SelectSet Avantra Series
Control Panel and Operating Guide

Part Number: M00123-0002

AGFA

FEDERAL COMMUNICATIONS COMMISSION
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NOTE: 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 manual, 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 own expense.

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Overview

Overview of Documentation

This User Guide

This guide describes how to operate the control panel on SelectSet® Avantra® internal drum imagesetters. It also provides information on error messages and maintaining the imagesetters.

This user guide contains the following sections and documents:

- SelectSet Avantra Series Product Overview
- SelectSet Avantra Series Control Panel Operations
- SelectSet Avantra Series Exposure Tests
- SelectSet Avantra Series Diagnostic and Error Messages
- SelectSet Avantra Series Imagesetter Maintenance

❖ *Note: For information on the SelectSet Avantra On-line Processor, refer to the guide for your specific imagesetter.*

❖ *Note: When this guide describes the 20/25, the 30, or the 36/44 series of imagesetters, it describes all imagesetters in that series. Specific notes appear if one member of the series differs from the others.*

Other Manuals

A number of different raster image processors (RIPs) can be used to drive SelectSet Avantra imagesetters. Each RIP comes with its own documentation. Consult the user documentation that comes with your RIP for information about RIP and Avantra software that lets you control the imagesetter from your front-end computer. Also refer to the RIP user documentation for information about fonts and about PostScript® language as it applies to SelectSet Avantra imagesetters.

Audience

This guide is written for imagesetter operators who are familiar with:

- Basic concepts of desktop publishing
- Operation of the software applications, computers, and other hardware in use with the imagesetter
- Operation of the RIP that drives the SelectSet Avantra imagesetter

This basic knowledge is critical to the effective and successful operation of this imagesetter.

Chapter 1

Product Overview

Introduction

This product overview provides the following information about the SelectSet Avantra imaging system:

- Specifications and features
- Parts of the imagesetter
- Product Options
- Imaging system configuration
- Operating environment
- Safety information

Please read the *Safety Instructions* and *Laser Safety Information* sections later in this chapter before you operate your SelectSet Avantra imagesetter.

Specifications and Features

The SelectSet Avantra 20 and SelectSet Avantra 25 are internal drum laser imagesetters designed to provide high standards of image quality and versatility. The following table lists their basic specifications.

	Avantra 20	Avantra 25
Maximum Image Size	13.7" x 20" 347 x 508 mm	17.7" x 25" 449 x 635 mm
Resolutions	1200, 1800, 2400, 3600 dpi	1200, 1800, 2400, 3600 dpi
Imaging Speed	334 sq. in./min. @ 1200 dpi	417 sq. in./min. @ 1200 dpi

	Avantra 25E	Avantra 25S
Maximum Image Size	17.7” x 25” 449 x 635 mm	17.7" x 25" 449 x 635 mm
Resolutions	1200, 1800 2400 dpi	1200, 1800, 2400, 3600 dpi
Imaging Speed	417 sq. in./min. @ 1200 dpi	625 sq. in./min. @ 1200 dpi

The SelectSet Avantra 30 is a medium-format, internal drum laser imagesetter designed to provide high standards of image quality and versatility. The following table lists its basic specifications.

	Avantra 30
Maximum Image Size	29.7" x 25" 754 mm x 635 mm
Resolutions	1200, 1800, 2400, 3600 dpi
Imaging Speed	625 sq. in./min. @ 1200 dpi

The SelectSet Avantra 36 and SelectSet Avantra 44 are large-format, internal drum laser imagesetters designed to provide high standards of image quality and versatility. The following table lists their basic specifications.

	Avantra 36	Avantra 36S
Maximum Image Size	35.7" x 28.5" 906 mm x 723 mm	35.7" x 28.5" 906 mm x 723 mm
Resolutions	1200, 1800, 2400, 3600 dpi	1200, 1800, 2400, 3600 dpi
Imaging Speed	320 sq. in./min. @ 1200 dpi	475 sq. in./min. @ 1200 dpi

	Avantra 44	Avantra 44S
Maximum Image Size	35.7" x 44.5" 906 mm x 1130 mm	35.7" x 44.5" 906 mm x 1130 mm
Resolutions	1200, 1800, 2400, 3600 dpi	1200, 1800, 2400, 3600 dpi
Imaging Speed	500 sq. in./min. @ 1200 dpi	742 sq. in./min. @ 1200 dpi

SelectSet Avantra imagesetter features include:

- Icon-based control panel
  The control panel uses a series of graphic pictures to show the system status and functions.
- Laser spot in multiple sizes
  Laser spot size is optimized for each imaging resolution.
- Memory for cassette parameters
  Cassette parameters include the media type, exposure values, media width, and media remaining. The system stores the settings you enter for each cassette.
- Internal drum imaging system
  This system yields the precise registration required to image jobs that use more than the standard four processing colors (cyan, magenta, yellow, and black), such as HiFi™ color jobs.
- Reloadable supply cassettes
  The Avantra imagesetters use reloadable supply cassettes that accept daylight-loadable or darkroom-loadable media.
- Media Optimization
  Through the RIP, you can program the imagesetter to rotate jobs for the most efficient use of media.

Parts of the Imagesetter

This section describes the basic components of the SelectSet Avantra imagesetter. See Figure 1.1.

Media Compartment

The media compartment contains:

- Supply Cassettes
  Supply unexposed media to the imaging drum. Load them with bulk rolls of media.
- Take-up Cassette
  Receives imaged media from the imaging drum. A take-up cassette is supplied with the imagesetter for use with off-line processing.
- Cutter
  Cuts media when you are ready to remove the take-up cassette to process exposed media during off-line processing. You can activate the cutter from either the control panel or the front end of your imaging system.

❖ *Note: On systems equipped with the optional Avantra on-line processor, the media transport bridge is installed in the media compartment.*

Main Power Switch

The main power switch is located at the front of the imagesetter, to the left of the control panel. Use it to turn the imagesetter on and off.

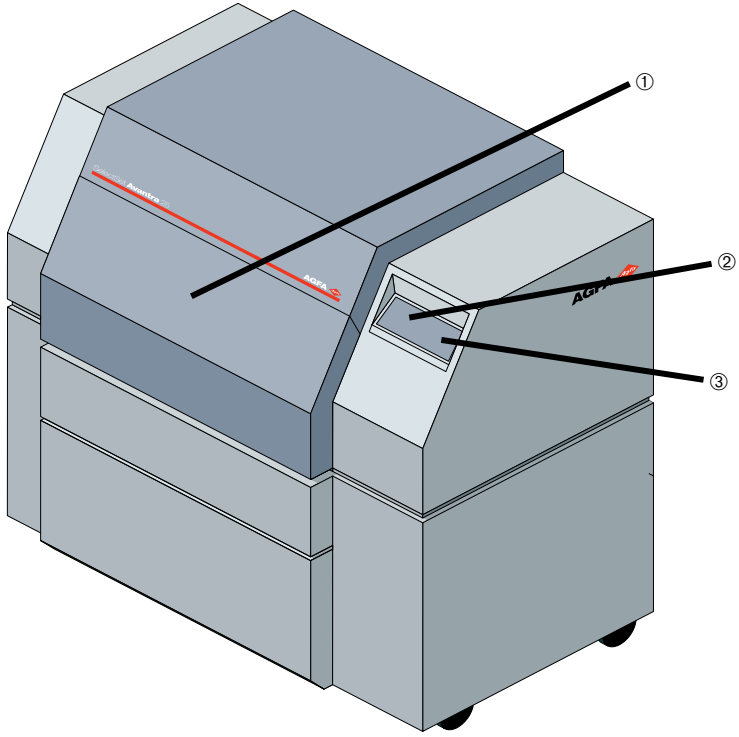


Figure 1.1 The SelectSet Avantra Imagesetter.
①—Media compartment. ②—Main power switch. ③—Control panel

The Control Panel

The SelectSet Avantra control panel is a liquid crystal display (LCD) with a pressure sensitive surface. This animated, touch-screen control panel includes intuitive icons that make it easy for you to change settings and monitor progress. Status icons on the screen display information about the imagesetter. Some icons act as buttons that you press to operate the imagesetter.

Product Options

The following options are available for the SelectSet Avantra imagesetters.

❖ *Note: The following descriptions of the 20, 25, 30, 36, and 44 include all imagesetters in their series.*

Avantra 20 and 25 Options

- Avantra On-line Processor (OLP)
  The OLP option adds a media transport bridge to the imagesetter that connects it directly to the processor. With the OLP option, you no longer need to use take-up cassettes in your daily operation. Instead, you can program the imagesetter to automatically advance and cut exposed media and send it through the bridge to the processor to be developed.
- DualSupply Cassettes
  The SelectSet Avantra 20 and 25 imagesetters can be equipped with a dual media supply. This option lets you load two different types of media for fast-changing job requirements.
- FlexMedia
  This option for the SelectSet Avantra 25 enables you to fine-tune the imagesetter to a wide range of media widths and thicknesses. It includes OptiFocus (adjustable focus lens) and media width adjustment.

- Registration Punches
  Punches media to facilitate registration of multicolor jobs.
- Custom Punches
  This option lets you design your own custom punching system. It is available for the SelectSet Avantra 25.
- Upgrade Option
  The SelectSet Avantra 20 can be upgraded to a SelectSet Avantra 25. All options are available to systems that have been upgraded.
- Extra Cassettes
  Extra media supply cassettes and take-up cassettes are available to help you operate more efficiently. For example, you might choose to purchase a separate supply cassette for each type of media you use.

The following table lists the options available:

Option	SelectSet Avantra 20	SelectSet Avantra 25
On-line Processor	Yes	Yes
DualSupply Cassettes	Yes	Yes
FlexMedia	N/A	Yes
Registration Punches:		
Head Punch	Stoesser only	Stoesser, Bacher 2000, or Bacher 2000 USA
Tail Punch	N/A	Stoesser, Bacher 2000, or Bacher 2000 USA
Custom Punches	N/A	Yes
Upgrade Option	Yes	N/A
Extra Cassettes	Yes	Yes

Avantra 30 Options

- Avantra On-line Processor (OLP)
  With the OLP option, you no longer need to use take-up cassettes in your daily operation. Instead, you can program the imagesetter to automatically advance and cut exposed media and send it through the bridge to the processor to be developed.
- Custom Punch Option
  This option lets you design your own custom punching system.
- Extra Cassettes
  Extra media supply cassettes and take-up cassettes are available to help you operate more efficiently. For example, you might choose to purchase a separate supply cassette for each type of media you use.

The following table lists the options available:

Option	SelectSet Avantra 30
On-line Processor	Yes
Punches:	
Head Punch	Stoesser, Bacher 2000, or Bacher 2000 USA
Tail Punch	Stoesser, Bacher 2000, or Bacher 2000 USA
Custom Punches	Yes
Extra Cassettes	Yes

Avantra 36 and 44 Options

- Avantra On-line Processor (OLP)
  The OLP option adds a media transport bridge and buffer to the imagesetter that connects it directly to the processor. With the OLP option, you no longer need to use take-up cassettes in your daily operation. Instead, you can program the imagesetter to automatically advance and cut exposed media and send it through the bridge and buffer to the processor to be developed.
- Custom Punch Option
  This option lets you design your own custom punching system. Head and tail punches are available for the Avantra 44. Only a head punch is available for the Avantra 36.
- EasyLoad Media Cart
  A battery-operated mechanical device is available to help you move rolls of media and supply cassettes to and from the imagesetter.
- Extra Cassettes
  Extra media supply cassettes and take-up cassettes are available to help you operate more efficiently. For example, you might choose to purchase a separate supply cassette for each type of media you use.

The following table lists the options available:

Option	SelectSet Avantra 36	SelectSet Avantra 44
On-line Processor	Yes	Yes
Punches:		
Head Punch	Stoesser, Bacher 2000, or Bacher 2000 USA	Stoesser, Bacher 2000, or Bacher 2000 USA
Tail Punch	N/A	Stoesser, Bacher 2000, or Bacher 2000 USA
Custom Punches	Yes	Yes
Upgrade Option	Yes	N/A
EasyLoad Media Cart	Yes	Yes
Extra Cassettes	Yes	Yes

Imaging System Configuration

Your SelectSet Avantra imagesetter is one component of a complete imaging system. Imaging systems can include:

- Front-end computers running PostScript language applications software. These are used for word processing, creating and editing graphic images, and page layout.
- A raster image processor (RIP). This receives the job from the front-end computer, assembles it, and sends it to the imagesetter.
- Output devices. These include proofing devices driven from the front-end computer and high-quality final production devices, such as the SelectSet Avantra imagesetter, driven by its own RIP.

Imaging systems that support the SelectSet Avantra imagesetters can be made up of many different combinations of hardware and software. To use your imagesetter most effectively, you need to understand all the components of your unique imaging system.

Raster Image Processors

Every SelectSet Avantra imagesetter is driven by a raster image processor (RIP). The RIP performs two functions:

1. It interprets the data generated by applications running on the front-end computer of your imaging system.

2. It converts this data to a form that can be used by the imagesetter.

The SelectSet Avantra imagesetter can be used with a wide choice of software and hardware RIPs.

- Software RIPs run on standard computer platforms. These standard platforms can serve other functions when not used as RIPs.
- Hardware RIPs are computers running on a dedicated platform designed to function only as RIPs.

Operating Environment

The SelectSet Avantra imagesetters require a relative humidity of 45% to 55%, noncondensing. In addition, we recommend that you maintain the temperature in the range from 65° to 80°F. For absolute accuracy, keep the environment at 70°F ±3°. Make sure that your operating environment meets this requirement.

Some models are equipped with a humidifier that maintains the relative humidity in the imagesetter drum at 50% ±5%.

Safety Information

This section provides the following safety information about SelectSet Avantra imagesetters:

- *Laser information:* Provides information about the laser device used within the imagesetter and the laser radiation that it emits.
- *Laser safety instructions:* Provide specific instructions for the safe operation of this laser imagesetter.
- *General safety instructions:* Provide guidelines for safe operation of this laser imagesetter.
- *Sound level:* Defines the sound level at the operator's position.
- *Safety and Compliance Labeling:* Describes the safety and warning labels that are attached to SelectSet Avantra imagesetters.
- *Product Compliance Standards:* Lists the electromagnetic emissions and safety standards to which SelectSet Avantra imagesetters comply.

Laser Information

SelectSet Avantra imagesetters are classified as Class I laser devices. The maximum accessible radiation level during operation and maintenance is less than Class I limits. This means that you are not exposed to any hazardous laser radiation during operation and maintenance. SelectSet Avantra imagesetters comply with the Code of Federal Regulations 21CFR, Subchapter J.

Inside SelectSet Avantra imagesetters are two Class IIIb laser products. These devices emit radiation that is considered hazardous in the Code of Federal Regulations and international standards.

You are not exposed to this level of radiation as long as the protective covers remain in place and interlocks are not bypassed.

Laser Safety Instructions

WARNING: To avoid hazardous radiation exposure, follow these instructions:

- Do not use controls or adjustments other than those specified in the user documentation that comes with this imagesetter.
- Do not perform procedures other than those specified in the user documentation that comes with this imagesetter.
- Do not attempt to service this unit.
- Never attempt to look at the laser beam, even if the unit appears to be nonfunctioning.
- Never remove the protective covers or enclosures, especially during operation or maintenance, except as instructed in the user documentation that comes with this imagesetter.
- Never bypass the safety interlocks. These covers and interlocks have warning labels located near them. Removing the covers or bypassing the interlocks may expose you to laser radiation that is considered hazardous according to the Code of Federal Regulations, Section 1040.10.

General Safety Instructions

- The imagesetter should be installed near a wall outlet, and the outlet should be easily accessible.
- Before cleaning, turn off the power, then unplug the imagesetter from the wall outlet. Clean only with a damp cloth. Do not use liquid or aerosol cleaners.
- Do not use the imagesetter in any area near water. Keep all liquids off the top of the imagesetter to prevent spills.
- Slots and openings in the enclosure provide ventilation. To ensure reliable operation, these openings must not be blocked. Install the imagesetter at least 12 in. (31 cm) away from walls. (Optimum clearance is 24 in. or 61 cm.) Do not place objects between the imagesetter and the wall.
- Make sure that the imagesetter is connected to the correct power source. This information is indicated on the model tag.
- The imagesetter must be electrically grounded to ensure conformance to safety requirements. It comes with a 3-wire grounding plug, which has a grounding pin. If this plug does not fit your electrical outlet, have a qualified electrician replace the obsolete outlet.
- Never allow objects of any kind into the imagesetter through the enclosure vents. Objects may come in contact with hazardous voltage, which could create a risk of fire or electric shock.
- Do not attempt to service the imagesetter yourself, except as specifically explained in the user documentation that comes with it. Opening and removing covers may expose you to dangerous voltage and radiation hazards.
- Unplug the imagesetter from the wall outlet and place a service call under these conditions:

  The power cord is damaged or frayed.

  Liquid has been spilled into the imagesetter.

  The imagesetter has been physically damaged.

  The imagesetter does not operate normally, even when you follow the operating instructions.

Sound Level

The sound level at the operator's position does not exceed 66 dB(A).

Safety and Compliance Labeling

The following warning and compliance labels are attached to the SelectSet Avantra imagesetters:

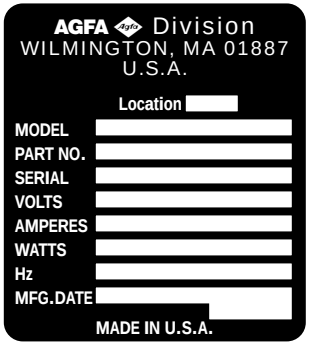


Figure 1.2 Manufacturer's identification label, located on the rear panel.

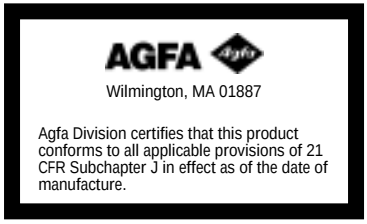


Figure 1.3 CDRH compliance label, located on the rear panel. It reads: Agfa Division certifies that this product conforms to all applicable provisions of 21 CFR Subchapter J in effect as of the date of manufacture.

Figure 1.4 Laser class label, located on the rear panel of the unit. Indicates the class of laser radiation during operation and maintenance.

❖ *Note: Class I lasers are considered safe for operator access in accordance with the Code of Federal Regulation and international standards.*

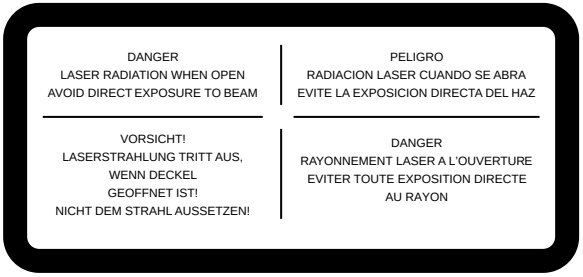


Figure 1.5 Multilingual warning label, located near the front and rear punch inside the imagesetter. It reads:
DANGER
LASER RADIATION WHEN OPEN
AVOID DIRECT EXPOSURE TO BEAM

Figure 1.6 Warning label located on the drum interlock mechanism.

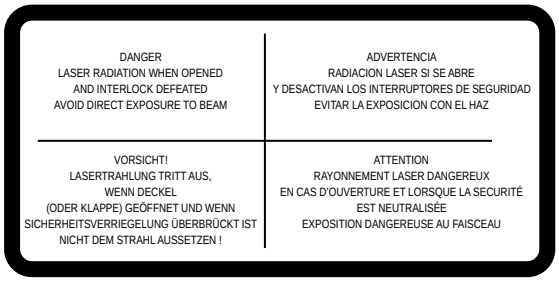


Figure 1.7 Multilingual warning label, located on the drum cover. It reads:
DANGER
LASER RADIATION WHEN OPENED
AND INTERLOCK DEFEATED
AVOID DIRECT EXPOSURE TO BEAM

Product Compliance Standards

SelectSet Avantra imagesetters comply with the following standards for product safety and electromagnetic emissions and immunity.

