT	-->	returns to OUT position
One (1) sec. delay◇	-->	allows pressure stabilization
Unit OUT◇	-->	returns unit to OUT position

Punch Calibration

The calibration of the punch system should be done only after the exposable area is calibrated.

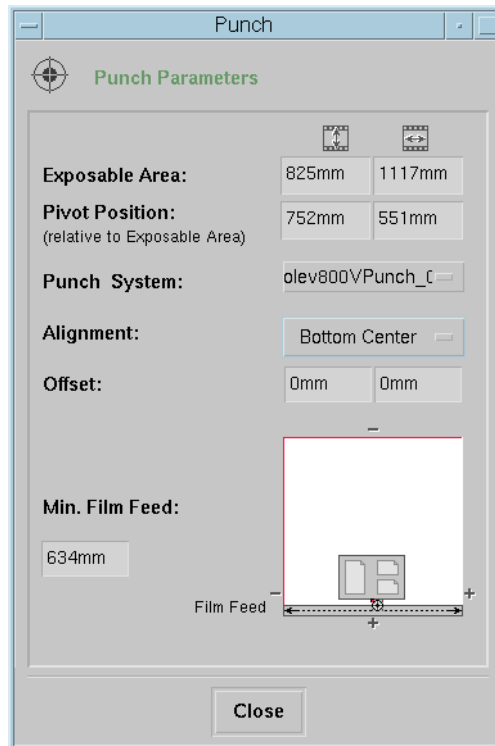
1. After installing the punch system, expose a full format with punch requested, without alignment to punch (AutoArrange or Single with alignment "none").
2. Check that the file is still exposed entirely after the punch system is installed. If not, repeat exposable area calibration.
3. Check that the central punch hole is exactly at the position across the center of the file. If not, calibrate the punch central hole.
4. Only after the central hole of the punch system is calibrated to the full format center, continue with the rest of the punch-system's calibration. After calibration is complete, check again exposure of a full format file and the location of its center in relation to the punch system.
5. Start the punch pivot calibration by setting the punch pivot to 820 H (Center Height), 558 W (Center Width) [NVM screen, Cri, Service Tables, Punch Settings]. Drag a full format file on an expose template, request bottom-center alignment to the punch with a -10,0 mm offset from pivot [job ticket launcher, expose dialog, punch subdialog].
 - a. If the Brisque announces that the file exceeds the exposable area on the left or right side, add/subtract to the punch W pivot setting (in the plotter) according to the message.
 - b. Initiate the plotter configuration dialog, press the "punch" button in the dialog and check that the punch pivot is identical to the pivot value entered in the plotter.
 - c. If the Brisque announces that the file exceeds the exposable area on the top or bottom side, change the alignment of the file now requesting bottom-center alignment, with a $-10 \pm$ (exceeding value), 0 mm offset from punch pivot.
 - d. Repeat the exposure of the file.
 - e. Check again that the punch central hole is exactly at the requested offset from the file's bottom center. If not, adjust the punch pivot setting accordingly. Repeat exposure after initiating the plotter configuration dialog and check offset again.

Defining Punch Parameters

Use the **Punch** option to designate a punch system and define the punch alignment parameters.

To define the punch parameters:

1. Click the **Punch** check box. The **Params** button next to it is enabled.
2. Click **Params**. The Punch dialog box appears. The options that appear in the window vary, depending on the connected output device, and on the selected punch system.



