Alliance HN to Alliance HNS

Change-over on Dolev 800

Before changing current film

- *Output an uncalibrated grey scale (this will show to what extent the current film is being overexposed and corrected.) This output can be used for your own reference in case it would be necessary to return to your current product.*

1. Change film.

Agfa developers		ACD/ASD/G101c	
Recommended processing time		**30 sec.**	
Processing latitude		20 - 40 sec.	
Processing temperature		35°C or 95°F	
Developer replenishment			
		ml/m2	cc/sqin
Pos Work	15% exp.	100	0,06
	50% exp.	200	0,12
Neg Work	85% exp.	350	0,23

2.How to set up the film on the Scitex Dolev 800

2.1 Criteria The film has to meet two requirements:
It has to reach the maximum density demanded by the customer. This aspect is determined by the "**Plotter settings**".
It has to have the correct halftone gradation in order to give the desired dot size. The required linearisation is achieved by outputting the "**EXCURVE**" (EXPose CURVE).

2.2 Media (Set) Loading from a Scitex I/O station

The Dolev 800 imagesetter has three supply cassettes: a small (12 inch), medium (20 inch) andlarge (33 inch) cassette. You can access the media setup functions by moving through a tree-like series of menus on the computer screen of a Scitex I/O station.

1. From the Scitex I/O workstation, press **Set Up** (F2) from the Main Fu

Reminder about selecting I/O workstation options:
I/O station soft keys are designated by parenthesis enclosing the letter F and the key number, 1-8. Example: F1 is the first soft key on the Main Functions Menu form.

The first top row on your keyboard contains the F1 key.

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2. Place the control panel in **Standby** to enter any of the Plotter setting Menu options. If the panel is not in Standby, you receive a message on the workstation screen:

Dolev: Panel Online
Plotter Busy, Pick YES when ready (or NO to Abort).

Select **I/O Devices** (Setting, 3.).
Select **Plotters.**
Select **Plotter Setting**.
Select **Machine** (1) from the Plotter Setting menu.
Select **Functions** (1.).
Select **Set Loading Cassette** Lrg/Med/Small (7, 8, or 9).
When the imagesetter completes the process, open the output cassette door. Slide the output cassette out of the imagesetter.
Open the output cassette. Remove the exposed film. Dispose of the film.
Put the output cassette back in the imagesetter.

2.3 Cassette "Sign In" from a Scitex I/O workstation

Whenever you mount a new supply cassette on the imagesetter, you must "Sign In" your cassette.**Sign In** includes recording the type of media, manufacturer, batch number and the lenght of media on 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.

To perform the Cassette "Sign In" without the control panel, follow the steps below:

1. From the Scitex I/O workstation, press the **Set Up** (F2) soft key from the Main Functions menu.
2. Select **I/O Devices** (Setting, 3.).
3. Select **Plotters**.
4. Select **Plotter Setting**.
5. Select **Machine Menu** (1.).
6. Select **Operator Tables**.
7. Select **Cassette NVM**.
8. Select your cassette, **Large, Medium** or **Small**.
9. Complete the Cassette NVM menu. Provide as much information as possible about the cassette media.

2.4 Excurves and Formats

To insure top quality films for printing, you need two sets of exposure instructions.The first set is known as an **Excurve**, the second is called an **exposure format**.Both are necessary before exposing on the Dolev Imagesetters.

First you provide the information to create an Excurve.An **Excurve** (**EX**posure **CURVE**) is a **Look-Up table** (**LUT**).It ensures that color data exposed on film is as accurate as possible in relation to images processedor created with the system.

The second step is to create Exposure Formats. Dolev 800 formats are sets of instructions that the system uses to send files to the Dolev Imagesetter.

To select the proper format and excurve, you need to know the quality requirements for your printing assignment.The Dolev 800 arrives with a list of exposure formats already on your computer. The list was developed by Scitex especially for your imagesetter. An appropriate excurve is already selected for each format,and is pre-selected on the form. For most of your work, you select an exposure format from this list.

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Excurves

The purpose of the excurve is to optimize exposure results. It eliminates any inconsistency between the expo sure results you desire and the results you are seeing on film. To optimize results, you **expose a sample file** using **a choosen format** and **measure the results**. The sample file you prepare should have a strip of 21 gray levels arranged from 0% to 100% dot. You **correct the problems on a form** and **repeat the process**.

The excurve is the table you build from the results of your sample file. It compares the measured results on film with the value you set.
For example, the gray levels are arranged 0, 5, 10%, but your measured results are 0, 5, 9%.
The table you build records this difference:

File Value	Measured Film Value
0	0
5	5
10	9

The table now accounts for the type of film, amount of light, and the particular film development chemistry used. The curve guarantees you a resolution, dot shape, mesh, and developing process identical to those used when exposing actual production files.

Any time **changes** occur **in the development process**, you need to **check** if your **Excurve** is still accurate.

1. The steps for creating and testing an Excurve are:
2. Create a gray scale.
3. Expose the gray scale under real exposure conditions.
4. Measure the received values with a densitometer.
5. Enter the measured values in the Excurve dialogue.
6. Prepare a Format or use an existing format.
7. Enter the Excurve name into the format.
8. Expose the gray scale again using the format.