Product Safety

- CSA C22.2 No.950 Safety of Information Technology Equipment including Electrical Business Equipment
- UL 1950 Information Technology Equipment including Electrical Business Equipment
- EN 60 950 10.92 Safety of Information Technology Equipment including Electrical Business Equipment
- IEC 825/1993 Safety of Laser Products

Electromagnetic Emissions and Immunity

- Class A limits according to Vol. II, Part 15, Subpart J of the FCC rules
- C 108.8 Electromagnetic Emissions from Data Processing Equipment and Electronic Office Machines
- EMC directive (83/336/EEC) and is tested to EN 50 081-1, EN 55 022 Class A, and EN 50 082-01

❖ *Note: Compliance with these regulations requires the use of shielded cables. The user is responsible for procuring properly shielded cables.*

Chapter 2

Using the Imagesetter Control Panel

Introduction

This section provides information about the SelectSet Avantra imagesetter and operator control panel. Topics include:

- A description of the parts of the operator control panel
- An overview of control panel screens and an introduction to their use
- Procedures for starting up and shutting down the imagesetter
- Definitions of and procedures for using the functions on each control panel screen

Control Panel Description

The control panel is an animated liquid crystal display (LCD) containing the following items:

- Pressure-sensitive squares: The display is divided into pressure-sensitive squares.
- Icons: Graphic pictures, called icons, appear on the control panel. Icons represent objects (such as the imagesetter or an output cassette) or functions that the imagesetter performs (such as feeding media).
- Buttons: Icons that represent functions are called buttons. You operate the imagesetter by pressing these buttons.
- Status icons: Pictures and numbers appear on the control panel to show the current status of the imagesetter. These are called status icons.
- Screen: The complete set of icons that appears on the control panel at one time is called a screen.

Overview of Screens

There are six control panel screens:

- Run screen — The Run screen appears if the imagesetter is ready to image a job and the RIP is connected when you first start up the imagesetter. A progress bar appears at the bottom of the Run screen.
- Pause screen — Press the Pause button on the Run screen to go to the Pause screen. Icons appear at the bottom of the Pause screen that provide access to the other control panel screens.

❖ *Note: If no media is loaded, no take-up cassette is in place, or the bridge for on-line processing is out of position, the Pause screen appears instead of the Run screen when you start up the imagesetter.*

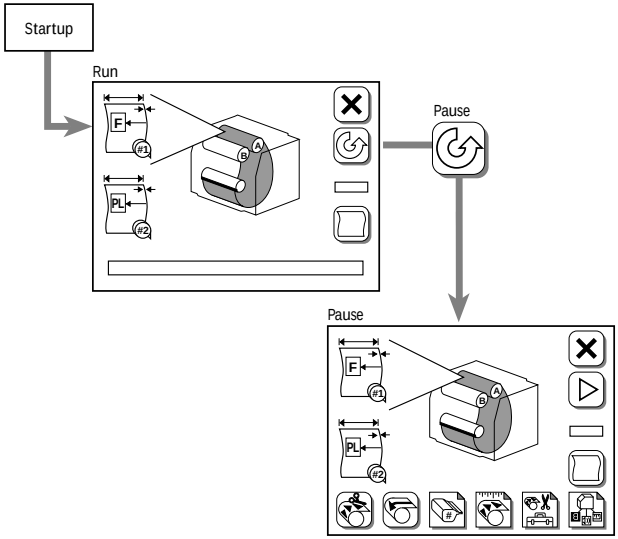


Figure 2.1 If the imagesetter is ready and a RIP is connected to it when you start it up, the Run screen appears. Press Pause to go to the Pause screen.

- Four function screens — Press one of the four square buttons at the bottom right of the Pause screen to reach the Cassette Setup, Feed Amounts, Utilities, and Configuration screens.

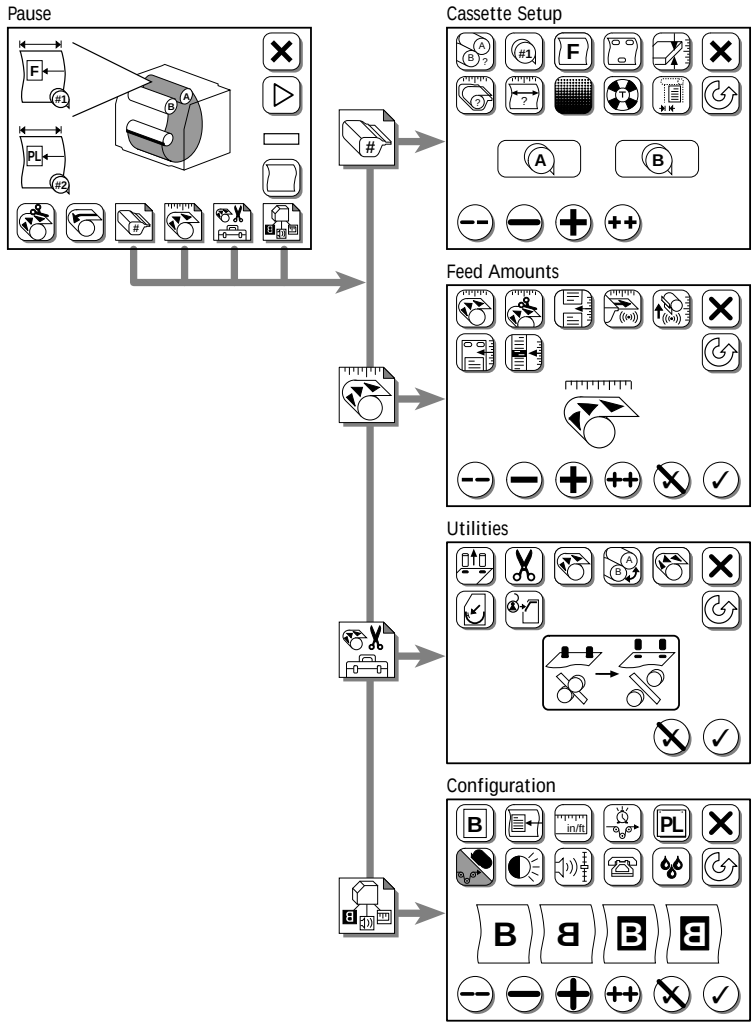


Figure 2.2 Press one of the four square buttons at the bottom right of the Pause screen to reach one of the four control panel screens for setting job parameters.

❖ *Note: Icons with folded corners indicate that additional screens appear after you press them. Icons without folded corners carry out an immediate action.*

Basic Controls

The buttons (pressure-sensitive icons) listed below are the basic controls in the control panel screens. Press each button to use the function indicated.

Abort: Appears on all screens. On the Run screen, Abort cancels a job that is being imaged. On the Pause screen, Abort cancels feed or cut functions. On other screens, Abort cancels the current operation and returns you to the Pause screen.

Pause: Puts the imagesetter in Pause mode and returns to the Pause screen. If the imagesetter is imaging a job, it puts the imagesetter in Pause Pending mode, which automatically changes to Pause as soon as the job is complete. In Pause mode, you can change parameters or perform tasks, such as loading media.

Run: Puts the imagesetter in Run mode (ready to accept and image jobs from the RIP) and returns to the Run screen.

Minus: Decreases the value of numerical parameters. Cycles through parameter selections in descending order when icons show choices.

Minus Minus: Decreases the value of numerical parameters in larger increments than Minus.

Plus: Increases the value of numerical parameters. Cycles through parameter selections in ascending order when icons show choices.

Plus Plus: Increases the value of numerical parameters in larger increments than Plus.

Cancel: Discards any changes made in the current screen and redisplays the parameters in use when you first reached the screen.

Accept: Accepts the parameters displayed on the screen.

The Abort button appears on all control panel screens. The Run button appears only on the Pause screen. The Pause button appears on all screens except for the Pause screen.

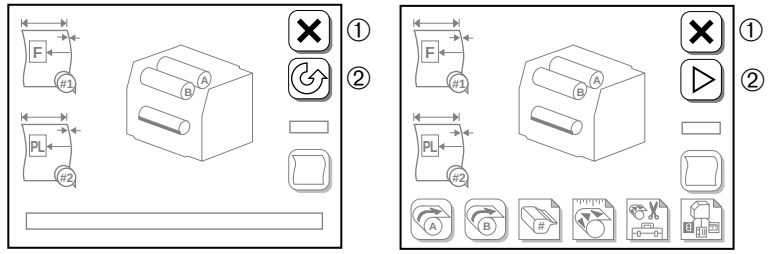


Figure 2.3 Left: Run screen. ①—Abort. ②—Pause.
Right: Pause screen. ①—Abort. ②—Run.

Using Plus  , Plus Plus  , Minus  , and Minus Minus 

Press Plus, Plus Plus, Minus, or Minus Minus to make selections as follows:

- Plus or Minus
  Use Plus or Minus to cycle through selections. When you press Plus or Minus, the display cycles through the different selections for a function. When you reach the last selection or numerical value on the list using Plus, you automatically return to the beginning of the list. When you reach the first selection or numerical value on the list using Minus, you automatically return to the end of the list.
- Plus Plus or Minus Minus
  Use Plus Plus or Minus Minus primarily to select numerical values. When using Plus Plus or Minus Minus, you advance through the list of selections in larger increments than if using Plus or Minus. When using Plus Plus or Minus Minus, you do not cycle through the parameter selections when you reach the maximum or minimum value, or first or last option.

The Plus, Plus Plus, Minus, and Minus Minus buttons appear only on screens where you set or change parameters.

Using Accept and Cancel

Press Accept to perform a function, such as Feed, or to accept a selection for a job parameter, such as Media Type and Media Width.

Press Cancel to cancel a requested function, such as Cut, or to cancel a selection for a job parameter, such as Image Mode.

Special Features of the Accept and Cancel buttons:

- Accept and Cancel are displayed on the Utilities screen when you first reach it.
- Accept and Cancel appear on the Cassette Setup, Feed Amounts, and Configuration screens only after you press Plus, Plus Plus, Minus, or Minus Minus to change a parameter.

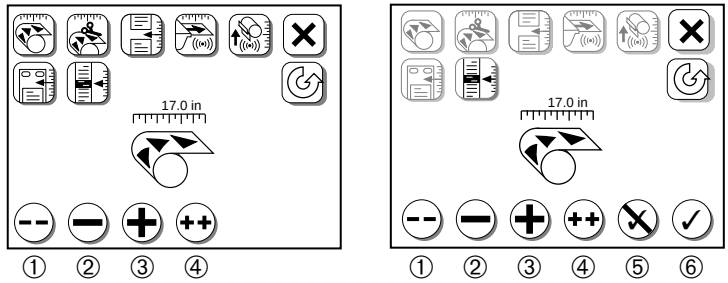


Figure 2.4 The Feed Amounts screen. Left, before you change a parameter. Right, after you press either ①—Minus Minus, ②—Minus, ③—Plus, or ④—Plus Plus to change a parameter, ⑤—Cancel and ⑥—Accept appear.

Flashing Buttons

To perform some functions, you must press a button twice. Whenever a button requires that you press it a second time, it flashes. For example, as shown below, you must press the Load Supply button twice to load media from a supply cassette into the imagesetter.

To Load a Supply:

Press once and the icon flashes.

Press again to complete loading or...

...press Abort to cancel.

❖ *Note: In all cases, the button flashes when it requires that you press it a second time. If you do not press the button a second time within five seconds, the function cancels itself.*

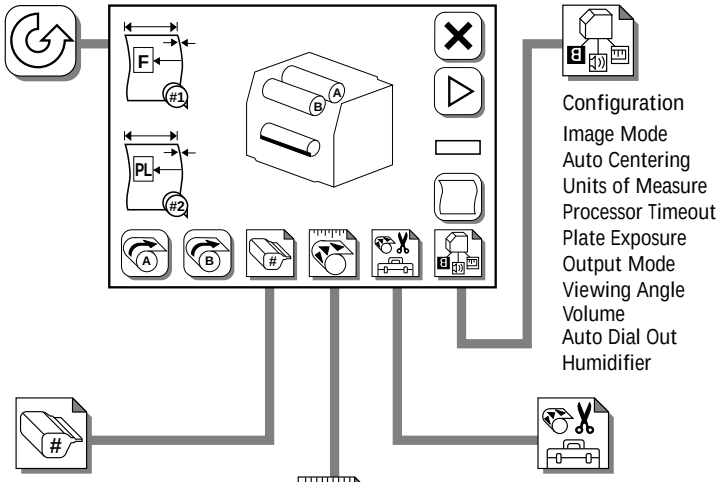
Displaying and Setting Parameters

❖ *Note: This section describes all SelectSet Avantra screen functions. However, not all functions apply to all models of SelectSet Avantra imagesetters. For example, only the large format Avantra 36 and 44 imagesetters have the Bridge Shuttle/Weight function due to the increased weight of their bridges.*

To use a function, first go to the control panel screen for that function.

Selecting a Screen

1. Press Pause to go to the Pause screen.
2. Press the button for the screen you need. The following diagram lists the functions on each of the four function screens.


F
#1
PL
#2
A
B
#
Configuration
Image Mode
Auto Centering
Units of Measure
Processor Timeout
Plate Exposure
Output Mode
Viewing Angle
Volume
Auto Dial Out
Humidifier
Cassette Setup
Select Supply
Cassette Number
Media Type
Punches
Media Thickness
Media Amount
Media Width
Exposure
Test Page
Image Offset
Feed Amounts
Feed Amount
Feed/Cut Amount
Interpage Spacing
Supply Alarm
Take-up Alarm
Distance to Punches
Plate Overlap
Utilities
Retract Punches/Nips
Cut
Feed
Switch Supply
Reverse Feed
Move Flapper
Bridge Shuttle/Weight

Displaying Current Parameter Settings

Once you reach a specific screen, you can display the current setting for any of its functions by pressing the function's button icon. The current setting appears in the center of the screen.

For some functions, such as Media Type, the button icon also changes to show the current setting for that function. If you change the setting for the function, the button displays the change. Figure 2.5 shows how Media Type information is displayed.

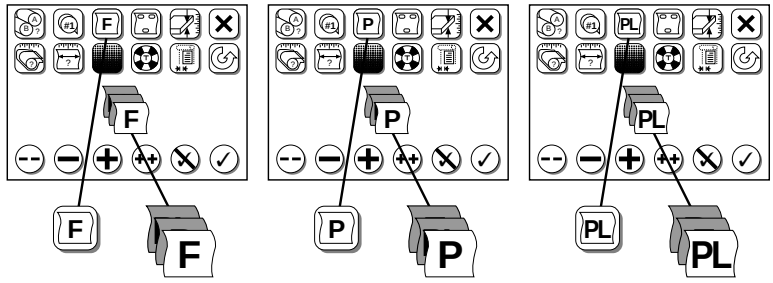


Figure 2.5 As you select different types of media in the Cassette Setup screen, the Media Type button displays the change.
Left, film selected; center, paper selected; right, plate selected.

Selecting Parameters

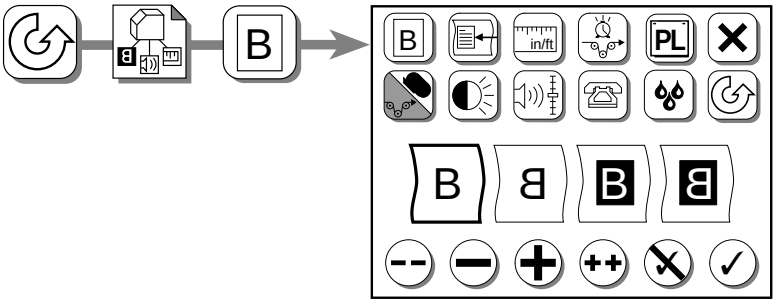
Some functions, such as Image Mode, require you to select a parameter from a list of options.

To select a parameter from a list of options:

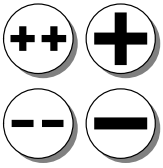
1. Press the icon that represents the parameter you need to change.
2. Select the desired setting. Use Plus or Minus to cycle through the options until the one you want is displayed.
3. Confirm your selection. Press Accept to keep or Cancel to discard changes.

The example below shows how to set the imaging mode in the Configuration screen.

1. Press Pause, Configuration, Select Image Mode.



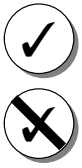
2. Select the image mode:



Press Plus or Minus to select image mode.

Choices (left to right):
- Right reading positive
- Wrong reading positive
- Right reading negative
- Wrong reading negative.

3. Accept or Cancel:



Press Accept to confirm your selection, or...

...press Cancel to discard.

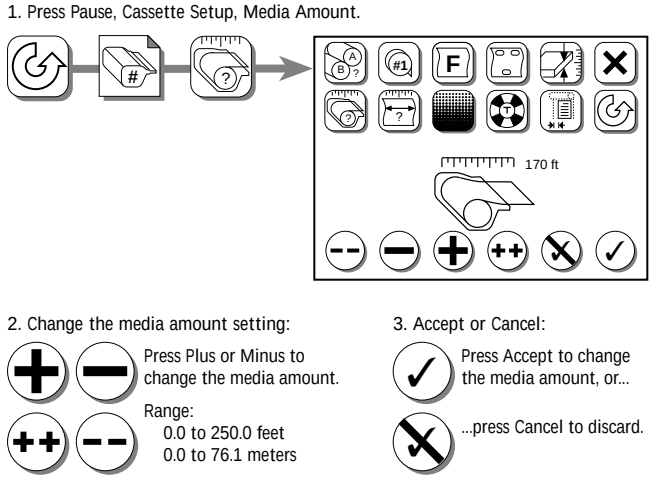
Specifying Numerical Values

Some functions, such as Media Amount, require you to specify a numerical value.

To specify a numerical value:

1. Press the icon that represents the parameter you need to change.
2. Use Plus, Plus Plus, Minus Minus, or Minus to increase or decrease the numerical value until the one you want is displayed.
3. Confirm your selection. Press Accept to keep or press Cancel to discard your changes.

The example below shows how to change the Media Amount value, which is specified in the Cassette Setup screen.



Starting Up and Shutting Down the Imagesetter

Starting Up the Imagesetter

Follow these steps to start up the SelectSet Avantra imagesetter:

1. Turn on the imagesetter. Press the top of the power switch located to the left of the control panel. A progress bar appears at the bottom of the control panel screen as the imagesetter starts up.

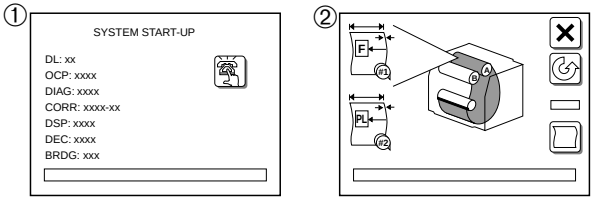


Figure 2.6 Screens that appear as you start up the SelectSet Avantra imagesetter.

2. When the imagesetter is ready to accept jobs, the Run screen appears on the control panel unless the RIP is not connected.

   If the RIP is not connected, the control panel displays error message 15 (No RIP).

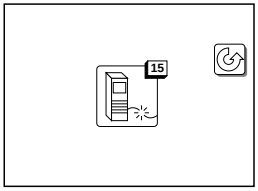


Figure 2.7 Error 15 appears if the RIP is not connected.

If you get error message 15, connect the RIP to the imagesetter. Follow the instructions in the manuals that come with your RIP.

If the imagesetter is not ready, the Pause screen appears instead of the Run screen. The Pause screen appears, for example, if no media is loaded, no take-up cassette is in place, or the bridge for on-line processing is out of position.

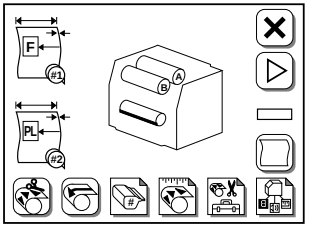


Figure 2.8 The Pause Screen appears if the imagesetter is not ready.

3. Turn on the other parts of your imaging system.

4. To ensure consistent results, let the imagesetter run for twenty minutes before you begin to image jobs.

Viewing Software Revisions

At start up, the control panel displays a dial-out button, a progress bar, and the revision levels of its firmware. Firmware is the basic operating software for the SelectSet Avantra imagesetter. This information can be helpful when diagnosing system problems.

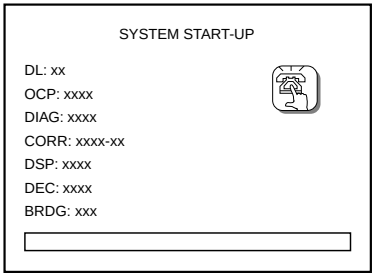


Figure 2.9 The system displays the revision level of the different modules that make up the operating software. Some items are not present on some Avantra models.

Shutting Down the Imagesetter

Follow these steps to shut down the imagesetter:

1. Shut down the RIP. Follow the instructions in the manuals that come with it.

2. Shut down the imagesetter by turning off its power. Use the power switch located to the left of the control panel.

Using Control Panel Screens

The following topics provide information on the functions and features of the six control panel screens used in the daily operation of SelectSet Avantra imagesetters. The control panel screens are basically the same for all models. The sample screens shown are Avantra 44 control panel screens. The number of icons, or their location, on your control panel screens may differ slightly.