Item	Description
Exposable Area	Displays the maximum image size supported by the imagesetter. The exposable area is defined according to the cassette's exposable area. Exposable Area = cassette's size - offset values of output device. Varies between Dolev 4press and Dolev 800. You cannot edit these boxes.
Pivot Position	Displays the existing punch configuration. They indicate the position of the punch hole that is defined as the pivot (normally the round hole). You cannot edit these boxes. (If the selected Punch System is External , this option is unavailable.)
Punch System	Enables you to select a punch system from a list of available systems.
Alignment	Designates the point on the image to be the reference point (for example, the top-left) when you position the image relative to the punch. If you select None , or External , you will not be able to define an offset.
Offset from punch	Defines exactly where the reference point (top-left, bottom-right, and so on) is positioned relative to the punch. Default is 0,0. If the defined Alignment is None or External, the Offset boxes are disabled. Note: Each punch system has one origin (pivot), or reference point, from where the measurements of the alignment are made. The plus and minus signs in the R-icon indicate a positive or negative offset and the direction. A positive offset moves the reference point down and to the right. A negative offset moves the reference point up and to the left.
Minimum Film Feed	Defines the minimum length of film that is fed when the punch is activated. (If the selected Punch System is External , this option is unavailable.)

3. From the **Punch System** list box, select a punch system. The **R-icon** in the bottom-right of the window reflects the general position of the punch system and the exposure on the film, relative to the expose area.
4. From the **Alignment** list box, select an alignment option. The **R-icon** reflects your selection.
5. In the Offset **Vertical** and **Horizontal** boxes, type the distance of the reference point from the Punch.
6. Click **Close** to save the settings and to return to the Expose window.



Note: The **Page** icon below the page **Inventory** button indicates that the **Punch** option is active.

Removing Stuck Film from the Imagesetter

The only maintenance procedure you are allowed to perform is removing film (supply media) stuck on the inside of the imagesetter drum area.

Please refer to the *Safety Precautions* chapter for details on laser and other safety precautions before proceeding.

To remove film stuck in the Imagesetter, proceed as follows:

1. Switch **off** the imagesetter, using the Master circuit breaker at the lower rear side of the imagesetter.
2. To access the inside of the imagesetter drum area, open the left or right service door, or both side doors (to do so, unscrew the thumb screw(s) accessible from the Unloading cassette compartment).
3. Locate the black protective cover on each side of the imagesetter drum.
4. Unfasten the two (2) capture screws that secure the cover to the frame of the imagesetter.
5. Remove the cover and store it on a clean surface.
6. Clear the film stuck in the machine.
7. Replace the side covers; secure the side covers with their thumb screws.
8. Close the side door(s); secure the side door(s) with their screws.

4

Res-Intensity Calibration

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Dolev $800V^+$ / $800V^2$ / $800V^3$ Calibration Workflow

To guarantee high-quality exposures, a unique laser intensity is required for each plotting resolution.

- If the laser intensity is too low, the exposure is too light and quality is lost (that is, black areas are **not** uniform, and thin lines and small text may disappear).
- If the laser intensity is too high, thin lines may become too thick and small text may be covered. In addition, the life of the laser is shortened.

To calibrate laser intensity, perform the following steps for each exposure resolution:

1. Prepare exposure strips.
2. Set an exposure resolution for the strips.
3. Expose the strips.
4. Use a densitometer to measure the density on the exposed strips of film. Write down on paper the intensity used to expose the requested density max of film at **each** resolution.
5. Record the new laser intensity values. Enter the intensity for each plotter resolution into the Resolution Intensity Table.
6. Save the new laser intensity as a standard.

Film Specifications

Imaging

Attribute	Specification
Wavelength	633 – 670 nm
Image Quality	
Dot Production	2% - 98% @150 line screen 1% - 99% @150 line screen with correction table
Dot Uniformity	+/- 1%
Dmin	<=0.04
Dmax	>=5.6