9. Measure the values with a densitometer. Expect values within +/- 1% of the created values.

Creating a gray scale

A. Preparing the sample file

To build a sample file with a gray scale, create a CT file with a height of 20 mm and a width of 420 mm. Define 21 shades of gray, spaced 5% each. Follow this example:

From the Main Functions menu, press **Library** (F1).
Select 5. **Create Job/Page**.
Create a Job, **Journal** and press **Return**. Create a page, **Sample**. Press **Return**

Source File

Select **Main Menu** (F8) to return to the Main Functions menu.
Select 3. **CT Mode** from the Main Functions menu.
Select 2. **Create** from the CT Options form.
Press **Start Work** (F1) from the Create CT form.
The Ct Create form appears. Fill in the form with the information below:

-File Name: **Test**
-Size (H,W): **20**, **420**
-Resolution: **10**,**10**
-Skip to the **Cyan** separation. Type in Cyan values:

Type **VS**, # of Strips: **21**, First Color **0** Last Color **100**.

CT Create JOB: Journal Page: Sample FILE: **Test** Size (H,W): 20.000 420 (mm) Resolution (H,W): 10 10 (points/mm) Type # of Strips First Color Cyan: VS 21 0 Magenta: Yellow: Black: Type Uniform=UN, Vertical Strips=VS, Vertical Smooth Change=VX Horizontal Strips=HS, Horizontal Smooth Change=HX, Rectangle=RC Vertical Linear Change=VL, Horizontal Linear Change=HL Colors in Percentage Last Color 100 Save & Exit Quit ***Building a test file***
9. Complete the form and press **Save & Exit** (F1). You receive the message:
File **Test** was created. The CT test file needed for the Excurve is now ready.
Select **Main Menu** (F8).

B. Exposing the gray scale, measuring the values with a densitometer

You now want to expose the gray scale file, **Test**, develop the film, and measure (in dot percentage) the densities of all 21 areas:

1. Begin at the Main Functions menu. Select:

-2. **Plot/Proof**
-1. **Raystar/Dolev**
- Job: Journal, Page: Sample, File: Test
-**Start Work** (F1) on the file **Test**.

2. The **Expose - Dolev 800** form appears. **Standard** is the default format in the **Format** field. Use it for now.

3. **Cassette**

Unless you have **a specific cassette** that you require the system to use, the Dolev 800 selects the ideal cassette for exposing film. So we have to **override the imagesetter** by selecting our specific cassette on this form. Just **toggle** the **SPACE BAR** until your choice appears in the box:

Cassette [~] (**S** / **M** / **L**)

Make the selection and press **ENTER** to confirm your choice.

appears in the box:

Cassette [~] (**S** / **M** / **L**)

Make the selection and press **ENTER** to confirm your choice.

NOTE: Press **Return** will select **the default**.The **default** (~) allows **the imagesetter** to **select the cassette**.

Go to the Separations field. Enter C (cyan). This is the only separation you need to expose.
Select Expose (F1). You receive a control panel LCD screen with a read out of the percent of the file exposed.

********** ** 27% ** **
** **********

< F1 = ABORT >

Wait until you see the message display that the CT file Test has been exposed.
Develop the exposed film. Measure the densities (in dot percentage) of all 21 areas on the Cyan separation.If you have a densitometer that reads in Negative or Positive mode, take the readings using Positive - even if the film is negative. The reason is that the system automatically calculates the table values based on the use of a Positive-reading Densitometer.

Write the measurements directly on the film using a felt-tipped pen. The range ideally is between 0% and 100% in steps of 5%.

C. Recording Laser Intensity

To guarantee high quality exposures, a unique laser intensity is required for each plotting resolution (60, 80, 100, 120, 140 dots/mm). If the laser intensity is too low, the exposure is too light and quality is lost. If the laser intensity is too high, thin lines may become too thick and small text may be covered.

Each type of film requires a unique laser intensity. If you switch to a new type of film, you MUST expose several strips of film and check the final density.

Select **Set Up** (F2) from Main Functions menu.
Select 3. **I/O Devices** from the Set Up menu.
Select 2. **Plotters** from the I/O Settings menu.
Select 1. **Plotter Setting** from the Plotter Options menu.
Select 1. **Machine** from the Plotter Settings menu.
Select 2. **Operator Tables** from the Machine menu.
7. Select 1. **Res Intensity** from the Operator Tables menu. At this point you must select a Res Intensity Table. Perform one of three actions:
-To update an existing table
-To replace an existing table
-To create a new table
The second Res Intensity Menu appears. Complete the menu with as much **information** about the **supply media** as you can provide. This step is **critical**, as it allows the software to automatically select the correct exposure intensity for your specific supply media.

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When you complete the form, press the soft key, **Next**. The next menu consists of two sets of values: the **exposure resolution** and the **laser intensity**. Resolutions are generally entered in **dots/mm**.
To enter your list of laser intensities for each resolution, select the **highlighted number** that corresponds to the resolution you want to set. Select **1)** to select **a blank table**

Complete the table until you have entered **all of the resolution intensities for each of the resolutions** you have checked.