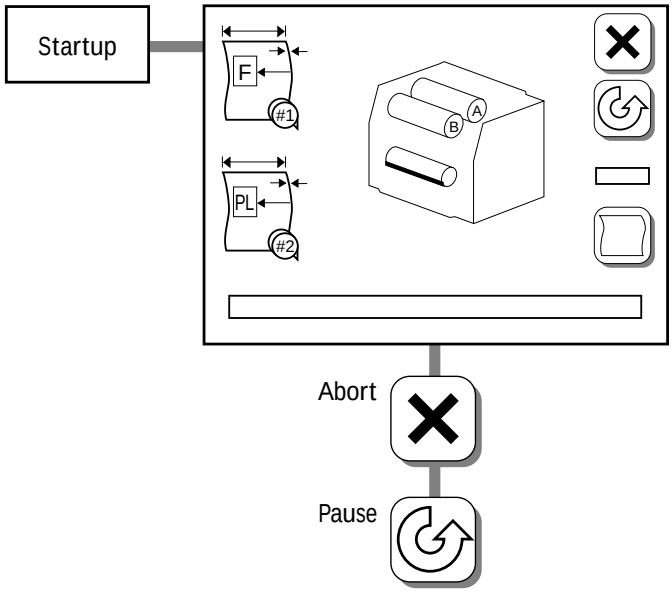
The following sections describe these topics:

- The Run Screen
- The Pause Screen
- Status Icons in the Run and Pause Screens
- The Cassette Setup Screen
- The Feed Amounts Screen
- The Utilities Screen
- The Configuration Screen

Many of the functions that you perform at the SelectSet Avantra imagesetter control panel can also be performed from your front-end computer. Certain features of the SelectSet Avantra imagesetter, such as media optimization, can be activated only from the front end.

For more information, see the user documentation that comes with the PostScript Support Environment (PSE) software if you have version 11.0 of PSE. If you have an earlier version of PSE software, see the *RIP and Avantra User Tools* section in this user guide. Also refer to the documentation that comes with your RIP.

The Run Screen



Basic Operating Modes

The SelectSet Avantra imagesetter has three operating modes in the Run screen:

- Idle: The imagesetter is ready and waiting to image a job.
- Busy: The imagesetter is imaging a job.
- Pause Pending: The imagesetter goes into Pause mode when the job it is currently imaging is complete. Pause Pending mode is indicated by a flashing Pause button on the Run screen. The Pause screen appears when the imagesetter goes into Pause mode.

Monitoring Jobs with the Progress Bar

- The progress bar appears at the bottom of the Run screen.
- While the imagesetter is busy, the outline of the progress bar appears in bold. The bar fills in to indicate the progress of the job.

Viewing Current Job Information

- The name of the job being imaged appears over the progress bar. The imagesetter clears this information when the job is finished.
- A limited number of spaces are available to display the name. The display cuts job names that are too long starting from the left.
- The page, copy, and separation number appear above the job name.

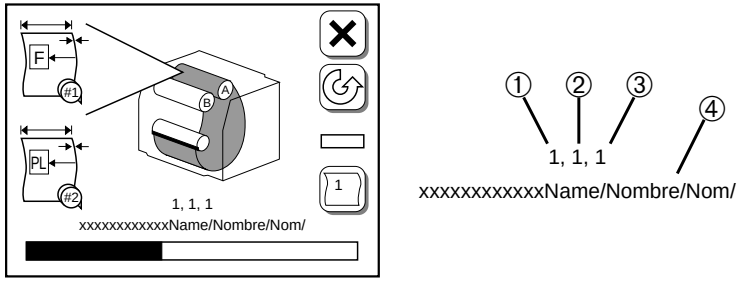


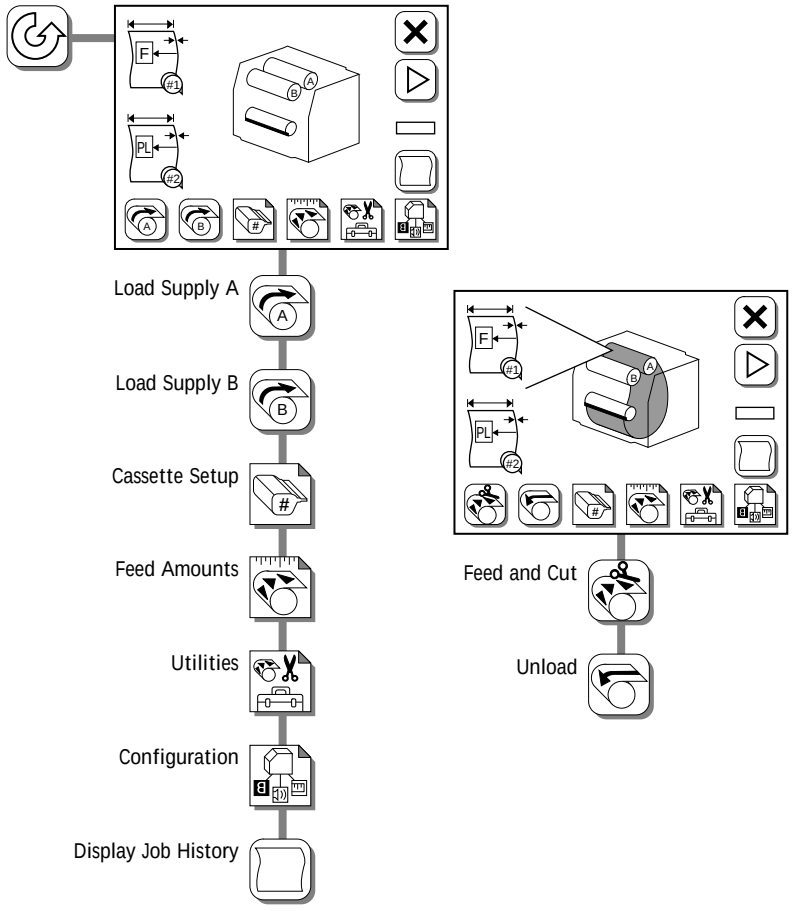
Figure 2.10 ①—Page number. Corresponds to page number that appears when you display job history. ②—Copy (if you are imaging multiple copies of a job.) ③—Separation number. ④—Job name.

❖ *Note: The job name may or may not appear on the Avantra control panel screen due to differences in LaserWriter drivers used to send the job. Typically, jobs sent or saved with 7.x LaserWriter drivers post the job name. Jobs sent or saved with 8.x drivers post only the sending Macintosh's name.*

Selecting and Canceling Pause Pending Mode

- To enter Pause Pending mode, press Pause on the Run screen while the imagesetter is busy.
- The Pause button blinks to indicate Pause Pending.
- When the current job is finished, the Pause screen appears. You can perform media operations, check parameters, etc.
- Press Run to resume imaging. If jobs were left in the queue when the imagesetter went into Pause mode, the imagesetter continues where it left off.
- To cancel Pause Pending, press the Pause button while it is blinking. The blinking stops.

The Pause Screen



The Load Supply A and Load Supply B icons appear on the Pause screen if no media is loaded. Once media is loaded, the Load Supply icons are replaced by the Feed and Cut and Unload icons.

Loading Media from a Supply Cassette

When you press Load, the imagesetter advances media from a supply cassette into the drum.

To Load a Supply:

Press once and the icon flashes.

Press again to complete loading or...

...press Abort to cancel.

Feeding and Cutting Media

Press Feed and Cut to advance media out of the drum.

To Feed and Cut:

Press once and the icon flashes.

Press again to complete the feed and cut or...

...press Abort to cancel.

The Output Mode that you specify in the Configuration screen affects the Feed and Cut function. Your choices for Output Mode are Take-up Cassette or On-line Processor.

When you use the take-up cassette mode:

- The imagesetter feeds imaged media past the cutter.
- Some unexposed media is advanced. The length of the unexposed media is the Feed and Cut Amount, specified in the Feed Amounts screen.
- The cutter cuts the media.

When you use the on-line processor mode:

- The imagesetter feeds imaged media past the cutter.
- The cutter cuts the media.
- The imagesetter feeds the cut media through the bridge to the processor.

❖ *Note: For on-line processing, a minimum of 13.3 inches (34 cm) of media for the Avantra 36 and 44, and a minimum of 10 inches (25 cm) of media for the Avantra 20, 25, and 30 must be fed past the cutter before the cut can be performed. The imagesetter ignores the Feed and Cut Amount set in the Feed Amounts screen.*

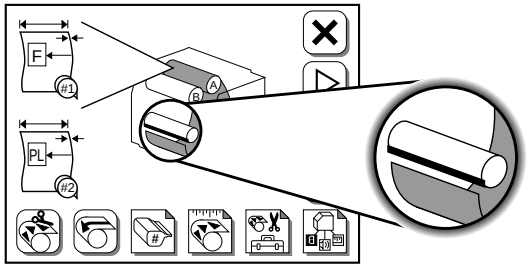


Figure 2.11 The display changes to show that the media has been cut.

Unloading Media

When you press Unload, the imagesetter:

1. Checks for media in the take-up cassette or imaged media in the drum.
2. Executes a feed and cut if media is detected in either place.
3. Rewinds the media in the drum back into the supply cassette.

To Unload:

Press once and the icon flashes.

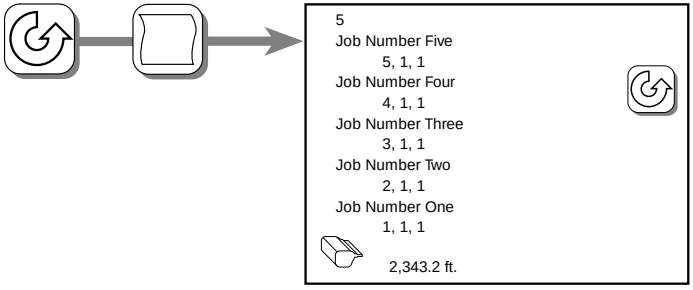
Press again to complete unloading or...

...press Abort to cancel.

Displaying Job History

When you press Display Job History in the Pause screen, the control panel shows a list of completed jobs.

1. Press Pause, then Display Job History.



2. Press Pause to return to the Pause Screen.

On the Job History screen:

- The first line shows the number of jobs currently in the display.
- Subsequent lines show the job name, then the job number. Numbers appear with the job name to indicate the page number, copy, and separation. These numbers are passed to the imagesetter from the front-end application. Not all applications pass this information to the imagesetter in the same way. This may cause variations in the way these numbers are interpreted as you change between different applications.
- The job name does not display special characters (such as Ø or Ç) or characters with diacritical marks (such as é or ñ). These characters are represented by a question mark (?) when the job name is displayed on the control panel.
- This function only displays jobs that are completed. Jobs that you abort at the imagesetter control panel do not appear.
- A limited number of spaces are available to display the name. The display cuts job names that are too long starting from the left.
- The most recently completed job is at the top and the oldest completed job is at the bottom.
- When the list exceeds five entries, new job names are added at the top and older names are deleted from the bottom.
- This list is cleared when you shut down or reset the imagesetter.

Tracking Lifetime Media Usage

Lifetime media usage appears in the bottom left corner of the screen when you display Job History. This is the amount of media that has been passed through the drum. The amount is displayed in the unit of measurement currently specified in the Configuration screen.

Run and Pause Screen Status Icons

This section describes status icons that appear in the Run screen and the Pause screen.

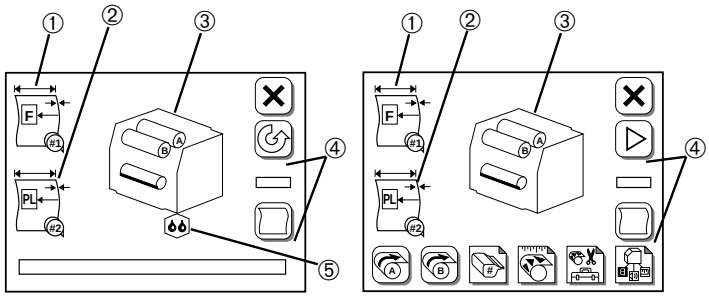


Figure 2.12 The Run Screen (left) and the Pause Screen (right).
①—Media status, supply A. ②—Media status, supply B.
③—Engine status. ④—Job status. ⑤—Humidifier status.

Viewing Media Status

When you press Unload to rewind media out of the drum and back into the supply cassette:

- The supply rollers shift and grip the leading edge of the media from the alternate supply cassette.
- The control panel display changes to show this condition.

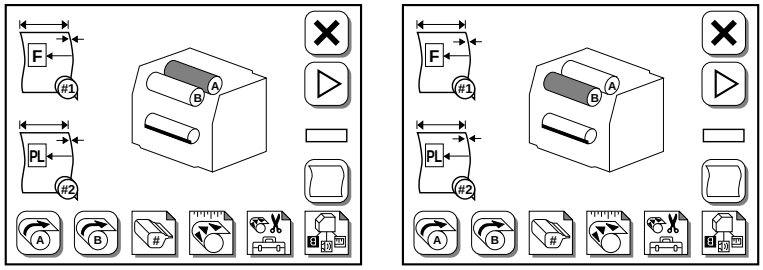


Figure 2.13 The control panel indicates which media supply is currently gripped by the supply rollers.
Left, supply B is unloaded; the supply rollers have gripped supply A.
Right, supply A is unloaded; the supply rollers have gripped supply B.

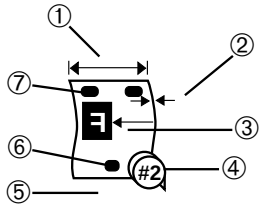


Figure 2.14 The media status display.
①—Media width. ②—Media Thickness. ③—Media type, alignment mode, and imaging mode. ④—Cassette program number. ⑤—Media remaining. ⑥—Tail punch, Avantra 25, 30, and 44 only. ⑦—Head punch.

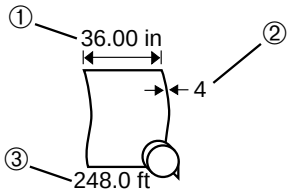


Figure 2.15 Sample of Media-Specific Information.
①—Media width. ②—Media thickness (in mils). ③—Media remaining.

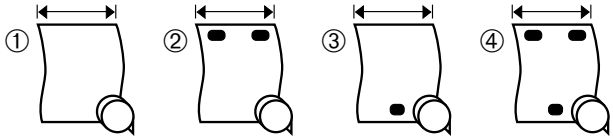


Figure 2.16 Punch modes. Adjust in Cassette Screen.
These symbols are used as a convention to represent
the different punch configurations that are available.
①—Punches off. ②—Head punches on.
③—Tail punches on, Avantra 25, 30, and 44 only.
④—Head and tail punches on, Avantra 25, 30, and 44 only.

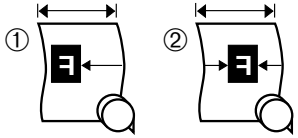


Figure 2.17 Alignment mode. Adjust in Configuration Screen.
①—Flush left. ②—Centered.

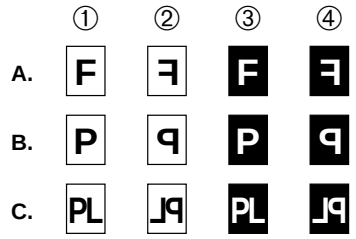


Figure 2.18 The four Imaging modes are listed left to right.
Change imaging mode using the Configuration Screen.
①—Positive right reading. ②—Positive wrong reading.
③—Negative right reading. ④—Negative wrong reading.
The three media types are listed top to bottom.
Change media type using the Cassette Screen.
A—Film. B—Paper. C—Plate.

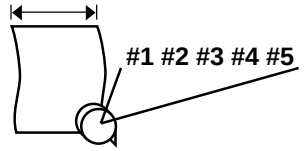


Figure 2.19 Cassette program number.
Select the program number using the Cassette Screen.

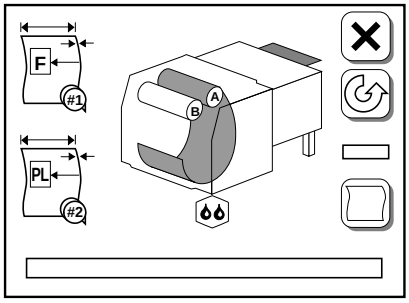


Figure 2.20 The Engine Status area in the center of the control panel indicates whether on-line or off-line processing is specified in the Configuration screen.

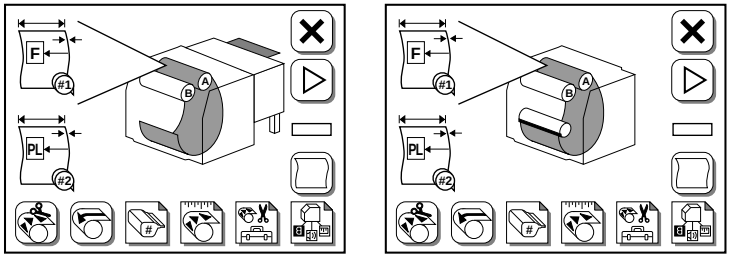


Figure 2.21 Left, on-line processing. The take-up cassette is removed and the on-line processor (OLP) is displayed.
Right, off-line processing. The take-up cassette is installed.

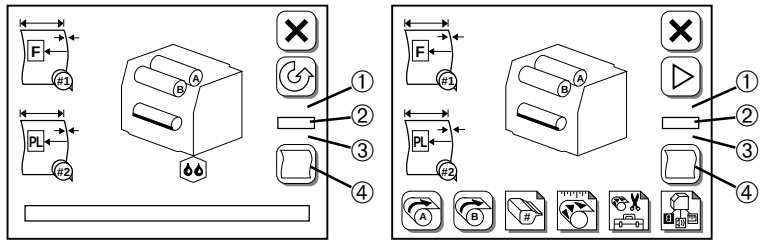


Figure 2.22 Job status display. Run Screen (left) and Pause Screen (right).
①—Current resolution. ②—Current exposure.
③—Media past the cutter. ④—Job counter.

Current Resolution: Displays the imagesetter's current setting for resolution.

- The imagesetter changes resolution based on commands embedded in the file that is being imaged or commands downloaded to the RIP from the front-end computer.

Current Exposure: Displays the current exposure value.

- When the imagesetter changes resolution, it automatically uses the exposure specified in the Cassette Setup screen for that resolution.

Media Past the Cutter: The imagesetter displays the amount of media that has been advanced past the cutter.

Job Counter: The number inside the Display Job History button is the number of images in the drum and take-up cassette.

- If the imagesetter is imaging a job, this number includes the job being imaged.
- The counter advances every time a job is started, even if you abort the job before it is complete.

Viewing Humidifier Status

The Run screen indicates if the Humidifier is on and running at the correct humidity or if it the humidity is too low. The humidifier maintains the relative humidity in the imagesetter drum at 50% ±5%.

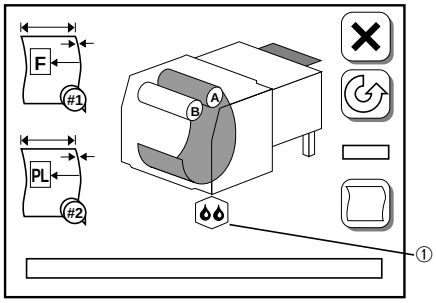


Figure 2.23 ①—Humidifier on.

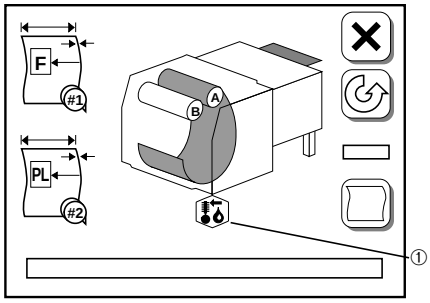


Figure 2.24 ①—Humidity low.

Monitoring the Amount of Media in the Supply Cassettes

- Specify the Supply Alarm amount on the Feed Amounts screen under the Pause screen.
- When the amount of media remaining in the currently loaded supply cassette drops below this amount, an alarm icon appears.
- The alarm blinks until you reload media.
- The imagesetter continues imaging until the supply cassette is completely empty. At this point, error message 4, Out of Media, appears on the control panel.