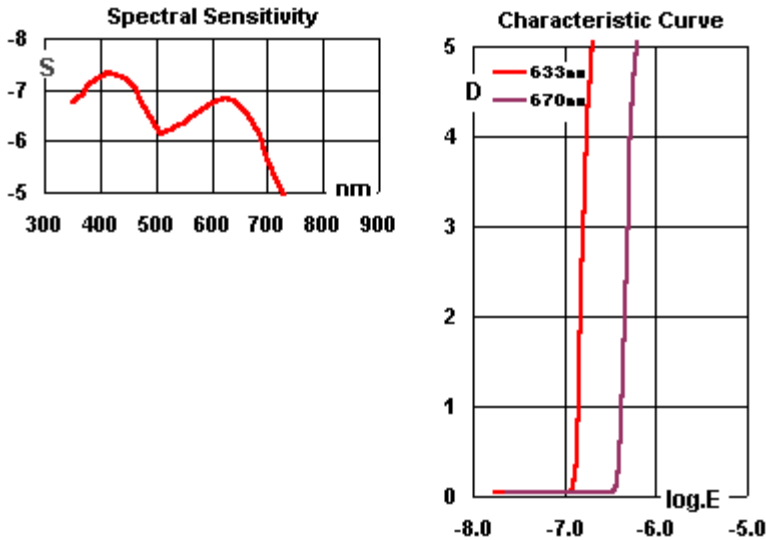


Figure 20: Film spectral sensitivity and characteristic curve

Chemistry

Creo supports only Creo CS HDF Developer 1+2 in conjunction with Creo Recording film.

Film Handling

Attribute	Specification
Safelight	EncapSulite T10/S10/ND.4 green or EncapSulite T20/ND.75
Storage	Average 18°C-21°C (64.4°F-69.8°F) Maximum 25°C (77°F) Minimum 4°C (39.2°F) No humidity control required
Film transportation	Temp up to 32°C (89.6°F) Up to 14 days by truck, up to 3 days by air
Film handling	Daylight loading conditions (DL)
Film disposal and Recycling	Possibility to recover silver by specialist

Hard dot film is more sensitive to heat than rapid access film.

It is important not to exceed the specified storage and transportation temperature specification.

Critical conditions

Shipment: up to 50°C (122°F) maximum 2 x 12 hours.

Storage: up to 28°C (82.4°F) allowed for 3 continued weeks per year.

The glue of the roomlight packaging might not withstand those extreme values. If such an extreme condition was faced, the roomlight packages should be visually checked. If the edge tape is loose, the film might have been exposed to light and consequently damaged.

Dimensions

Complies with ISO 3772 Photography:

Rolls of sensitized material for the pre-press industry – Dimensions and related requirements.

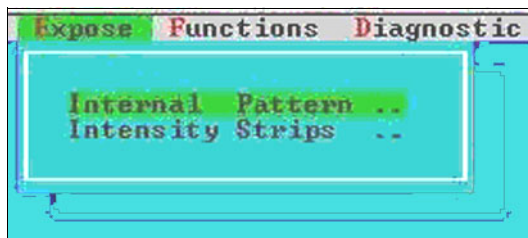
Imagesetter	Width (cm)	Width (Inch)	Spec. (*)
Dolev 800V+/800V ² /800V ³	30.5	12	(*) O = Emulsion out I = Emulsion in 7 = core 71.9 mm DL = Daylight Load
Dolev 800V+/800V ² /800V ³	50.8	20	
Dolev 800V+/800V ² /800V ³	83.8	33	

Preparing Exposure Strips

In this step you use automatic functions to create exposure strips.

On the Host Workstation:

1. Access the Remote mode of the imagesetter.
The **Util Main** screen appears.
2. Select **Expose** from the **Util Main** screen; the **Expose** menu opens.



3. Select **Intensity Strips** from the **Expose** menu to define the parameters for the generation of the intensity strip.
The **Intensity Strips** form appears.