Generally, once you build a table for a specific film type, you do not return to this menu.

Press **Exit** until you return to the Main Functions menu. When you are finished, be sure to **perform an update**.
Go to **Plotter Setting** menu.
Select **Machine**. Select 5. **Save/Restore NVM**.
Select 1. **Save NVMon Host Disk**, or 3. **Save NVM on PC Diskette**.
Fill in a **file name**. Answer **Y** (Yes) to the query, Save? Press **ENTER**.
Exit to the NVM menu. **Exit** to the Machine menu. **Exit** to the Plotter Setting menu. **Exit** Plotter Setting.
You receive the message "**Press any key to continue.**"

Note: The values on the Res Intensity Tables are saved. However, the information entered on the Cassette NVM menu for the Large/Medium/Small cassettes is not saved. It is up to you to update the cassette information each time you change the cassette or type of consummable on the cassette.

D. Creating the Excurve, adding measured gray scale values

1. Begin at the Main Functions menu. Select:
   -2. **Plot/Proof**
   -1. **Raystar/Dolev**
   -On the now appearing **Source Files** menu, use the arrow keys on your keyboard to highlight the **Job**.
   -Press **List** (F4) to receive the list of Jobs.
   -Select by highlighting the JOB **Public**. The Jobs are numbered. You can also enter the number on the command line and press ENTER.
   - Select the PAGE **Table** in the same way you selected the Job.
   -Return to the **Main Functions** menu.

Choose an Option

List

Excurve creation

Select 7. **Auxiliaries**.
Select 3. **Table**.
Select 2. **Create** from the Table options form. Press the **Return** key.
Press **Start Work** (F1).
Fill in the Create Table form:

New Excurve (Create Table) form

Enter the following parameters on the Create Table screen:
-File name: **Alliance**
- File Type: [* **Excurve**]
* Use the SPACE BAR to toggle to the Excurve.
-Smooth Curve **~No**
-In the Separations field, enter **Y** for all of the separations.

Select **List/Modify** (F3).

Note:
You can change the units if desired. If left unchanged, the units remain in dot percentages.

A table form appears: See next page !

7. You want to enter the points you measured with the densitometer. Select **Add** (F2).

Take the sheet of film with your exposed gray scale. For each vertical strip, enter the "ideal" value on the left column, and the value actually measured with the densitometer on the right column. For example:

Add New Points (Add)

You can enter up to 10 points (Measured values 3 - 12) on the form. If you want to enter more points, select **Add More** (F3). For your convenience, the first field contains the last point added o, the previous form.

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When you finish, select **Previous** (F2) to go back to the **Add New Points** form and **Exit** (F1) to return to the Excurve intermediate screen.

Select **Save & Exit** on the Create Table form. Select **Main Menu** (F8) and return to the Main Functions menu. The new excurve, **Alliance**, appears on the **Tables** list of files.

E. Entering the Excurve into the Format

Now that you have a measured gray scale (**Test**), a format (**Standard**), and an Excurve (**Alliance**), your work is almost complete. You must now enter the Excurve onto the Format, and expose a file using the new format:

Press **Set Up** (F2) and then 3. **I/O Devices**. Select 2. **Plotters** and 2. **Plotter Formats**. Select **Copy** (F5) on the Formats (Modify) form.
You want to create a new format by copying an existing format and customizing it for your purposes. A line appears on the bottom of the form:

Old Format Name: New Format Name:

Enter **Standard** (0) as the old format name and press the **Return** (ENTER) key. Enter a new format name (Ex., **Agfaform**).

Press **Modify/Create** (F2).
Format **Agfaform** appears at the end of the format list.
Selecty the new format. Enter **Alliance** in the Excurve field.
Select **Save** to return to the main formats list. Select **Exit** (F1) to return to the main menu.
Expose the gray scale test file again. Select **Start Work** on the file **Test**.
Select **Expose** from the expose form. Develop the film and measure the gray scale values like you did earlier.

Note:
The values you measure with the densitometer should match the file values (+/-1%), because you are using your new Excurve **Alliance**. If this is not the case, start over. Unless you have extensive experience with Excurves, starting over is better than using the **Modify Points** option.

F. Exposure Formats

Dolev 800 Formats are defined sets of instruction that the system uses to send files to the Dolev Imagesetter.Scitex provides you with a set of formats. These "**Home Formats**" cover a wide range of applications, and we highly recommend you use them. If you do need to define customized Dolev formats, use the **Plotter Formats**option from the **Set-Up Menu I/O Devices**, **Plotter Options** menu.Prepare the Formats in consultation with the Scitex service/application engineer.

Select **Set Up** (F2) from the Main Functions menu.
Select 3. **I/O Devices** from the Set Up menu.
Select 2. **Plotters** from the I/O Settings menu.
Enter a format name or number on the Dolev 800 format list

Set-up is based on practical density

Select correct intensity *(this applies for Pos_output, Pos_readings)*: **On the test page select the patch where**

Primary rule	Density is **> D.4.10** and 50 % patch reads **> 53%**
Secondary rule	5% recommended to be /**3%** (for all rulings [175lpi)