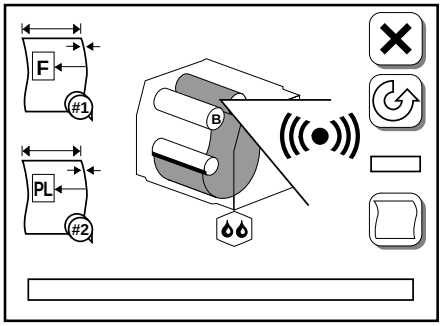


Figure 2.25 Supply alarm icon.
Appears in both the Run and Pause screens.

Monitoring the Amount of Media in the Take-up Cassette

- Specify the Take-up Alarm amount on the Feed Amounts screen under the Pause screen.
- When the media fed into the take-up cassette exceeds this amount, an alarm icon appears.
- The alarm blinks and the imagesetter goes into Pause Pending mode; it goes into Pause mode when the current job is finished.
- When the Pause screen appears, feed and cut the media, remove the full take-up cassette, and put an empty cassette in its place.
- To override the alarm, press Run. The imagesetter goes to the Run screen and begins the next job; it goes into Pause Pending mode again and then into Pause mode at the end of this job.
- You also can increase the Take-up Alarm amount. When the imagesetter is in the Pause screen, press Feed Amounts, change the alarm amount and continue imaging.

CAUTION: The maximum limit for the take-up cassette is 100 feet (30.4 m) with 4 mil media. Exceeding this limit can scratch the media or jam the cassette.

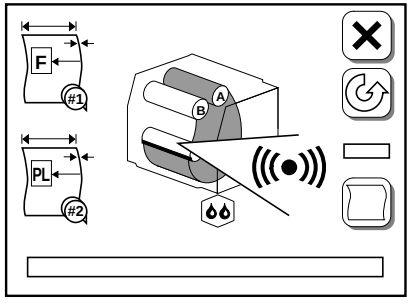
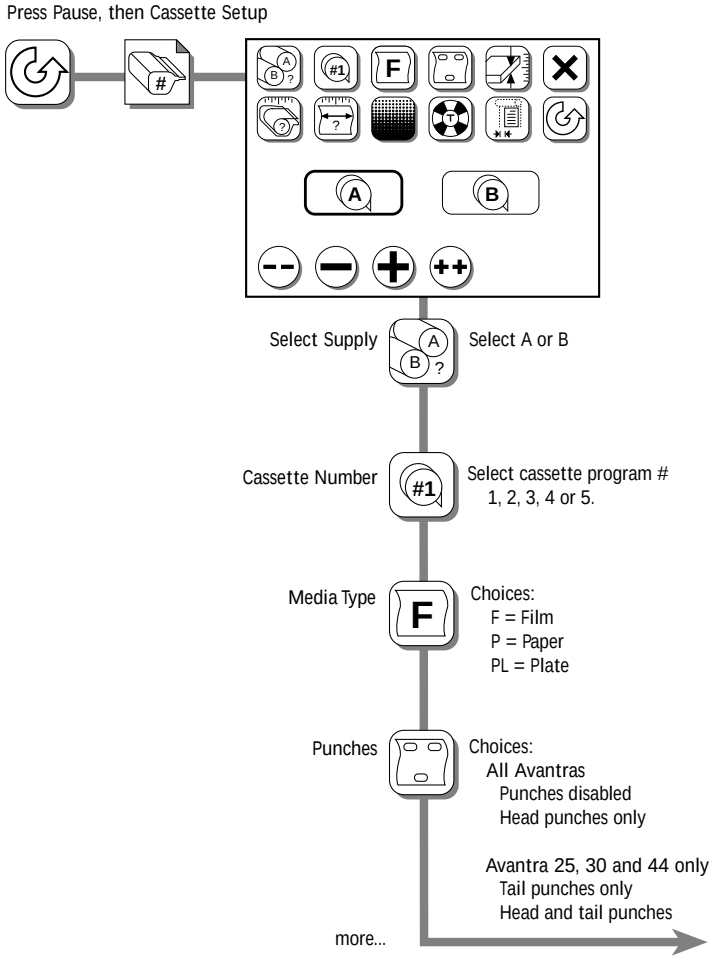
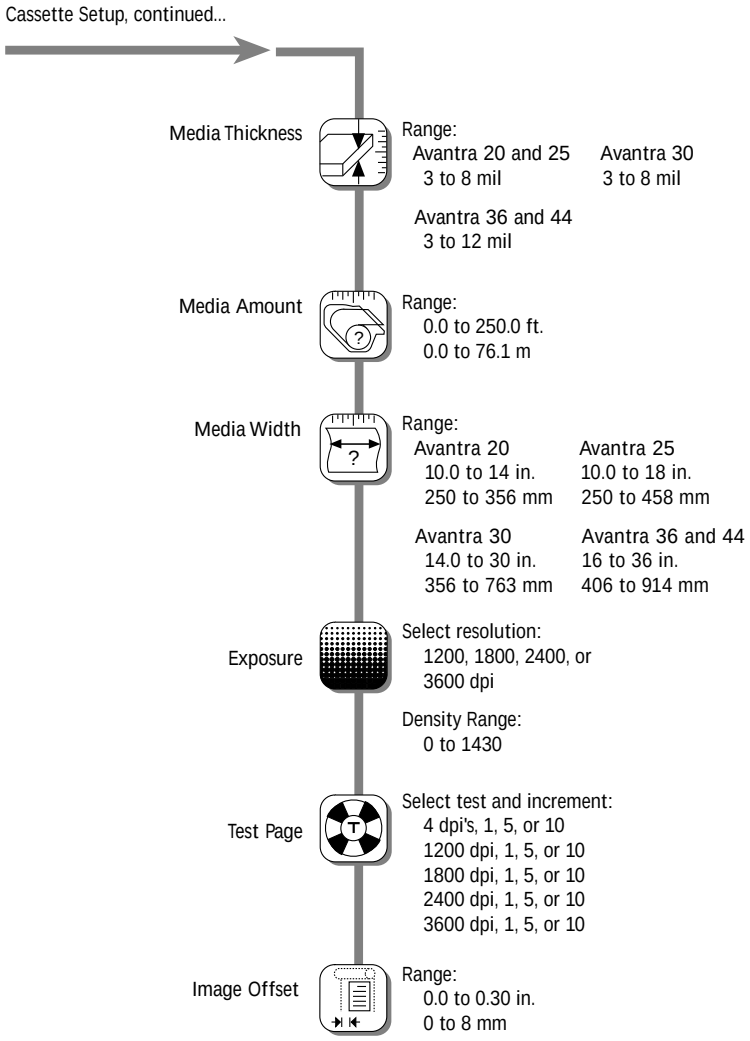


Figure 2.26 Take-up alarm icon.
Appears in both the Run and Pause screens.

The Cassette Setup Screen





❖ *Note: The Avantra 25E does not have the 3600 dpi setting. As a result, 3600 dpi is not an available selection for resolution and test pages.*

Definition of Cassette Setup Functions

Select Supply: The supply cassette to be used.

Cassette Number: The number of the cassette program that contains the preset supply cassette parameters for the selected supply cassette. See Storing Supply Cassette Parameters later in this section.

Media Type: Type of media (film, plate, or paper) in the selected supply cassette.

Punches: Whether punches are enabled or disabled. For Avantra 20 and 36: head punches only. For Avantra 25, 30, and 44: head punches, tail punches, or head and tail punches.

Media Thickness: Thickness of the media in the selected supply cassette.

Media Amount: Amount of media (length of media remaining on the media roll) in the selected supply cassette.

Media Width: Width of media in the selected supply cassette.

Exposure: Resolution and density range to be used for imaging.

Test Page: The resolution and exposure increments to be used for imaging the test page. See the Exposure Tests section in this user guide.

Image Offset: Lets you set an amount by which an image will be offset from the left side of the media. You can use this fine-tuning adjustment to move the image on a plate, so that the transfer punches do not make holes in the image.

- *Note: On some models, certain functions, such as dual supply cassettes and media punches, are extra-cost options. If an option is not installed, the icon that controls it is grayed out (dimmed).*

Using Cassette Setup Functions

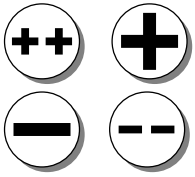
The steps for using the Select Supply and Exposure functions differ slightly from those of the other Cassette Setup functions. Instructions for using Select Supply and Exposure appear later in this section.

The steps for using the other Cassette Setup functions are:

1. Select a function.

For example, press Media Width.

2. Use the Plus, Plus Plus, Minus, and Minus Minus



Press to display the value you want.

3. Press Accept.

Press Accept to confirm your settings.

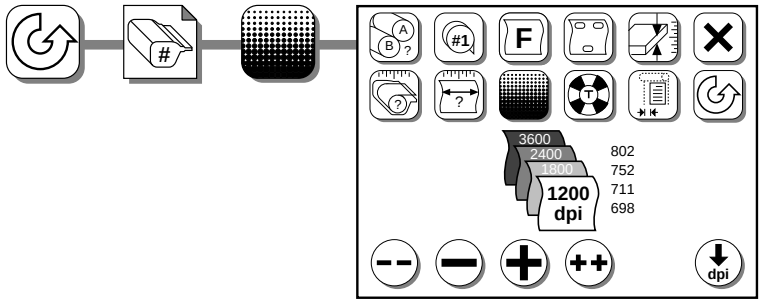
Press Cancel to reject your new settings.

Press Abort to cancel and return to the Pause screen.

Setting the Imaging Exposure

You must specify an exposure setting (density range) for each resolution that you use.

The steps for selecting the exposure are:



1. Select resolution:

dpi

1200, 1800, 2400 or 3600 dpi

2. Adjust exposure:

Density Range: 0 to 1430

3. Accept or cancel:

4. Repeat as needed:

dpi

Adjust exposure for other resolutions as required.

- *Note: You must run exposure tests to determine the optimum exposure setting for your work. Run tests for each media type and each imaging resolution before you begin production.*

- *Note: The Avantra 25E does not have the 3600 dpi setting. As a result, 3600 dpi is not an available selection for resolution.*

See *Chapter 3: Running Exposure Tests* in this user guide for information on running and evaluating test pages.

Storing Supply Cassette Parameters

You can define up to five different sets of supply cassette parameters and store each of them under its own cassette program number. If you define and use cassette parameters, you can change a group of parameters on the SelectSet Avantra imagesetter just by selecting a different cassette program number.

Consider this example:

A shop uses film in three different widths. Operators frequently need to change film width. Cassette 1 is loaded with 16-inch (305 mm), cassette 2 is loaded with 24-inch (355 mm), and cassette 3 is loaded with 36-inch (458 mm) film. When changing supply cassettes, the operator changes the cassette number at the control panel. The imagesetter reads the stored parameters from memory.

Consider these advantages:

- Save time by not having to key in a new set of parameters.
- Reduce the chances of operator error.
- Easily track media remaining in a cassette.

List of Programmed Supply Cassette Parameters

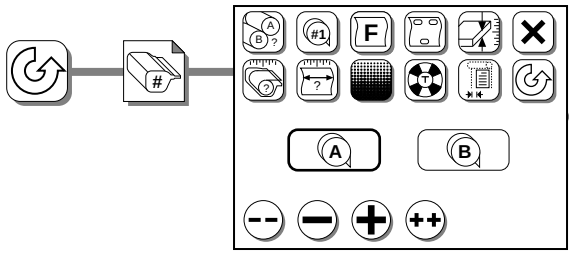
This table lists the different cassette parameters and provides space for recording the settings you use. Make a copy of this form to keep in your work area.

Cassette Number	1	2	3	4	5
Media Type					
Punches					
Media Thickness					
Media Width					
Exposure 1200 dpi					
Exposure 1800 dpi					
Exposure 2400 dpi					
Exposure 3600 dpi					

You can also record information directly on the supply cassette. There is a blank white space on the back of the cassette where you can write with an erasable marker. For example, you might choose to record the media remaining amount in this space.

Specifying a Supply Cassette and Program Number

Once you select a supply cassette, assign a cassette program number to it so you can use preset parameters as follows:



Select Supply A or B:

1. Press Select Supply.

2. Press Plus or Minus to highlight the supply you want and continue.

Select Cassette Program Number:

1. Press Cassette Number.

2. Press Plus or Minus to highlight the cassette number you want.

3. Press Accept.

The cassette number you select is assigned to the selected supply.

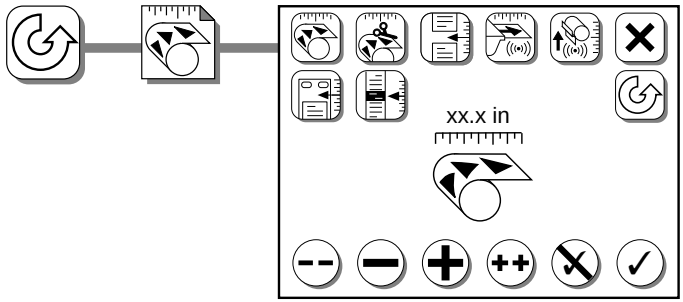
After you select a cassette number, all parameters you change affect that cassette. You can change or examine parameters for a cassette that is not currently installed in the imagesetter.

You cannot assign the same cassette number to both supplies. For example:

- Cassette 1 is specified as Supply A.
- You select Supply B.
- You can specify cassettes 2, 3, 4 or 5 for Supply B.
- You cannot specify cassette 1 for Supply B.

The Feed Amounts Screen

Press Pause, then Feed Amounts.



Feed Amount

Range:
Avantra 20 and 25
0.0 to 39.0 in
0 to 99 cm
Avantra 30
1.4 to 39.0 in
4 to 99 cm
Avantra 36 and 44
0.0 to 78 in
0 to 198 cm

Feed Cut Amount

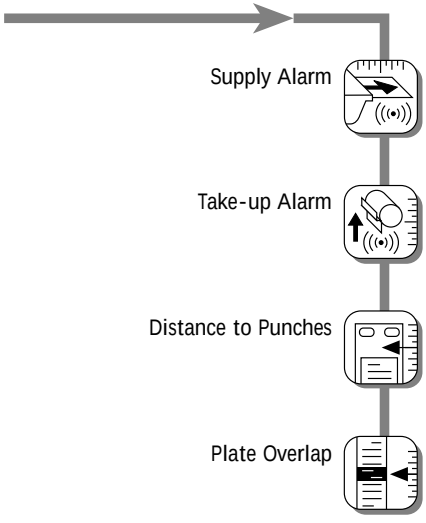
Range:
Avantra 20, 25, and 30
0.0 to 39.0 in.
0 to 99 cm
Avantra 36 and 44
0.0 to 78 in.
0 to 198 cm

Interpage Spacing

Range:
0.0 to 10.0 in.
0 to 25.4 cm

more...

Feed Amounts, continued...



Definition of Feed Amounts Functions

Feed Amount: Media fed when you use the Feed button in the Utilities screen or when you send a feed command from your front-end computer.

Feed and Cut Amount: The amount of media fed between the most recent job and a cut. Used by the Feed and Cut function on the Pause screen for off-line processing. For on-line processing with the Avantra 30, the minimum feed and cut amount is 10 inches (25 cm). With the Avantra 36 and 44 imagesetters, the minimum feed and cut amount is 13.3 inches (34 cm).

Interpage Spacing: The amount of media fed between jobs. For the Avantra 30, 36, and 44 imagesetters, a minimum interpage gap of 0.6 inches (1.0 cm) is recommended.

When the imagesetter is using a take-up cassette, the actual Interpage Spacing will be as you have set it from the Feed Amounts Screen, in the range from 0.0 to 10.0 in. (0 to 99 cm). When the imagesetter is using the on-line processor, it overrides the amount set for Interpage Spacing. With tail punches on, the maximum Interpage Spacing is 0.8 in. (2 cm). With tail punches off, the maximum Interpage Spacing is 8 in. (20 cm).

Supply Alarm Amount: When the amount of media remaining in a supply cassette is less than this amount, an alarm icon appears.

Take-up Alarm Amount: When the amount of media fed into the take-up cassette is greater than this amount, an alarm icon appears.

Distance to Punches: Distance from the center of the top punches to the leading edge of the image.

Plate Overlap: The amount that images overlap when imaging is being performed on plate material. For more information on using plate material as the imaging media, see *Using Plate Material* in the *Media Handling* section of this user guide.

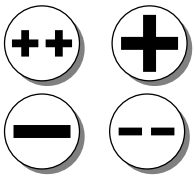
Using Feed Amounts Functions

The steps for using Feed Amounts functions are:

1. Select a function.

For example, press plate overlap.

2. Use the Plus, Plus Plus, Minus, and Minus Minus



Press to display the value you want.

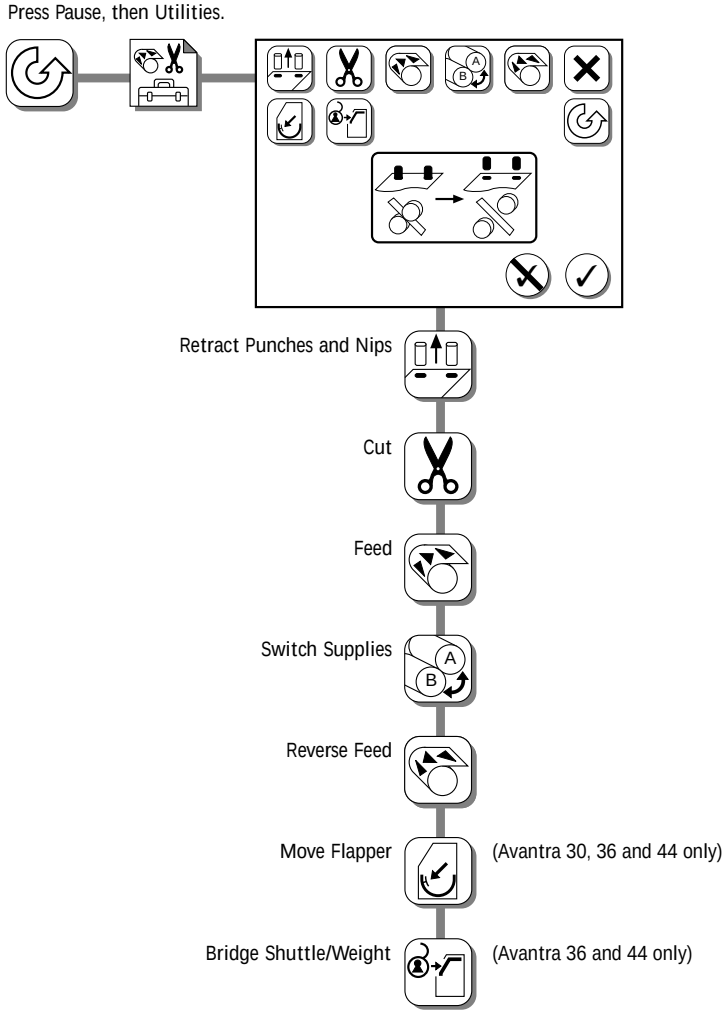
3. Press Accept.

Press Accept to confirm your settings.

Press Cancel to reject your new settings.

Press Abort to cancel and return to the Pause screen.

The Utilities Screen



Definition of Utilities Functions

Retract Punches and Nips: Rollers, called nip rollers or supply rollers, and punches hold media in place. Press Retract Punches and Nips to release media. Use this function to clear jammed media.

Cut: Cuts media with no media feed. Before the imagesetter makes the cut, it checks to make sure that at least 6 in. (15.3 cm) has been fed past the cutter. This prevents you from cutting a short piece of media that could slip between the feed rollers and cause a jam.

Feed: Feeds the amount of media specified by Feed Amount in the Feed Amounts screen.

Switch Supplies: Use this function when the supply rollers are not set to the correct position for the supply cassette that you want to load or remove.

Reverse Feed: Use this function to unload media when a media jam or carriage jam prevents you from using Unload in the Pause screen. Rewinds media into the supply cassette without making a Feed and Cut and without centering the media shields in the drum. If there is media in the take-up cassette, press Cut before Reverse Feed.

Move Flapper: Avantra 30, 36, and 44 only. Use this function to move the flapper, which holds media against the drum, before clearing media jams.

Bridge Shuttle/Weight: Avantra 36 and 44 only. On imagesetters with on-line processing, use this function to put the bridge in light mode. That is, use this to shift the weight of the bridge back, which makes it easier and safer to raise the bridge. Once you lower the bridge again, it automatically returns to heavy mode.

- *Note: If you press the Bridge Shuttle/Weight button to place the bridge in light mode and do not raise the bridge within 25 seconds, it automatically returns to heavy mode.*

Using Utilities Functions

The steps for using Feed Utilities functions are:

1. Select a function.

For example, press cut.