Intensity Strips

Start Value

1000

[1000]

End Value

5000

[5000]

Step Intensity

500

[500]

Strip Height

20

[20]

Strip Width

700

[700]

Cassette

SMALL

[SMALL]

Move Carriage

Yes

[Yes]

Load Media

Yes

[Yes]

Punch

No

[No]

Resolution

100

[100]

Spinner Speed

24000.0

[24000.0]

Height Offset

0.00

[0.00]

Width Offset

0.00

[0.00]

SSP number

0

[0]

Parameter	Range	Default	Do the following...
Start Value	300 - 4000	1000	Enter the value of the first intensity strip, for example, 2000.
End Value	1000 -11000	5000	Enter the value of the last intensity strip, for example, 10230.
Step Intensity	100 - 4000	500	Enter the value of the gap between intensity strips, for example, 800.
Strip Height	10 -1000	20	Enter the height of the intensity strips in [mm], for example, 5.
Strip Width	0 - 1180	700	Enter the width of the intensity strips in [mm], for example, 100.
Cassette	-	SML	Toggle to the size of cassette currently used.
Move Carriage	-	Yes	Toggle this field to Yes to use exposing mode (that is, not simulation mode).
Load Media	-	Yes	Toggle this field to Yes to load film into the imagesetter (that is, not simulation mode).
Spinner Speed	3000 - 14000	13800	Enter the speed of the spinner in [RPM], for example, 13800. Note: This resolution-dependent field affects the quality of the exposure.

Parameter	Range	Default	Do the following...
Data Frequency	12.00 - 33.00	25.00	Enter the frequency used to transfer the data, for example, 25.00.
SSP number	0 - 500	0	Enter 0 for the number of lines after which the plotter performs stop spiral .
Resolution	30.00 - 200.00	100.00	Enter 1 resolution (in mm and equal in height and width) per exposure, for example, 100.00. After you expose the strip, repeat the entire procedure for each resolution. Note: If you wish to use Half Resolution , set the Half Res field (in exposure format in the Host) to Yes and begin the exposure process from the beginning.
Height Offset	0 - 900	0	Enter the distance in height between the origin of the imagesetter and the start of the strips exposure.
Width Offset	0 - 1180	0	Enter the distance in width between the origin of the imagesetter and the start of the strips exposure.



Note: The film offset in height and width can be left at **0,0**.

Exposing the Strips

1. Press <F6> (**Done**).
The **Service** screen appears. It indicates the status of the OMC and CRI, the messages, and the active task. You may press <P> to display the **Expose Parameters** window, or <Enter> to exit to the Util Main screen.
2. Develop the film strips.



Note: You can expose calibration strips via Brisque > Calibration.

Measuring the Density on the Exposed Strips

1. Place the exposed film on a light table.
2. Use a densitometer to find the density of the darkest area on the film. The reading must be between **4.2** and **4.4** (or as recommended by the film manufacture).
3. To find which exposed strip has the best density, look at the light strip that is exposed together with the black strip. Ideally, the transparent area should be 0%, and the black area should be 100%.



Note: The shape on the gray strip, whether it is a dot or line, must be smooth, sharp, and of high quality. When you find a gray strip with these qualities, you find the desired density on the black strip with which it is paired.

4. Write down the laser intensity that yields the best density.

Recording New Laser Intensity Values

1. Press the **Util** soft button on the Control Panel.
2. Select **Tools Operation** and press **Done**.
3. From the **Util** main screen, execute the following sequence:
Setup > Operator Tables > Intensity Tables.

The following form appears:

The screenshot shows a software interface titled "Intensity Tables". It contains several input fields and a data table.

Fields at the top:

- Intensity Table # **1** from 10
- Material **Film**
- Media Thickness **4**

Table below:

Resolution	Intensity	Resolution	Intensity
40	3000	240	3000
60	3000	250	3000
80	3000	260	3000
100	3000	270	3000
120	3000	280	3000
140	3000	290	3000
160	3000	300	3000
180	3000	310	3000
200	3000	320	3000
220	3000	330	3000
230	3000	340	3000

4. Toggle the desired **Intensity Table** (1-10). Navigate using the **Next-Field** or **Shift + Prev-Field** soft buttons.
5. Modify the values for the active table, as follows:
 - **Material** [toggle field; default is **Film**].
Leave this field as **Film**.
 - **Vendor** [toggle field; default is **None**].
Leave this field as **None**.
 - **Media Thickness** [default is 4].
Leave this field as 4 mil.
6. Enter the new intensity value for the relevant resolution and press **Done**. The new values will be saved.
7. Exit from **Tools Operation**.