2. Press Accept.

Press once and the icon flashes.

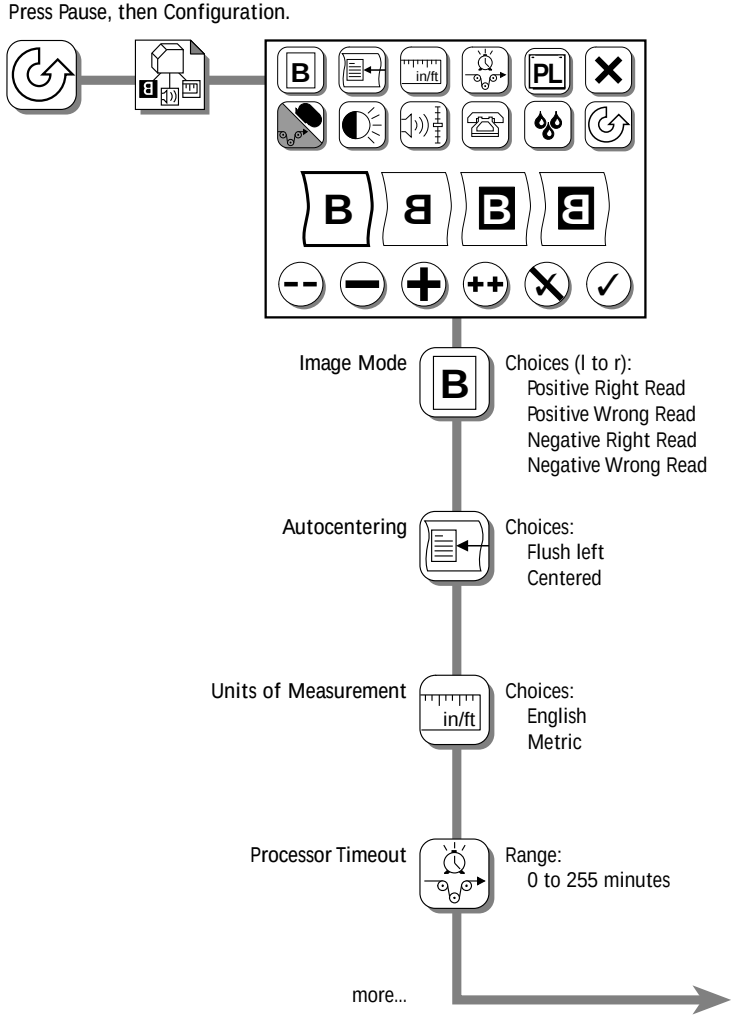
Press again to confirm.

OR

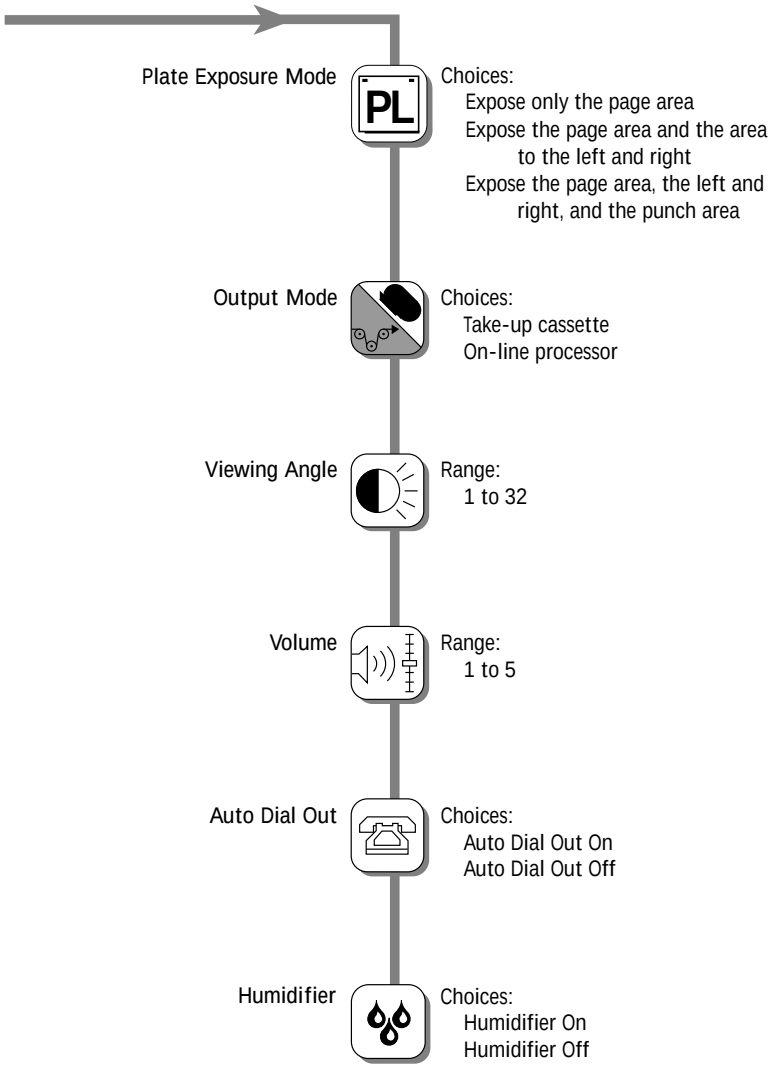
Press Cancel to reject your new settings.

Press Abort to cancel and return to the Pause screen.

The Configuration Screen



Configuration, continued...



Definition of Configuration Functions

Image Mode: Use this function to select the image mode as follows:

- Positive Right Reading:

  Type and images exposed; background unexposed.

  Right reading with the media emulsion side up.

- Positive Wrong Reading:

  Type and images exposed; background unexposed.

  Right reading with the media emulsion side down.

- Negative Right Reading:

  Type and images unexposed; background exposed.

  Right reading with the media emulsion side up.

- Negative Wrong Reading:

  Type and images unexposed; background exposed.

  Right reading with the media emulsion side down.

Autocentering: Use this function to automatically position the image within the media width. The choices are center or flush left.

Units of Measurement: Use this function to select the English (inches, feet, etc.) or metric units of measure.

Processor Timeout: For use with the on-line processor. Use this function to set the auto cut time delay after the last job. When the delay period ends with no activity at the imagesetter, the last job is advanced, cut, and fed to the processor. Set this value to 0 to shut it off. Shorter timeout settings increase the amount of media wasted.

❖ *Note: Be careful not to set the Processor Timeout too short (i.e., 2 or 3 minutes). If you set it too short, the timeout may expire before the next job is sent from the RIP, wasting 4-5 in. of media between each job.*

Plate Exposure Area: The imagesetter exposes the pages you send from your front-end application on an area of the plate material. The imagesetter can expose some additional sections of the plate material as follows. See Figure 2.27 for illustrations of the plate exposure icons.

- No additional area
- An area to the left and right of the page
- An area to the left and right of the page as well as the punch area

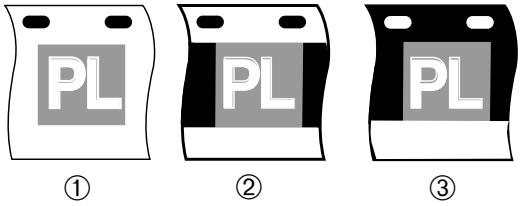


Figure 2.27 Plate Exposure icons. ①—No additional area.
②—An area to the left and right of the page.
③—An area to the left and right of the page as well as the punch area.

Output Mode: Use this function to change from on-line processing to off-line processing.

Viewing Angle: Use this function to change the contrast of the control panel screen for better viewing. The optimum setting is a matter of personal preference.

Volume: Use this function to change the volume of the control panel speaker.

Auto Dial Out: Use this function to turn Auto Dial Out on or off. A modem must be attached to the phone line for Auto Dial Out to be on.

Humidifier: Use this function to turn the Humidifier On or Off.

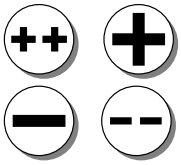
Using Configuration Functions

The steps for using Configuration functions are:

1. Select a function.

For example, press Auto Dial Out.

2. Use the Plus, Plus Plus, Minus, and Minus Minus



Press to display the setting you want.

3. Press Accept.

Press Accept to confirm your settings.

Press Cancel to reject your new settings.

Press Abort to cancel and return to the Pause screen.

Using Auto Dial Out to Report Fatal Errors

You can program an Avantra imagesetter to automatically dial out through its internal modem when it detects a fatal error. The Auto Dial Out button in the Configuration screen lets you turn this feature on and off.

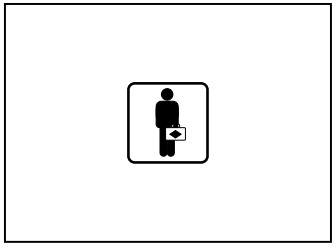
The icon button shows the current auto dial out mode.

Auto dial out on.

Auto dial out off.

When Auto Dial Out is on, the imagesetter follows this sequence when it detects a fatal error:

1. The imagesetter detects an error and displays the appropriate icon on the control panel.
2. After a four-second delay, the imagesetter automatically reboots.
3. When the software detects the fatal error during the reboot, it automatically dials out to report the error to the remote diagnostic computer. When the modem connects, the service communication icon appears:



❖ *Note: Do not shut off the system while dialing out or communicating with the Remote Diagnostics Center or an incomplete report will be sent.*

4. At the end of the communication, the diagnostic computer signals the imagesetter to reboot.

5. If the imagesetter operating software can complete the reboot in spite of the error, the Run screen appears on the control panel showing no activity, which indicates the imagesetter is in Idle mode, waiting to run a job.

If the imagesetter detects a fatal error when Auto Dial Out is off, follow the recovery procedures provided with the error messages in *Chapter 4: Diagnostic and Error Messages*.

❖ *Note: Keep in mind that, during long periods of unattended operation, whether Auto Dial Out is on or off, it is possible for the imagesetter to be halted by a fatal error that requires operator intervention.*

In the case of recurring fatal errors, you can attempt to turn off Auto Dial Out as follows:

1. During the four-second delay before the imagesetter reboots to dial out, turn off the imagesetter. Use the power switch to the left of the control panel.

2. Wait a few minutes, then restart the imagesetter.

3. If the imagesetter can boot up, turn off Auto Dial Out.

The example in the preceding section, *Using Configuration Functions*, shows how to select the Auto Dial Out mode. Use the procedure in that section to turn Auto Dial Out off.

Chapter 3

Running Exposure Tests

Introduction

The SelectSet Avantra laser imagesetters produce high-resolution type and graphic images. To attain the quality that SelectSet Avantra imagesetters can deliver, you need to use the optimum exposure setting for your imaging medium.

Before you begin production, always run and evaluate exposure tests. To maintain high-quality standards, repeat the exposure tests at regular intervals.

This section provides information on how to run exposure tests for SelectSet Avantra imagesetters and how to evaluate them to determine optimum exposure settings. It also provides information on how the development process affects the density of the processed medium so that you can control your overall imaging environment and ensure that you get the results you expect.

This chapter covers the following topics:

- Using the exposure test page
- Running exposure tests
- Evaluating exposure tests
- Controlling the development process

After you evaluate a test page and determine the optimum exposure settings for each combination of media and resolution you use, you need to set the exposure values at the imagesetter control panel. See *Chapter 2: Using the Imagesetter Control Panel* earlier in this user guide for information on how to use control panel functions to set the imaging exposure.

Using The Exposure Test Page

Always image a test page to evaluate your exposure settings.

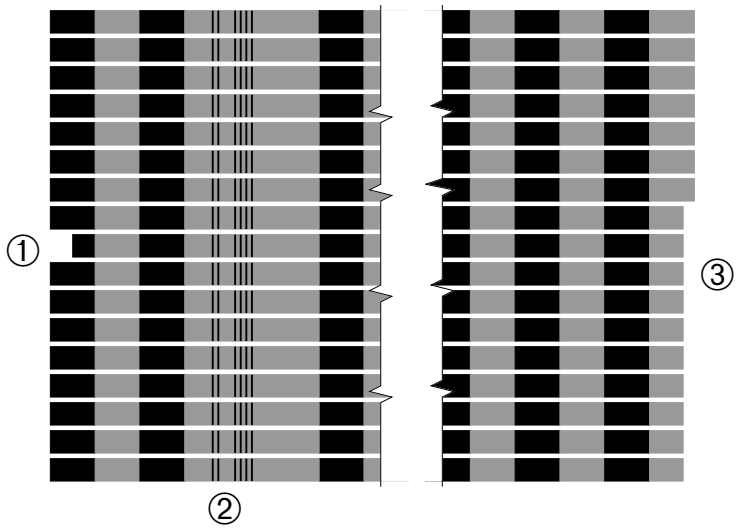


Figure 3.1 An example of a test page.
①—Reference band, indicated by an indent at the left side of the test page.
②—Imaging resolution, indicated by a bar code.
③—Increment value, indicated by indents at the right side of the test page.

Test Page Components

A test page is made up of a number of bands imaged at different exposures. The number of bands on the page varies with the width of the media.

- The bands consist of black 100% regions and gray 50% regions.
- A reference band near the center of the page is imaged at the current exposure set in the Cassette Screen. The reference band is indented at the left edge of the test page. See ① in Figure 3.1.

- The increment, or difference in the exposure setting from one band to the next, is indicated by indents at the right end of the test page. See Figure 3.2.

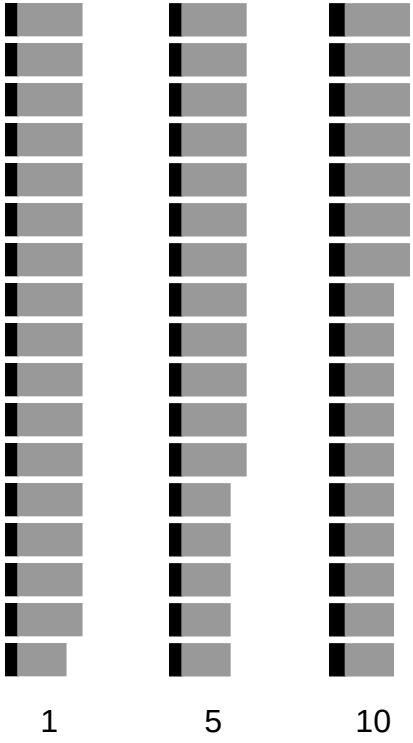


Figure 3.2 Indents show the increment value, expressed in exposure units.

- The resolution is indicated by a bar code. See Figure 3.3.

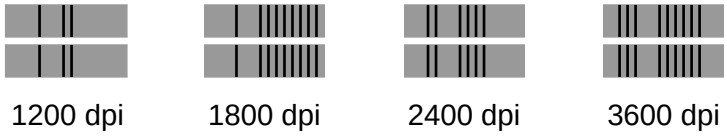


Figure 3.3 Bar codes indicate the resolution (dpi value) used to image a test page.

The 4 DPI's Test Page

The 4 dpi's test page is made up of four smaller test images.

- Each image uses a different resolution.
- The reference band for each image is exposed at the current setting for that resolution.
- All four images use the same increment value.

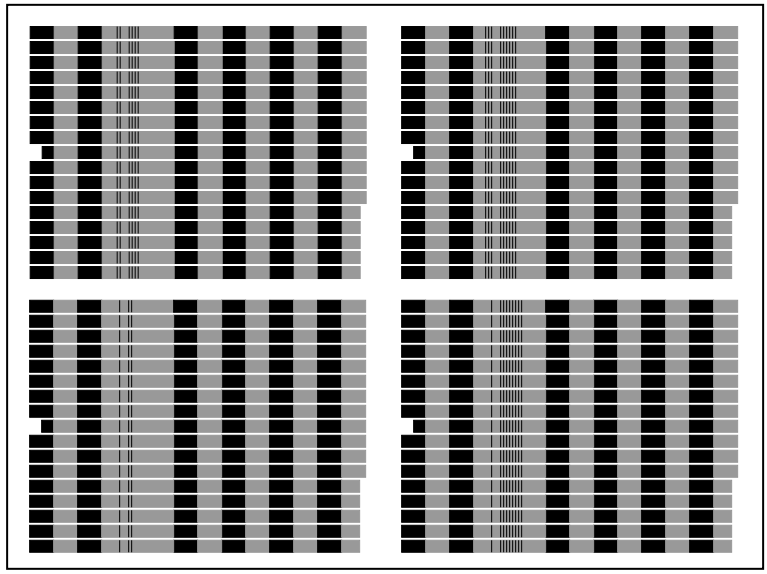


Figure 3.4 The 4 dpi's test page.

Running Exposure Tests

Before you begin production, run and evaluate exposure tests to determine the optimum exposure setting for each resolution. To maintain high-quality standards, repeat this procedure at regular intervals.

When to Image a Test Page

Image a test page:

- When you first use a new imaging medium (for example, when you first change from film to plate).
- When you change emulsion batches. (The product label attached to each case and each roll of Agfa photographic media is stamped with a number that identifies the emulsion batch.)
- When you load a new roll of media or when you replace the chemicals in your media processor.
- When you change processing conditions (new processor, different type of processing chemicals, and so on).
- At some regular interval to ensure quality control.

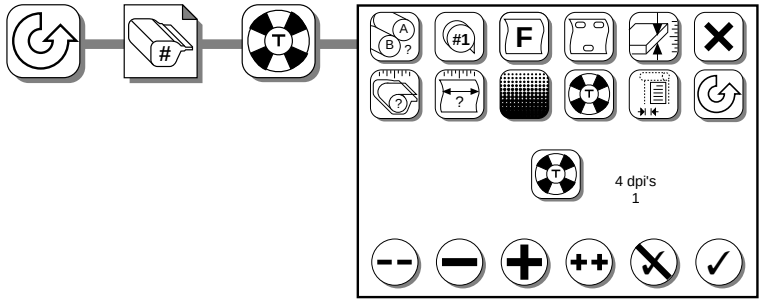
❖ *Note: Run separate exposure tests for each resolution setting. The optimum exposure value varies for each one.*

How to Image a Test Page

Basic Steps

The basic steps for imaging and evaluating a test page follow:

1. Run a test page from the control panel.
2. Process the medium.
3. Evaluate the processed medium.
4. Use your results to set the imagesetter exposure.



1. Select a test page:

Select test:
4 dpi's, 1, 5, or 10
1200 dpi, 1, 5, or 10
1800 dpi, 1, 5, or 10
2400 dpi, 1, 5, or 10
3600 dpi, 1, 5, or 10

2. Image the page:

Press Accept to image the test page.

Press Abort to cancel and return to the Pause screen.

Press Cancel to reject your new settings and remain in the Cassette screen.

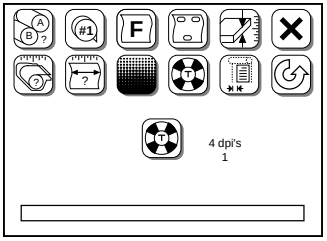
Guidelines

When selecting an increment value, follow these guidelines:

- An increment value of 10 is useful when you are not sure what the exposure setting should be (for example, when evaluating a new type of media). The higher value yields the widest range of exposures on the test image.
- Use the lower values (5 or 1) when you have a better idea what the exposure setting should be.
- In tests run with higher increment values, the lowest and highest exposures may be far out of range. In this case, determine which exposure setting is closest to the results you need, set that as the exposure, then run the test again using a smaller increment value.
- Expect each resolution to have a unique optimum exposure.

When you image a test page, the imagesetter advances the exposed media out of the drum.

While the test page is being imaged, a progress bar appears at the bottom of the Cassette Screen.



❖ *Note: When you use an on-line processor, the Avantra imagesetter automatically advances, cuts, and feeds an imaged test page to the processor if the Processor Timeout function in the Configuration screen is turned on (set to any valid value other than 0).*

Evaluating a Test Page

After you process the exposure test page, read and evaluate it. Use a densitometer to measure the density and determine which exposure is the best for your purposes.

How to Read a Test Page

To read the exposure values for each band on a test page, hold the page with the reference band indent to the left and the increment value indents to the right. See Figure 3.5.

The imagesetter follows this pattern to select exposure settings for each band on the test page:

Higher exposures toward the top of the page...

Step +3	=	current exposure + (3 x increment value)
Step +2	=	current exposure + (2 x increment value)
Step +1	=	current exposure + (1 x increment value)
Reference band		(current exposure)
Step -1	=	current exposure - (1 x increment value)
Step -2	=	current exposure - (2 x increment value)
Step -3	=	current exposure - (3 x increment value)

Lower exposures toward the bottom of the page...