5

Data Configuration Setting

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Data Connectivity

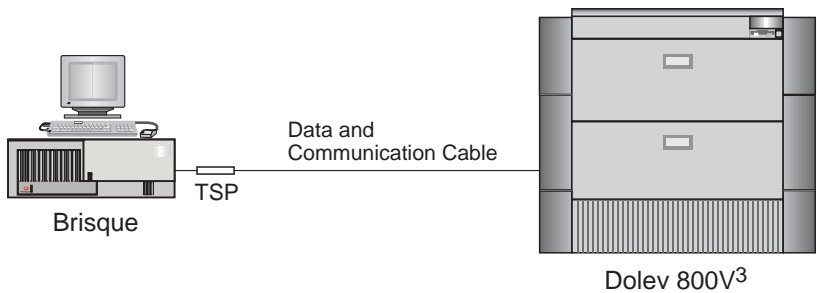


WARNING: Do not connect the TSP cables unless the Dolev 800V+/800V²/800V³ is switched **off**.

The Dolev to Brisque connectivity consists of a cable connection for data transfer and communication between the Dolev and the Brisque.

Following are the locations of the TSP boards on the Dolev 800V³.

Brisque Platform	Slots	Isdev	TSP Cable	Laser #
F50	# 5	nsp0	TSP1*	Laser1*
6F1	# 7	nsp0	TSP1*	Laser1*
44P-170	# 4	nsp0	TSP1*	Laser1*



Connecting TSP Cables - Dolev 800V³

Using TSP Data Cable Link (Data Connectivity)

To connect the TSP data cable (p/n - 199D06226) link between the Brisque and a Dolev 800V³:

1. Connect the cable marked TSP to the TSP Board on the Brisque (see table on page 68).
2. Connect the other end of the TSP cable to connector COM 3 or 4 on the MB-SOMC board (see Figure 21 on page 69).

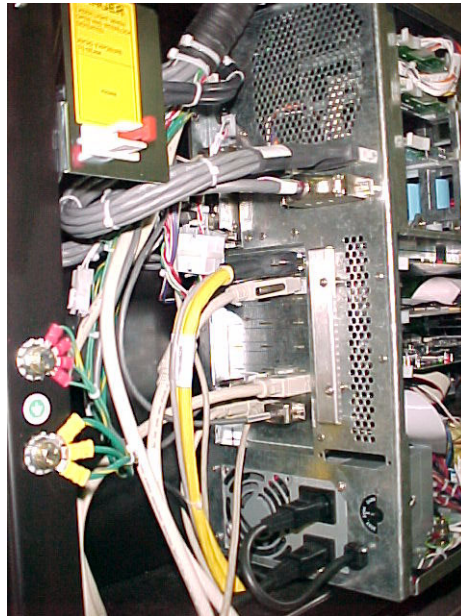


Figure 21: TSP connector on MB-SOMC board

Accessing the Output Device Configuration

The Output Device Configuration on the Brisque is used to configure the Dolev $800V^+/800V^2/800V^3$, to view the device parameters, to define Press Formats, and to perform Excurve and Tone Reproduction.