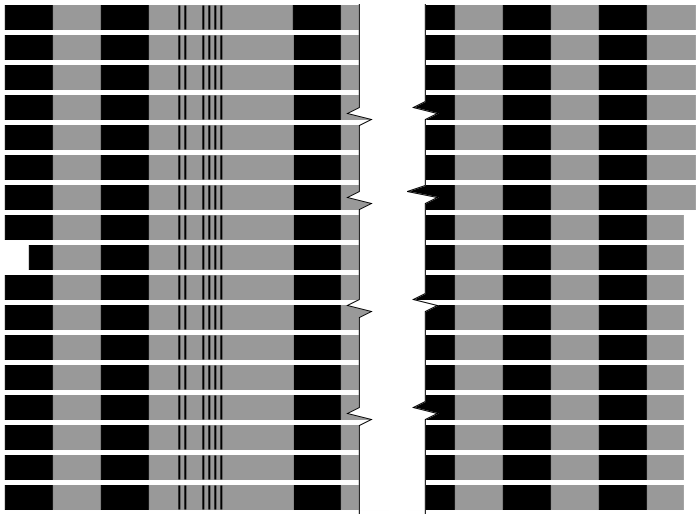


Figure 3.5 To read a test page, hold it like this.

For example, if the current exposure setting is 592 and the increment value is 10:

Higher exposures...

Step +3 (592) + (3 x 10) = 592 + 30 = 622
Step +2 (592) + (2 x 10) = 592 + 20 = 612
Step +1 (592) + (1 x 10) = 592 + 10 = 602
Reference band (592)
Step -1 (592) - (1 x 10) = 592 - 10 = 582
Step -2 (592) - (2 x 10) = 592 - 20 = 572
Step -3 (592) - (3 x 10) = 592 - 30 = 562

Lower exposures...

Using a Densitometer

Use a densitometer to measure density and determine optimum exposure.

❖ *Note: Make sure that you know how to use your densitometer before you begin the evaluation procedure.*

Density

Density is the darkness of a photographic image. It is expressed as a number. The higher the number, the darker the image.

The density of photographic images is affected by:

- Exposure
  The amount of light that reaches the photographic medium. Changing the exposure changes the density of the processed image.
- Development
  Changes to the developing conditions (i.e., processor speed, developer temperature) affect the density of the processed image.

Dmax is the maximum density that can be found in a photographic image.

Exposure

Exposure is the amount of light that reaches the media. As you increase the exposure value, you increase the amount of light that reaches the media to create an image.

Exposure affects density as follows:

- Underexposure
  The exposure setting is too low; there is not enough light. The Dmax is too low; black areas appear gray.
- Overexposure
  The exposure setting is too high; there is too much light. The Dmax is too high; fine screens will fill in, making tone reproduction inaccurate.
- Optimum Exposure
  The exposure setting is correct. The Dmax is within the correct range.

Types of Densitometers

- Transmission Densitometer
  Measures how much light passes through processed film. Use for evaluating film.
- Reflection Densitometer
  Measures how much light is reflected by an opaque image. Use for evaluating photographic paper, plate material, or press print.

Controlling the Development Process

Development is the chemical process that makes an image appear on exposed photographic material. You must control the development process to ensure that the processed medium will have the density you expect it to have based on the exposure settings you used.

Development Variables to Control

Development of the photographic image is affected by:

- The length of time the photographic material is in the developer, controlled by the processor speed
- Developer temperature
- Replenishment rate

Changes to any of these elements affect the density of the processed medium.

For optimum image quality, follow the manufacturer's specifications for processing media. This information is generally provided on a data sheet packaged with each roll of media.

Replenishment

Replenishment is the automatic replacement of the developer solution in a mechanical processor. The developer needs to be replenished because it loses its strength, or becomes exhausted.

Photographic developer becomes exhausted by:

- Exposure to air
  Ingredients in the developer mix with the oxygen in the air. This process, called oxidation, weakens the developer. The longer the developer sits in a processor, the more exhausted it becomes.
- Development
  Ingredients in the developer are used up in the chemical reaction that creates the photographic image. The more media you process, the more the developer becomes exhausted.

Replenishment rates for media processors are controlled two ways:

- Anti-oxidation or AOX function
  Compensates for exposure to air; built into most processors.
- Developer replenishment setting
  Compensates for the amount of media processed. On some processors, you can adjust this rate; others require adjustment by a service representative.

For more information, consult the user documentation for your processor or the manufacturer.

❖ *Note: Film requires more processing chemicals than paper because it contains more silver. When you use both film and paper daily in your production environment, we recommend that you set your processor to the replenishment rate for film. Under-replenishment for film produces inadequate working density. Over-replenishment for paper does not harm the end result.*

Chapter 4

Diagnostic and Error Messages

Introduction

This section provides information on diagnostic and error messages for all models of SelectSet Avantra imagesetters. Topics include:

- How the control panel displays error messages
- How to clear error messages from the control panel
- How to reset the system after errors occur
- List of error messages and corrective actions
- Procedures for correcting certain media and operator errors
- Definition of boot errors and procedures for bypassing them
- Remote diagnostics

Control Panel Display

When an error occurs, all icons on the control panel screen are replaced with a single error icon and the Pause button.

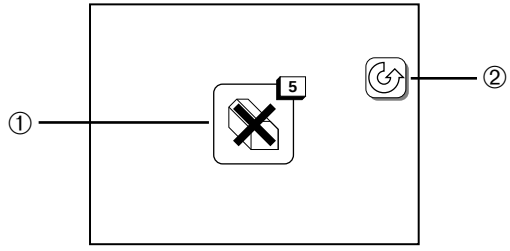


Figure 4.1 Control panel reporting error 5.
①—Error icon. ②—Pause button.

Clearing Error Messages

To determine what action is required, refer to the section *List of Error Messages and Corrective Actions* later in this chapter.

To clear the error message from the control panel:

1. Identify the error message, then press Pause.
2. Correct the problem and reset the system if necessary.

Resetting the System

To correct some errors, you need to reset the system. Errors that require a system reset are identified in the next section, *List of Error Messages and Corrective Actions*.

To reset the system:

1. Turn the imagesetter off and let it remain idle for a few minutes.

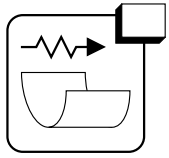
2. Restart the imagesetter. You may also need to reboot the RIP before you can continue.

List of Error Messages and Corrective Actions

This section lists all SelectSet Avantra imagesetter error messages and provides corrective actions. The error messages are listed in numerical order.

Some error messages apply to all Avantra imagesetters; some errors are model specific. The diagrams in the icons for the messages that apply to all Avantra imagesetters differ slightly for each model, but the error message number remains the same. (For example, the diagram of the imagesetter/processor unit in the icon for error message 27, Processor Alarm Signal, shows the buffer area for the Avantra 36 and 44 but does not include a buffer for the other models.)

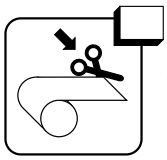
Always use the error message number when looking up error message information. The icons used as samples in this section are those for the Avantra 36 and 44 imagesetters.



1 Carriage Jam

Motion of the carriage has been blocked.

Reset the imagesetter and retry the original operation. If the error returns immediately, the carriage may be getting caught on media in the drum. See *Unloading Media Using the Utility Screen* later in this chapter.



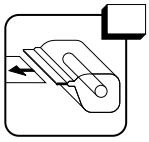
3 Cutter Jam

The power cutter is jammed.

Check for a media jam in the cutter area. Follow the procedures given in the *Troubleshooting Media Jams* section of this user guide.

Check to make sure that the cover is in place over the cutter. If the cutter interlock within the cover is not in place, the cutter will not operate (Avantra 36 and 44 only).

Clear the error and retry the cut operation. If the error persists, call for service.



4 Out of Media

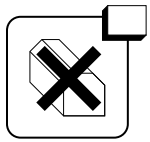
The supply cassette is empty.

Load media into the supply cassette.

You may find excess media extending out of the take-up cassette when you remove it after an Out of Media error message.

When the engine detects an out-of-media condition, it feeds all remaining media out of the drum and into the take-up cassette or OLP.

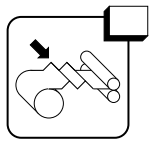
While the imagesetter feeds the media out of the drum, the icon for message 4 and an octagonal stop sign with a blinking hand appear. When the media feed is complete, the screen displays the message icon and the Pause button. If you have an OLP, this message appears after the processor has completed processing.



5 No Take-up Cassette

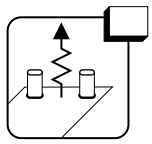
The take-up cassette is not in place or is not seated correctly.

Put in the take-up cassette. If the cassette is in the media compartment, make sure that it is seated correctly.



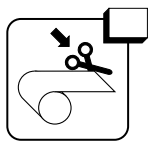
6 Media Jam

Go to the Utilities screen; press Feed, then Accept. If this does not clear the error, see *Unloading Media Using the Utility Screen* later in this chapter.



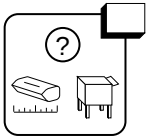
7 Output Side Punch Jam

Retry the operation. If the error persists, call for service.



8 Cutter in Media Path

Go to the Utilities screen; press Cut, then Accept.



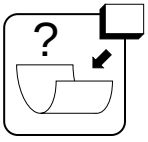
10 Output Device Mismatch

The imagesetter has detected a mismatch in output devices selected.

Check to make sure that the correct take-up cassette size called for in the cassette parameters is inserted into the imagesetter. If this is correct, make sure that the installation of the take-up cassette is not being attempted while on-line processing is being requested.

Clear the error code.

If the error persists, call for service.

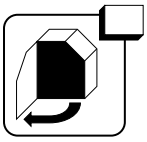


11 Carriage Hit End of Travel

Reset. Retry the operation. If the error persists, call for service.

12 Hardware Error

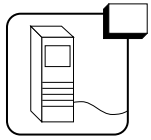
Reset. If the error persists, call for service.



13 Left Side Door Open

The left door is not securely closed.

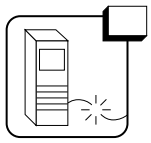
Close the door. When you clear the message, the imagesetter resets itself.



14 RIP Data Error

The RIP sent more data than it specified.

Reset. Process the job that generated the error. Make sure that it is complete. If the error persists, call for service.



15 No RIP

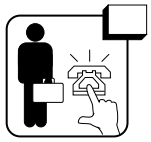
Check to see if your RIP is running. Check cable connections between RIP and imagesetter.

Reset. If the error persists, call for service.

17 Spinner Speed Error

Hardware error.

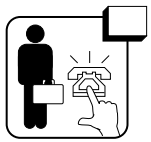
Reset. If the error persists, call for service.



22 Spot Aperture Jam

The device that adjusts the laser spot size is jammed.

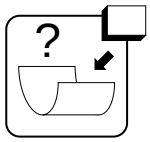
Reset. If the error persists, call for service.



23 Boot Diagnostic Error

Hardware error detected while attempting to boot.

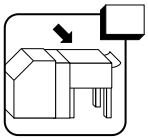
Reset. If the error persists, call for service.



25 Carriage Switch Broken

Hardware error.

Reset. If the error persists, call for service.



27 Processor Alarm Signal

The OLP is reporting an alarm. This message appears as an overlay on the screen that is currently displayed on the imagesetter control panel.

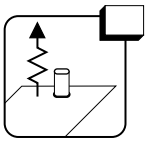
The imagesetter will finish the current job, but will not image another job or advance media until you correct the error at the processor.

Check the alarm indicator LEDs on the processor control panel. For more information, see the documentation that comes with the SelectSet Avantra OLP.

After you correct the error at the processor, the imagesetter automatically resumes operation. This may take a few minutes.

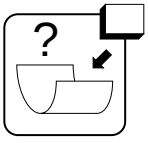
28 Hardware Error

Reset. If the error persists, call for service.



31 Input Side Punch Jam

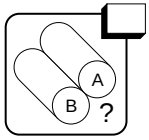
Reset and retry the command. If the error persists, call for service.



32 Carriage Position Error

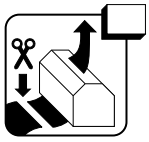
The system detected a problem with the carriage while imaging.

Reset. If the error persists, call for service.



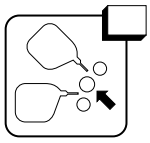
33 No Media Currently Loaded

Go to the Pause screen and load a media supply.



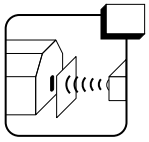
34 Media in Take-up Cassette

There is cut media in the take-up cassette. Remove the cassette. Replace it with an empty cassette.



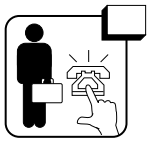
36 Supply Cassette Jam

Ensure that the supply cassette is positioned correctly. If necessary, unload and load the supply again. If the error persists, call for service.



37 Take-up Cassette Jam

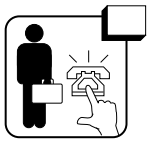
Make sure that the take-up cassette is positioned correctly and that nothing is blocking the end of the cassette from the sensor.



38 Focuser Jam

Hardware error.

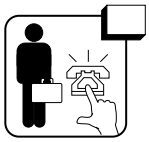
Reset. Call for service if the error persists.



39 Polarizer Error

Hardware error.

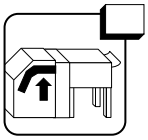
Reset. Call for service if the error persists.



40 Diagnostic Error

Hardware error.

Reset. Call for service if the error persists.



41 Bridge not in Position

Open the media compartment and make sure that the bridge is completely lowered.

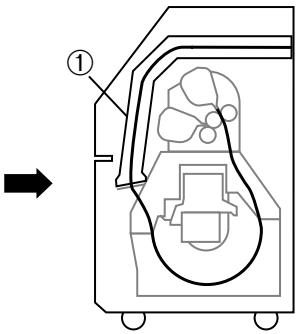
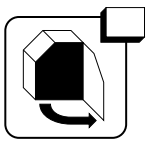


Figure 4.2 Make sure that the bridge ① is completely lowered.



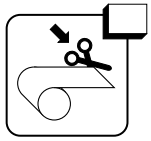
42 Right Side Door Open

The right door is not securely closed.

Close the door. When you clear the message, the imagesetter resets itself.

43 Internal Error

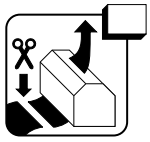
Reset. Call for service if the error persists.



44 Cut Not Allowed

Not enough media has been fed past the cutter.

If this message appears when you use Cut in the Utilities screen, follow the *Overriding Error 44: Cut Not Allowed* procedure later in this section.



45 Feed and Cut Before Changing Supply

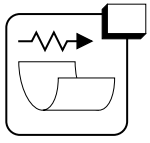
A media supply is already loaded and media from that supply has been imaged and advanced into the take-up cassette.

Feed and cut the media and remove the take-up cassette. Unload the current supply, then load the other supply.

46 Laser Bad

Hardware error.

Reset. Call for service if the error persists.



47 Carriage Speed Error

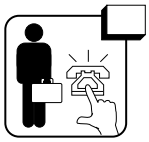
Motion of the carriage has been blocked.

Open the side panel to determine the problem. This error is usually caused by a crinkle in the media. Use Unload to clear the error.

48 Invalid Engine Configuration

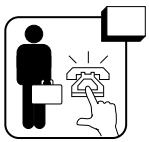
Hardware error.

Reset. If the error persists, call for service.



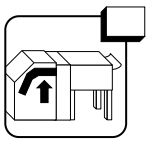
49 Hardware Error

Reset. If the error persists, call for service.



50 Hardware Error

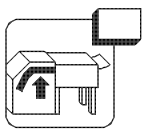
Reset. If the error persists, call for service.



51 Bridge Communication Error

An error occurred in communication between the imagesetter and the bridge.

Reset. If the error persists, call for service.



52 Bridge Jam Before Center Sensor

Open the media compartment and remove the top and bottom bridge covers.

Look for media in the lower section of the bridge. If you find no media in the bridge, lift the bridge up and look for media protruding from the media slot. See Figures 4.3 and 4.4.

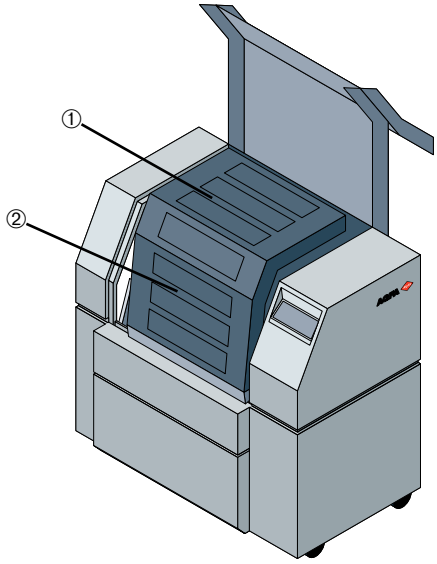


Figure 4.3 Bridge for the Avantra 20/25 on-line processor.
①—Top cover. ②—Bottom cover.

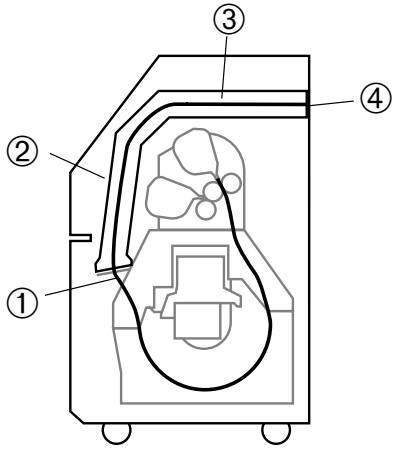


Figure 4.4 Locations on the Avantra 20/25 bridge media path.
①—Media slot. ②—Lower section.
③—Top section. ④—Entrance to media processor.

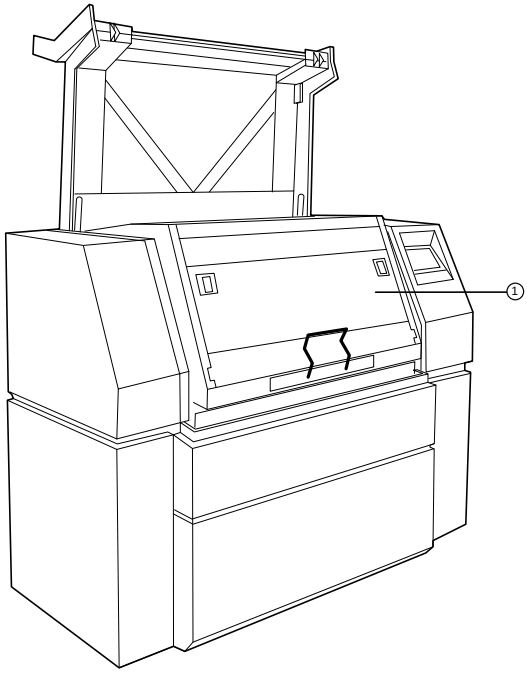


Figure 4.5 Bridge for the Avantra 30 on-line processor. ①—Top cover.

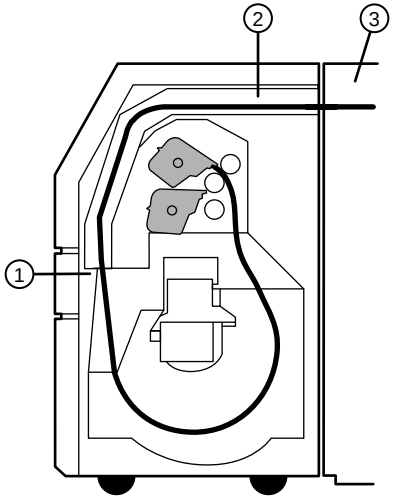
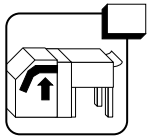


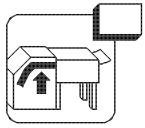
Figure 4.6 Locations on the Avantra 30 bridge media path. ①—Media slot. ②—Bridge ③—Entrance to media processor.



53 Bridge Jam At Processor Entry

Open the media compartment and remove the top bridge cover.

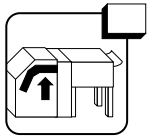
Open the bridge or buffer cover and look for media caught near the entry to the media processor. See Figures 4.3 and 4.4 for the Avantra 20 and 25. See Figures 4.5 and 4.6 for the Avantra 30. See Figures 4.7 and 4.8 for the Avantra 36 and 44.



54 Bridge Jam After Center Sensor

Open the media compartment and remove the top bridge cover.