To access the Output Device Configuration:

1. From the Brisque Launch Pad, open the **Setup** panel.

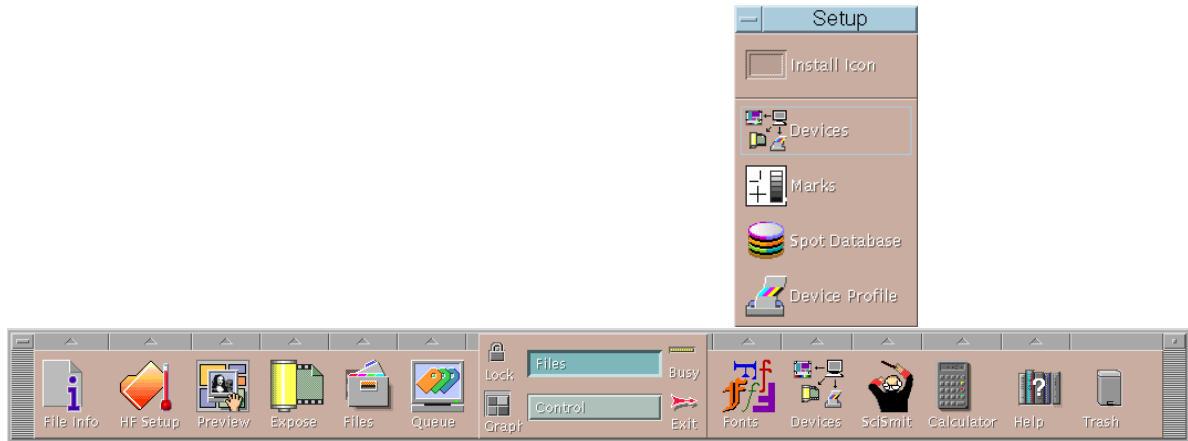


Figure 22: Brisque Launch Pad with Setup panel open

2. Double-click the **Devices icon**; the Output Devices Handling window appears.

The Output Device Handling Window

From the Output Devices Handling window all configurations of the output devices are performed. From here new devices are configured, currently configured devices modified or deleted and previously configured devices are re configured periodically.

All the device groups, device families and device configurations are displayed in this window, as well as the various operations relevant to each of the selected configurations. The device specific operations and the general operations relevant to all output devices are accessed via the available operation buttons in the Operations section.

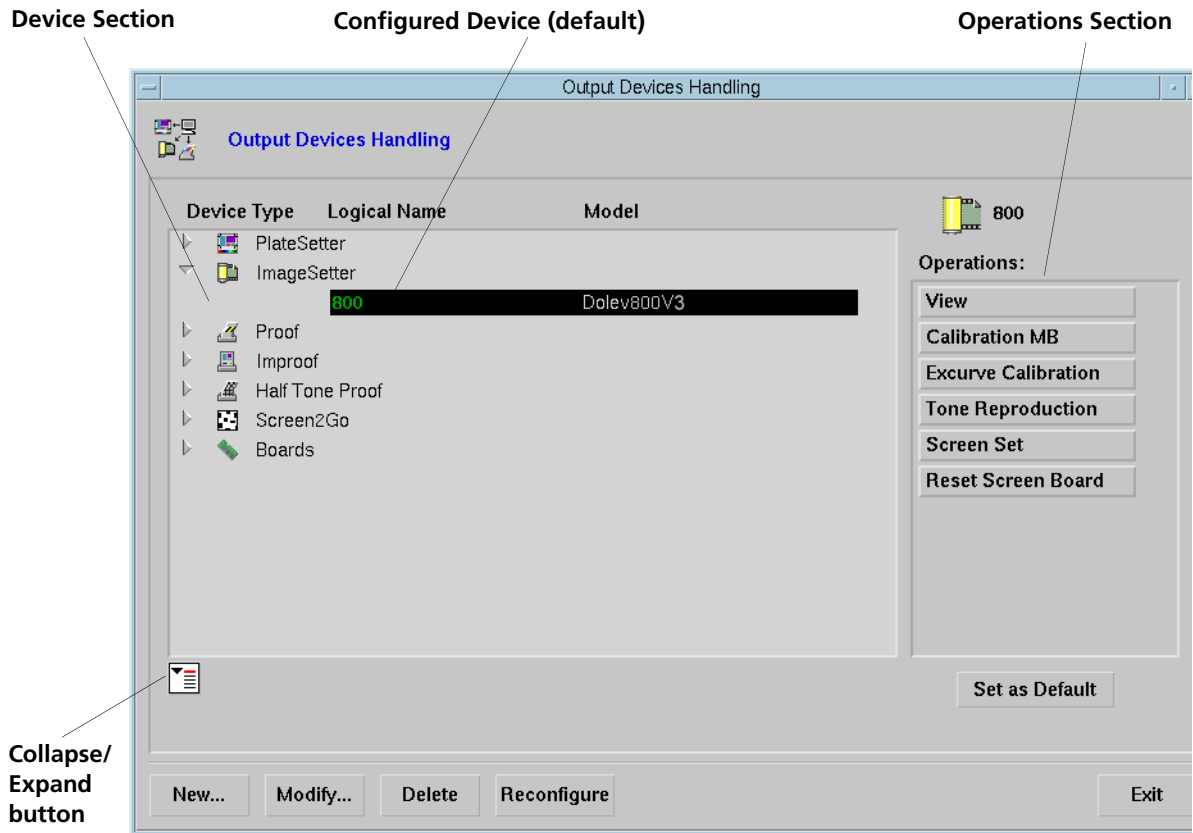


Figure 23: Output Devices Handling window

Item	Description
Device section	<p>The section is comprised of three columns:</p> <p>Device Type - Displays the Device Groups such as Platesetter, Imagesetter, Proofer, Imposition Proofer and Halftone Proofer. In this case it would be a Imagesetter. The list of Device Families appears under each group such as Dolev. Each level is locally expandable or collapsible, using the arrow on the left.</p> <p>Logical Name - This column displays the name of a specific configuration. When highlighted, relevant operations are enabled (in the Operations section).</p> <p>Model - This column displays the physical device name.</p>
Expand or Collapse icon	Click to expand or collapse the entire list of devices to show or hide all details.
New...	Click to open the New Device Wizard and start configuring a new device.
Modify...	Click to modify parameters for an existing output device.
Delete	Click to delete an established configuration to an output device.
Reconfigure	<p>Reestablishes the connection to the selected device. Click Reconfigure to reconnect the device (Online mode); a message confirms the connection or warns of the failure to connect.</p> <p>When a device is configured, the data is read and registered in the Brisque database. Disconnection of the device or failure of a component, is not logged in the Brisque, and no mechanism is currently available to warn of the device disconnection.</p> <p>We recommend that you reconfigure the device before every use.</p>

Item	Description
Operations section	Operations related to the output devices are activated from here. Operations are enabled when a particular configuration is selected. Some operations are connection-specific, others are applicable to all output devices.
Set as Default	Not relevant.
Exit	Exit the Output Devices Configuration window.

Configuring the Dolev 800V+/800V²/800V³ Imagesetters

To check if a Dolev 800V+/800V²/800V³ imagesetter is configured:

1. In the Output Devices Handling window, click arrow next to the **imagesetter** icon.
2. Click the arrow next to the **Dolev** icon. If a Dolev is configured, the connection to the Brisque is displayed under the **Dolev** icon; the name is in **green** if it is the default imagesetter.

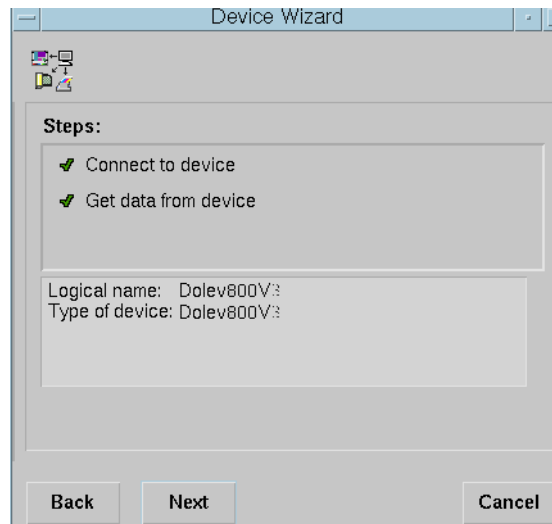
To configure a new Dolev 800V+/800V²/800V³ imagestter:

1. In the Output Devices Handling window, click **New...**; the following dialog box opens.



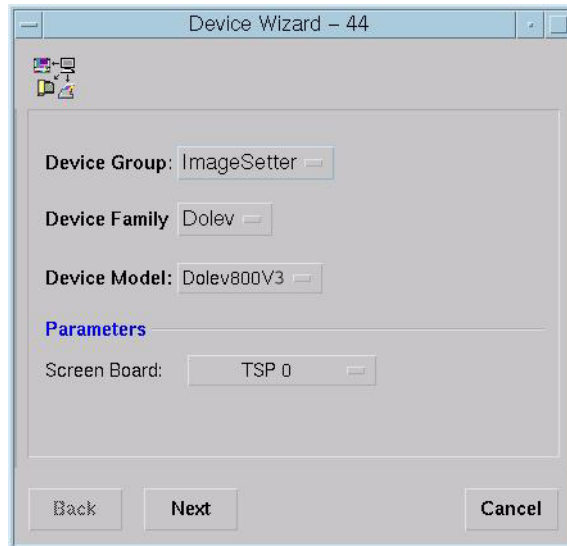
2. From the **Device Group** list box, select **Imagesetter**; the **Device Family** list box is labeled Dolev.
3. In the Screen Board drop-down list, choose **TSP 0**.

4. Click **Next**; a device summary is displayed. Now the Device Type is identified as Dolev800V3.

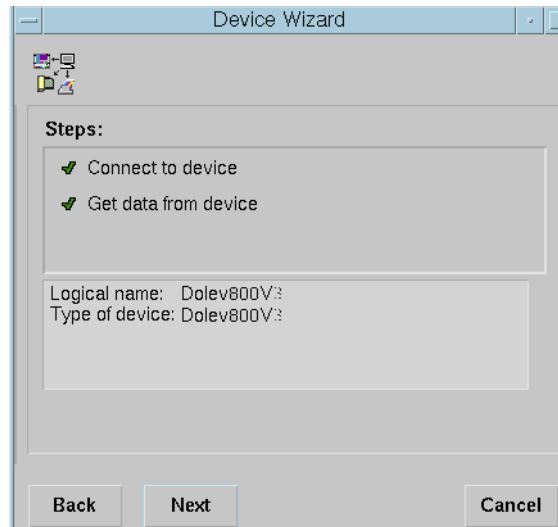


To modify the Dolev 800V+/800V²/800V³ imagesetter parameters:

1. From the Output Devices Handling window, select the **Dolev imagesetter** configuration and click **Modify...**; the following dialog box opens. The Device Model name, for example **Dolev800V²**, is returned from the connected device.



2. Click **Next**; the following dialog box opens.



3. Click **Save**, to save the configuration. If the update was successful, a confirmation message is displayed for a few seconds. The modified connection is displayed in the Output Devices Handling window, under the **Dolev** icon.

To delete the Dolev 800V+/800V²/800V³ imagesetter configuration:

1. From the Output Devices Handling window, select the appropriate **Dolev** configuration, then click **Delete**; the delete confirmation is displayed.
2. Click **Yes** in the confirmation dialog to delete; the configuration is removed from the Output Devices Handling window.

To reconfigure the Dolev 800V+/800V²/800V³ imagesetter:

Important: In case of failure, check the physical connection to the device, then try to reconfigure.

1. From the Output Devices Handling window, select the **Dolev** configuration.
2. Click **Reconfigure**. The Brisque reads the data from the device and confirms the connection. It displays a confirmation dialog for a few seconds, if the device has been reconnected. Otherwise, a failure message is displayed.

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