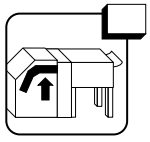
Look for media caught on the top section of the bridge. See Figures 4.3 and 4.4.



55 Bridge Motor Jammed

Open the media compartment and remove the top and bottom bridge covers.

Media could be caught anywhere on the bridge.



56 No Response, Bridge Entry Sensor

Open the media compartment and lift the bridge up out of the way.

Look for media protruding from the media slot. See Figures 4.3 and 4.4 for the Avantra 20 and 25. See Figures 4.5 and 4.6 for the Avantra 30. See Figures 4.7 and 4.8 for the Avantra 36 and 44.

If you find no media, remove the nip drive assembly. (This procedure is described in the *Troubleshooting Media Jams* chapter of this user guide.)

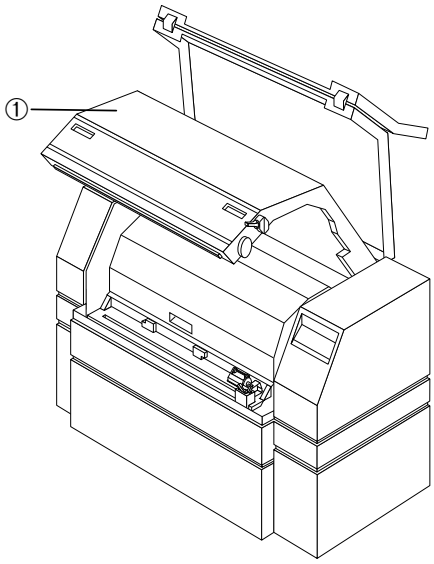


Figure 4.7 Bridge for the Avantra 36/44 on-line processor. ①

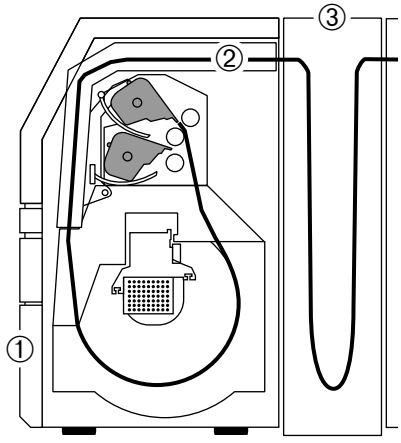
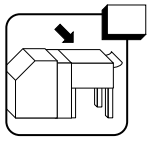


Figure 4.8 Locations on the Avantra 36/44 bridge media path. ①—Media slot. ②—Top section of bridge. ③—Buffer area.



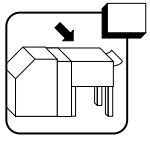
57 Processor Error

The on-line processor is reporting an Input Jam, an Exit Jam, or a Motor Overload error.

Remove the top cover of the processor. Check for media near the input rollers. If media exists, push it through the rollers and then reset the processor. If the media does not finish processing, remove it and close the cover.

Clear the error and check the on-line processor control panel. For information on the media processor, see the documentation that comes with the SelectSet Avantra OLP.

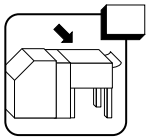
The imagesetter will abort the current job and will not image another job or advance media until the processor error is cleared.



58 No Processor Communication

The on-line processor is not communicating with the imagesetter.

Check the processor to make sure that it is turned on and that the cables are connected.



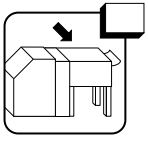
59 Processor Top Door Open

The top door in the on-line processor is open. This message appears as an overlay on the screen that is currently displayed on the imagesetter control panel.

The top door needs to be open when you use the processor off-line. For example, you can process media from another imagesetter by feeding it into the on-line processor through this door.

If this message appears and you are not currently using the processor off-line, check to make sure that the door is securely closed.

The imagesetter will finish the current job but will not image another job or advance media until the door is closed. After you close the door, the imagesetter automatically resumes operation.



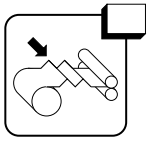
60 Processor Communication Error

There has been an error in the flow of messages between the processor and the imagesetter.

Reset the processor.

61 Hardware Error

Reset. If the error persists, call for service.

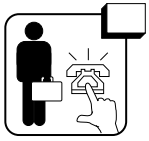


62 Media Error

The imagesetter has detected an error in the media path.

Press Pause, then Utilities, then Feed. In most cases, this will cause the imagesetter to display another error code. If error 62 repeats, feed media again.

If error 62 persists, physically check the current supply cassette to make sure that it is loaded with media.



63 Beam Compressor Jam

Hardware Error.

Reset. If the error persists, call for service.

64 Flapper Jam

Flapper is jammed.

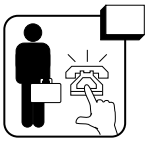
Go to the Utility screen and press Flapper to move the flapper. Follow the procedures given in the *Troubleshooting Media Jams* chapter of this user guide.

Reset. If the error persists, call for service.

65 Media Warranty Met

Information message.

Life media warranty has been met or exceeded. Auto dial out sends information to field service and displays this message during the next start up.

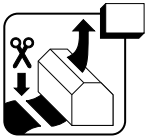


66 Continuous Media Feed

Media rollers are continuing to move with or without media feed.

Clear error code.

Reset. If the error persists, call for service.

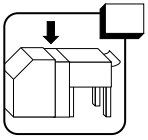


67 Media Blocking Take-up Sensor

Media is detected in the cutter area.

Remove and process the take-up cassette containing media. Check for media in the cutter area. Follow the procedures given in the *Troubleshooting Media Jams* chapter of this user guide.

Reset. If the error persists, call for service.

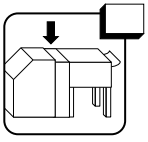


68 Jam in Buffer Before Buffer Entry Sensor

The buffer entry sensor does not sense media.

Remove the bridge covers and clear any media. Carefully reseat the bridge covers and close cover.

Reset. If the error persists, call for service.

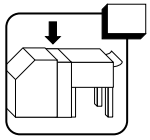


69 Jam in Buffer Before Purchase Sensor

Jam in Buffer area.

Remove the buffer top panel and cover and check for any media within buffer area. Replace the top panel and cover.

Reset. If the error persists, call for service.

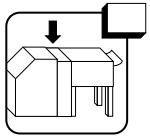


70 Jam in Buffer Before Exiting to Processor

The imagesetter is ready with media, but the buffer already has media at the processor entrance.

Uncover the buffer and clear media. Remove top panels of the bridge and clear media. Clear the error and repeat the task in process.

If the error persists, call for service.



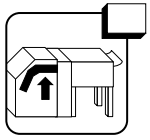
71 Jam Moving Buffer Carriage

The sensor is not detecting the buffer carriage movement.

Open the buffer top panel and covers and check for a possible carriage jam. Remove any jammed media. Check the carriage sensor flags for possible damage or mis-alignment.

Note that the buffer carriage may be moved manually without harming the assembly.

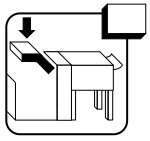
Reset. If the error persists, call for service.



72 Jam in Bridge Shuttle

The shuttle that adjusts the bridge weight is jammed.

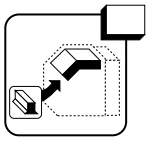
Reset. If the error persists, call for service.



73 Bridge Out of Position

An attempt was made to put the bridge in light mode while it is in the up position.

The bridge is already in light mode if it is in the up position. Clear the error code and continue.

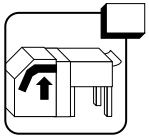


74 Foot Not Attached

An attempt was made to put the bridge into light mode when the bridge foot is already removed.

It is not necessary to use Bridge Shuttle/Weight to put the bridge into light mode if the bridge foot is not attached.

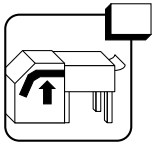
Clear the error code. Continue with the task in process.



75 Bridge Communication Overflow

An error occurred in communication between the imagesetter and the bridge.

Reset. If the error persists, call for service.

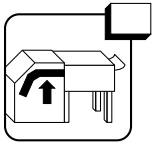


76 Media Jam in Bridge

Media passed the bridge center sensor but did not reach the bridge exit sensor.

Remove the media from the bridge area.

Reset. If the error persists, call for service.

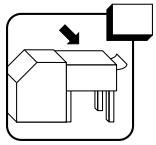


77 Media Jam in Bridge

Media entered the bridge but did not reach the first processor input sensor in the expected amount of time.

Remove the media from the bridge area.

Reset. If the error persists, call for service.

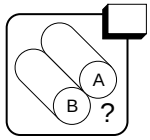


78 Media Jam at Processor Entry Roller

Media passed the first processor input sensor but did not reach the second processor input sensor.

Remove media from the entry roller area of the processor.

Reset. If the error persists, call for service.

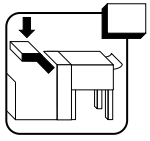


79 Media Load Is Not Allowed

An attempt was made to load media into the drum while some media still remains in the drum. (The supply-side drum sensor reports media is present. The take-up cassette side (media exit) drum sensor reports no media is present.)

Unload media from the currently loaded supply cassette. Access the drum area and verify that both supply cassettes are unloaded. If a cassette is still loaded, manually clear the media from the drum area. Then, make sure the leading edge of the media is correctly positioned at the “fingers” of each supply cassette.

Reset and load one of the supply cassettes. If the error persists, call for service.



80 Bridge Is Not In Light Mode

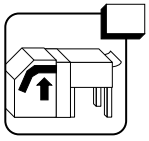
An attempt was made to raise the bridge while the bridge foot is attached and the bridge is in heavy mode.

Use the Bridge Shuttle/Weight icon on the Utility screen to shift the bridge weight into light mode and continue.

See the *Correcting Error 80: Bridge Is Not In Light Mode* section later in this chapter for detailed instructions on how to correct this error condition.

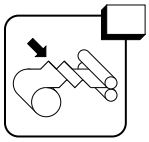
81 Vector in service

Reset. If the error persists, call for service.



82 Unknown bridge error

Reset. If the error persists, call for service.



83 Buckle in drum

Try to feed media by pressing the Feed button. If the error persists, clear the jammed media.

84 Missing spinner index pulses

Reset. If the error persists, call for service.

85 Extra spinner index pulses

Reset. If the error persists, call for service.

Errors 100 and Above

Error messages numbered 100 and above are displayed by diagnostic software that the imagesetter runs as it boots (powers) up. For more information, see *Boot Errors* later in this chapter.

Error messages 200 and up report bridge and buffer problems that occur during boot up.

Media and Operator Errors

This section contains detailed procedures for unloading media using the Utilities screen and for correcting some special error conditions.

Unloading Media Using the Utility Screen

Perform the following procedure to unload media using the functions in the Utilities screen:

1. Go to the Utilities screen.
2. If there is media in the take-up cassette, press Cut, then Accept to cut it.
3. Rewind media back into the supply cassette. Press Reverse Feed, then Accept.
4. Remove the supply cassette.
5. Remove any media that was bent or crumpled by the carriage shield (Avantra 20/25) or shroud (Avantra 30/36/44). Pull one to two feet (30 to 60 cm) of media out of the supply cassette, cut it off, and discard.
6. Put the supply cassette back into the imagesetter.
7. Go to the Pause screen and load the supply.
8. Retry the original operation.

If you cannot unload the media or the error persists after following this procedure, open the imagesetter and try to free the carriage. See the *Troubleshooting Media Jams* chapter in this user guide.

If you cannot correct the problem, call for service.

Overriding Error 44: Cut Not Allowed

When you press Cut in the Utilities screen, the imagesetter checks to make sure that at least 6 inches (15 cm) has been fed past the cutter. Message 44, Cut Not Allowed, appears if not enough media has been fed.

You can override this message and get the imagesetter to make the cut without advancing media by performing the following procedure.

To override error 44:

1. Go to the Utilities screen.
2. Press Cut, then Accept.
3. When message 44 appears, press Pause. You return to the Utilities screen.
4. Immediately press Cut, then Accept again.

❖ *Note: Use this override only if you are absolutely sure that at least 6 inches (15 cm) of media is past the cutter. If the cut produces a sliver of media less than 6 inches long, you may have trouble removing it.*

Correcting Error 80: Bridge Is Not In Light Mode

Lifting the bridge while it is in heavy mode can be dangerous if the bridge foot is attached. Therefore, when you attempt to lift the bridge, the system checks to see if the bridge foot is attached and, if it is attached, if the bridge is still in heavy mode.

If the bridge is in heavy mode and its bridge foot is attached, an alarm beeps and the error 80 icon appears on the control panel. The alarm continues to beep until you lower the bridge. The error 80 icon remains on the control panel until you press Pause.

Perform the following procedure to correct error 80:

1. Lower the bridge and press Pause to display the Pause screen.
2. Press Utilities to go to the Utilities screen.
3. Press Bridge/Shuttle Weight and press Accept. The Accept button flashes.
4. Press Accept a second time to start the shuttle motor. You will hear the shuttle motor running as the bridge weight is shifted to the back of the bridge. The shuttle motor is located in the back corner at the top right side of the bridge.

5. Wait until the shuttle motor stops running before you attempt to lift the bridge again. The bridge is not in light mode until the shuttle motor stops running.

CAUTION: Do not lift the bridge while the shuttle motor is running. Lifting the bridge while the shuttle motor is running can damage the motor and will cause it to burn out prematurely.

❖ *Note: Once the bridge is in light mode, it remains in light mode for about 25 seconds. After 25 seconds it automatically returns to heavy mode if you have not raised the bridge.*

6. When the shuttle motor stops running, you can safely lift the bridge.

Boot Errors

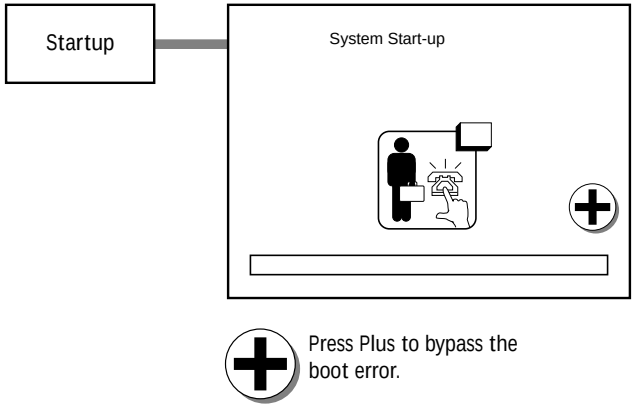
The SelectSet Avantra imagesetter runs a diagnostic program as it starts up. If the diagnostic program detects an error:

- When the internal modem is connected, the imagesetter automatically dials out to the remote diagnostic unit.
- When the internal modem is not connected, the error icon remains on the control panel.

❖ *Note: If your modem is not connected, write down the error message and call for service.*

Displaying Boot Errors

If an error occurs during bootup, the error icon and the Plus button appear on the control panel.



Bypassing Boot Errors

If you encounter an error code numbered 100 or above, try to bypass it. The system will attempt to complete its bootup.

To bypass boot errors:

1. Restart the imagesetter.
2. When the boot error is detected, an error icon and the Plus button appear on the screen.
3. Press Plus within ten seconds. The imagesetter will attempt to complete its bootup.

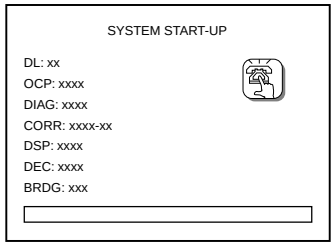
If the system cannot bypass the error and complete its bootup, make note of the error message and call for service.

- *Note: It is recommended that you report diagnostic errors even if you can bypass them. Diagnostic errors indicate there is a problem with your system that eventually will cause it to fail.*

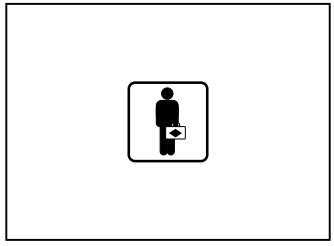
Remote Diagnostics

The imagesetter can be set up with an internal modem to communicate with a remote diagnostic computer.

To activate the modem and have it dial out to the remote diagnostic computer, press the Dial Out button that appears for about five seconds on the Start-Up screen when the system is booting up.



While the modem is active, the control panel looks like this:



CAUTION: Never turn off the imagesetter while the modem is active. Doing so could damage the imagesetter operating software.

Chapter 5

Imagesetter Maintenance

Introduction

This section provides instructions and guidelines for maintaining SelectSet Avantra imagesetters. It begins with maintenance procedures that apply to all models of SelectSet Avantra imagesetters and ends with additional, model-specific maintenance procedures.

Always refer to these maintenance instructions and guidelines when cleaning the imagesetter.

Universal Maintenance Procedures

To maintain any SelectSet Avantra imagesetter, you only need to keep it clean. For all models of the SelectSet Avantra imagesetter:

- Keep your work area as clean as possible.
- Clean the parts of the imagesetter as indicated in the following table.
- In addition, refer to the section *Model-Specific Procedures* later in this chapter for specific maintenance information on each mode.

Table of Universal Maintenance Procedures

Part	Interval	Cleaning Method
External panels	As required	Wipe with a damp cloth. Use a mild soap as a cleaning agent, if necessary.
Control panel	As required	Wipe with a damp cloth.
Take-up cassette compartment	Every two weeks	Vacuum or wipe with a clean, dry, lint-free cloth. Do not use cleaning agents of any kind. When vacuuming, use a clean attachment with soft bristles. Do not use metal or hard plastic attachments.
Take-up cassette exterior and interior	Once a month	Vacuum or wipe clean as described above. Open the take-up cassette by removing the six screws that hold the lid and base together.
Supply cassette compartment	Every two weeks	Vacuum or wipe with a clean, dry, lint-free cloth. Do not use cleaning agents of any kind. When vacuuming, use a clean attachment with soft bristles. Do not use metal or hard plastic attachments.
Supply cassette exterior and interior	Every time you load media	Vacuum or wipe clean as described above.
Supply rollers	Once a week	Remove supply cassettes. Wrap plastic packing tape around your hand with the sticky side out and press it against the rollers to pick up dirt. You can also use adhesive rollers used for removing lint from clothing. See Figure 5.1.

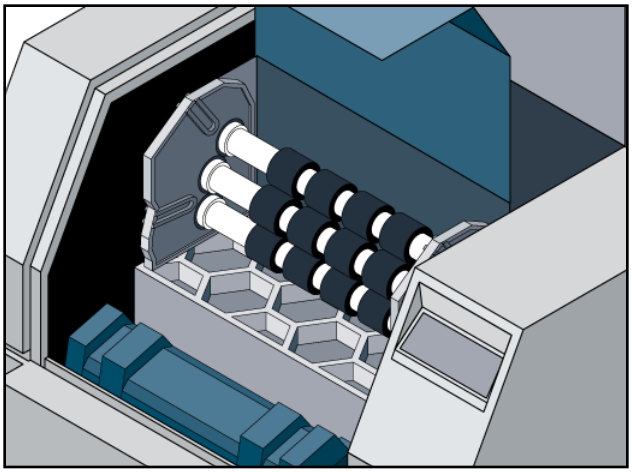


Figure 5.1 Supply rollers in the media compartment.

Model-Specific Procedures

Cleaning Avantra 20 and 25 Intake Filters

Check both the Electronics Enclosure Intake filter and the Drum Intake filter every day to make sure they are not blocked.

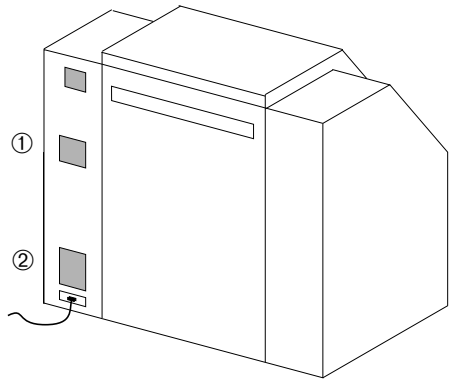


Figure 5.2 Rear view of the Avantra 20/25 imagesetter.
①—Electronics enclosure filter. ②—Drum intake filter.

- Clean the Electronics Enclosure Intake filter. This filter is approximately 1/4 in. (6 mm) thick and made of black plastic foam.

  Interval: Weekly.

  Method: Shut down the imagesetter. Open the right side top door. The filter is located on the inside back panel of the side door. Pull out the filter and vacuum it.

- Replace the Drum Intake filter. This filter is approximately 3/4 in. (19 mm) thick and is made of several different layers.

  Interval: Once a month or more frequently if necessary.

  Method: Shut down the imagesetter. From the rear of the imagesetter, pull out the filter and replace it. Use part number C00305-001. Contact your service provider for information about ordering replacement filters.

Cleaning Avantra 20 and 25 Punch Trays

Check the punch trays every three months. Perform the following procedure to empty them.

1. Turn off the imagesetter.
2. Open the left side bottom door. See Figure 5.3.
3. There are two punch trays, both below the imaging drum. They are bright red. Slide the trays out of the imagesetter to empty them.

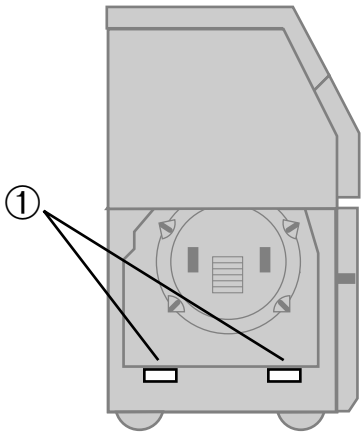


Figure 5.3 The Avantra 20/25 imagesetter with the left side door open. ①—The punch trays.

4. Replace the trays, close the left side door and restart the imagesetter.

Cleaning Avantra 30 Intake Filters

Check both the Electronics Enclosure Intake filter and the Drum Intake filter every day to make sure they are not blocked.

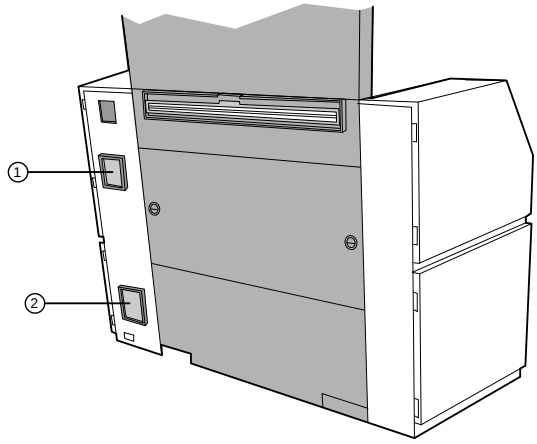


Figure 5.4 Rear view of the Avantra 30 imagesetter.
①—Electronics enclosure filter. ②—Drum intake filter.

- Clean the Electronics Enclosure Intake filter. The filter is approximately 1/4 in. (6 mm) thick and made of black plastic foam.

  Interval: Weekly.

  Method: Shut down the imagesetter. Open the right side bottom door. Reach inside and to the left and loosen the thumbscrew that retains the right side top door. Swing the right side top door open. See Figure 5.5.

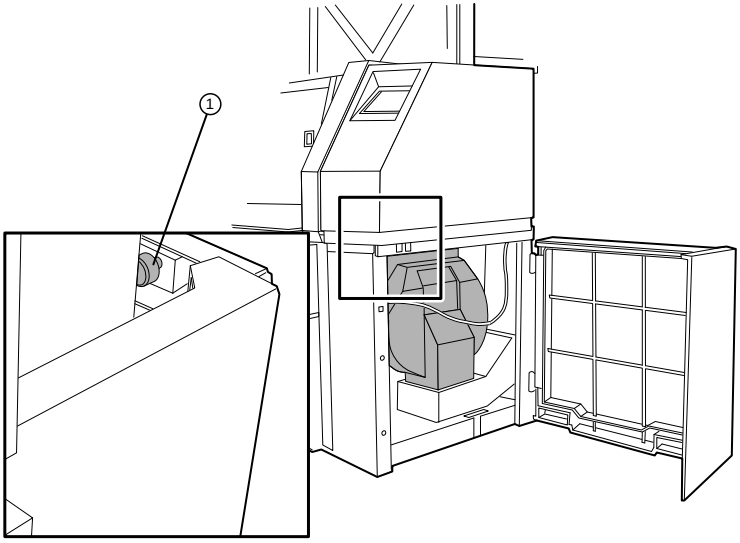


Figure 5.5 Opening the right side top door. ①—The thumbscrew.

The filter is located on the inside back panel of the side door. Pull out the filter and vacuum it.

- Replace the Drum Intake filter. This filter is approximately 3/4 in. (19 mm) thick and is made of several different layers.

  Interval: Once a month or more frequently if necessary.

  Method for imagesetters not connected to an OLP: Shut down the imagesetter. From the rear of the imagesetter, pull out the filter and replace it.

  Method for imagesetters connected to an OLP: Shut down the imagesetter. Open the center bottom panel on the right side of the OLP. Look to the left. You will see two large hoses that resemble dryer hoses. Remove the bottom hose by unscrewing the 4 wingnuts that attach it. Pull the hose off. Pull out the filter and replace it. Reattach the hose.

  For both methods, use part number C00305-001. Contact your service provider for information about ordering replacement filters.

Cleaning Avantra 30 Punch Trays

Check the punch trays every three months. There are two punch trays on the Avantra 30. Perform the following procedure to empty them.

1. Turn off the imagesetter.
2. Remove the front access panel.
3. One punch tray is attached to the front of the take-up light shield. It is bright red. Lift the tray up slightly and then pull it down to remove it. Empty the tray.

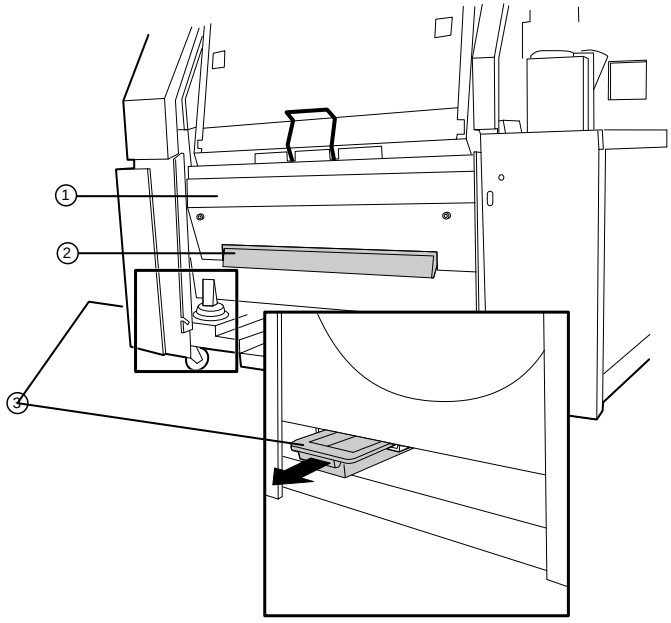


Figure 5.6 The Avantra 30 imagesetter with the front access panel off. ①—The light shield. ②—The front punch tray. ③—The rear punch tray.

4. Replace the tray and replace the front access panel.
5. Open the left bottom side door by swinging it out at a right angle to the imagesetter. The punch tray is located toward the back of the imagesetter. See Figure 5.6.
6. Gently slide the red tray out. Empty it and slide it back in.
7. Close the side door and restart the imagesetter.

Cleaning Avantra 36 and 44 Intake Filters

Check both the Electronics Enclosure Intake filter and the Drum Intake filter every day to make sure they are not blocked.

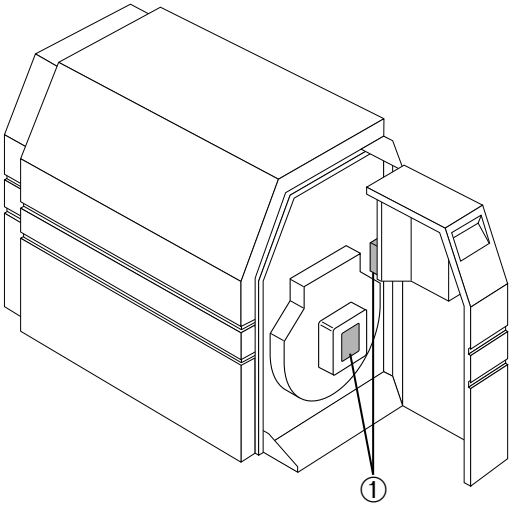


Figure 5.7 Avantra 36/44 imagesetter with the right door open.
①—Drum intake filter and the electronics enclosure filter.

- Clean the Electronics Enclosure Intake filter weekly. This filter is approximately 1/4 in. (6 mm) thick and made of black plastic foam.

  Method: Shut down the imagesetter. Open the right side door. Pop off the outer covering. Remove and vacuum the filter.

- Replace the Drum Intake filter. This filter is approximately 3/4 in. (19 mm) thick and is made of several different layers.

  Interval: Once a month or more frequently if necessary.

  Method: Shut down the imagesetter. Pull out the filter and replace it. Use part number C00305-001. Contact your service provider for information about ordering replacement filters.

Cleaning Avantra 36 and 44 Punch Trays

Check the supply punch chaff tray (Avantra 44 only) and the take-up cassette punch chaff tray every three months.

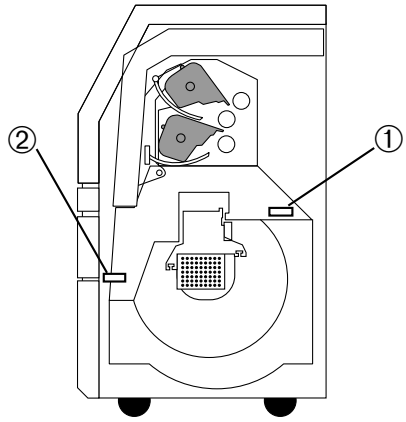


Figure 5.8 Cutaway view of the Avantra 36/44 imagesetter.
①—The supply punch chaff tray (Avantra 44 only).
②—The take-up cassette punch chaff tray.

Cleaning the Avantra 44 Supply Punch Chaff Tray

Perform the following procedure to empty the the supply punch chaff tray.

1. Turn off the imagesetter.
2. Raise the top cover. See Figure 5.9.

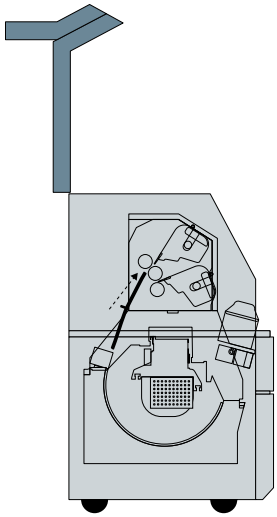


Figure 5.9 The Avantra 36/44 imagesetter with the top cover open.

3. Remove the upper light shield that covers the rear of the media supply area.

   Lift it straight up and out of the imagesetter.

4. Lift up the lower hinged light shield and push it out of the way to the back of the imagesetter.

5. Lift out and empty the supply punch chaff tray and then replace it.

   The supply punch chaff tray is located in the back of the imagesetter. See Figure 5.8.

6. Push the lower hinged light shield toward the front of the imagesetter.

7. Replace the upper light shield.

8. Close the top cover and restart the imagesetter.

Cleaning Avantra 36 and 44 Take-up Area Punch Trays

Perform the following procedure to empty the take-up cassette punch chaff tray.

1. Turn off the imagesetter.
2. Lift the top and middle access panels up and out from the cutter area. See Figure 5.10.

   The take-up cassette punch tray is located below the cutter area below the nip drive assembly. See Figure 5.8.

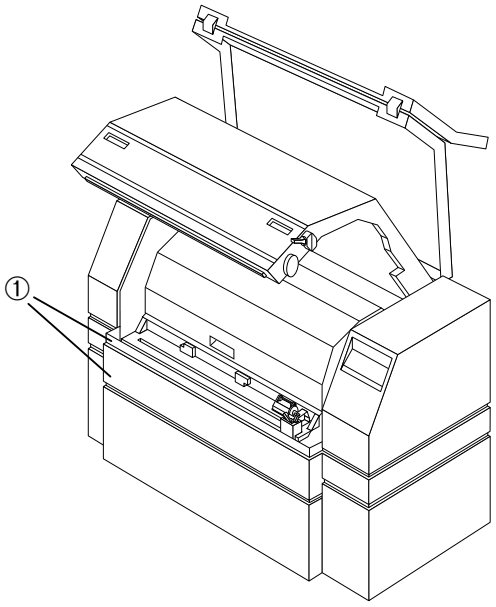


Figure 5.10 ①—The Avantra 36/44 imagesetter top and middle access panels.

3. Remove the front light shield, located behind the top and middle access panels, from the cutter area.

   To release the panel, loosen the three screws on the front of the panel. Slide the panel out and then up to remove it from the imagesetter.

4. Lift out the punch tray, empty it and then replace it.

5. Replace the front light shield.

   Insert the front light shield into the imagesetter by sliding the flat top piece underneath the cutter platform. Tighten the three screws.

6. Replace the top and middle access panels.

   Insert the top and middle access panels by attaching the knobs to the latches inside the imagesetter.

Appendix A

RIP and Avantra User Tools

Introduction

There are RIP and imagesetter software tools for SelectSet Avantra imagesetters that let you perform imagesetter control panel functions from your front-end computer. These software tools are part of the Agfa PostScript Support Environment (PSE) software that comes with your Agfa RIP.

This appendix describes the RIP and Avantra software tools designed for versions of PSE software prior to version 11.0. If your system is running a version of PSE software prior to version 11.0, use this appendix as your guide to using these tools. The following topics are covered:

- A definition of RIP and imagesetter user tools
- Guidelines for using tools
- Descriptions of the tools, presented in charts
- Information about media optimization and virtual cassette operation, two special Avantra features enabled only by using tools

For more information on RIP user tools prior to PSE 11.0, refer to the documentation that came with your Agfa RIP.

❖ *Note: Beginning with PSE version 11.0, these software tools are provided as engine description files (EDFs) for the Macintosh computer and as user tools for the IBM PC, or PC-compatible computer. Also beginning with PSE 11.0, these software tools are documented in the PSE user documentation. If your system is running PSE 11.0, or higher, refer to the documentation that comes with your PSE software package.*

What Are RIP and Avantra User Tools?

For versions of PSE software prior to version 11.0, RIP and Avantra user tools are software files that contain instructions written in PostScript language. They provide a method for controlling your Avantra imagesetter from your front-end computer. To pass these instructions to the imagesetter, download them from your front-end computer to your RIP using any file downloading application that can download PostScript files.

RIP and imagesetter user tools enable you to change parameters and perform functions from your front-end computer. Most of these tasks and functions also can be performed at the imagesetter control panel.

For example, the tools CENTDS and CENTEN perform the same function as the Autocentering button in the Configuration Screen. Thus, the same parameter can be changed from two different places.

Use RIP and imagesetter user tools carefully. Remember that many control panel functions can also be performed by using the user tools. Set up guidelines in your shop to ensure that, as operators change imagesetter parameters, everyone using the system is notified.

> CAUTION: If one operator changes a parameter at the imagesetter and another operator changes the same parameter by downloading a tool, the output from your imagesetter may not be what you anticipate.

User Tools that Perform Control Panel Functions

The following charts list only the tools that are designed exclusively for use with SelectSet Avantra imagesetters. They are grouped according to the control panel screen that provides the same function.

There are additional tools, not listed in this appendix, that affect Avantra imagesetters. For example, there are user tools to change the imaging mode, imaging resolution, exposure settings, and more. For descriptions of these additional tools, refer to your RIP documentation.

Pause Tools

These tools perform functions found in the Pause Screen:

Filename	Description
LOADA	Loads spindle A.
LOADB	Loads spindle B.

Cassette Setup Tools

These tools perform functions found in the Cassette Setup Screen:

Filename	Description
PUNCHDS	Disables all punches.
PNCHBOTH	Enables head and tail punches. Avantra 25, 30, and 44 only.
PNCHHEAD	Enables head punches only.
PNCHTAIL	Enables tail punches only. Avantra 25, 30, and 44 only.

Feed Amounts Tools

These tools perform functions found in the Feed Amounts Screen:

Filename	Description
LDR-01	Subtracts 1 unit from the feed and cut value.
LDR-02	Subtracts 2 units from the feed and cut value.
LDR-05	Subtracts 5 units from the feed and cut value.
LDR-10	Subtracts 10 units from the feed and cut value.
LDR01	Adds 1 unit to the feed and cut value.
LDR02	Adds 2 units to the feed and cut value.
LDR05	Adds 5 units from the feed and cut value.
LDR10	Adds 10 units from the feed and cut value.
PGSPC-01	Subtracts 1 unit from interpage spacing.
PGSPC-02	Subtracts 2 units from interpage spacing.
PGSPC-05	Subtracts 5 units from interpage spacing.
PGSPC-10	Subtracts 10 units from interpage spacing.
PGSPC01	Adds 1 unit to interpage spacing.
PGSPC02	Adds 2 units to interpage spacing.
PGSPC05	Adds 5 units to interpage spacing.
PGSPC10	Adds 10 units to interpage spacing.

When you specify English units of measurement, these tools subtract inches. For example, LDR-10 would subtract 10 inches from the feed and cut value.

When you specify metric units of measurement, these tools subtract centimeters. For example, LDR-10 would subtract 10 cm from the feed and cut value.

Configuration Tools

These tools perform functions found in the Configuration Screen:

Filename	Description
CENTDS	Disables auto-centering. Files are imaged flush with the left edge of the media.
CENTEN	Enables auto-centering. Files are imaged centered on the media.

User Tools that Perform Additional Functions

The user tools listed in this section provide additional functions that are not available at the Avantra imagesetter control panel. The only way to use these tools is to download them to your RIP.

Filename	Description
SET_M_O.OFF	Disables media optimization.
SET_M_O.ON	Enables media optimization. (Editable tool*)
SET_V_C.OFF	Disables virtual cassette.
SET_V_C.ON	Enables virtual cassette.
SET_GANG.OFF	Disables ganging.
SET_GANG.ON	Enables ganging.
GNSP-01	Subtracts 1/10 unit from intrapage spacing.
GNSP-02	Subtracts 2/10 units from intrapage spacing.
GNSP-05	Subtracts 5/10 units from intrapage spacing.
GNSP-10	Subtracts 1 unit from intrapage spacing.
GNSP01	Adds 1 unit to intrapage spacing.
GNSP02	Adds 2 units to intrapage spacing.
GNSP05	Adds 5 units to intrapage spacing.
GNSP010	Adds 10 units to intrapage spacing.

*You can edit the SET_M_O.ON tool to specify the percentage of media to be saved as the criteria for switching spindles. See the last section of this appendix, *Using Media Optimization*, for more information.

SelectSet Avantra Special Tools

This section provides additional information about two special Avantra features controlled by user tools:

- Virtual cassette mode
- Media optimization

Operating in Virtual Cassette Mode

SelectSet Avantra imagesetters equipped with a bridge and buffer to enable on-line processing can operate in virtual cassette mode.

Virtual cassette mode works like this:

- Specify on-line processor as the output mode in the Configuration Screen.
- Fill both media supply cassettes with the same media (same type, width, thickness).
- In the Pause Screen, load one of the media supplies.
- In the Feed Amounts screen, set the Supply Alarm value so that the media low alarm will be activated when media is running low.
- Download the tool SET_V_C.ON to enable virtual cassette mode.
- Queue jobs to be imaged.
- Jobs are imaged until the current media supply sets off a low media alarm.
- The imagesetter completes the current job and sends it to the bridge. It then unloads the current supply and loads the other supply.
- Imaging continues until the second media supply sets off a low media alarm.
- The imagesetter remains in virtual cassette mode until you download the tool SET_V_C.OFF.

Using Media Optimization

Media optimization instructs the imagesetter to swap spindles to optimize media use.

Media optimization operates in two basic ways, depending on the media savings percentage specified in the SET_M_O.ON PostScript file. This percentage is set to 15% by default, but you can change the value in this field to suit your own purposes.

When media optimization is enabled and the media savings percentage is between 1% and 100%, the RIP compares both spindles and determines if switching to the other spindle will save more media than using the currently loaded spindle. If it will, the current spindle will be unloaded, the other spindle will be loaded, and the job will be sent to the new spindle.

When media optimization is enabled and the media savings percentage is 0%, the imagesetter will not swap spindles to optimize media usage. Instead, the imagesetter compares the current media width and the dimensions of the next job to be imaged and rotates the image 90 degrees if that will use media more efficiently. See Figure A.1.

For example:

- Media optimization is active.
- The imagesetter is loaded with 16 in. (406 mm) media.
- The next job is 8 in. wide and 10 in. deep (203 mm by 254 mm).
- The job is rotated 90 degrees when imaged.

Use SET_M_O.ON to enable media optimization. Use SET_M_O.OFF to disable the function.

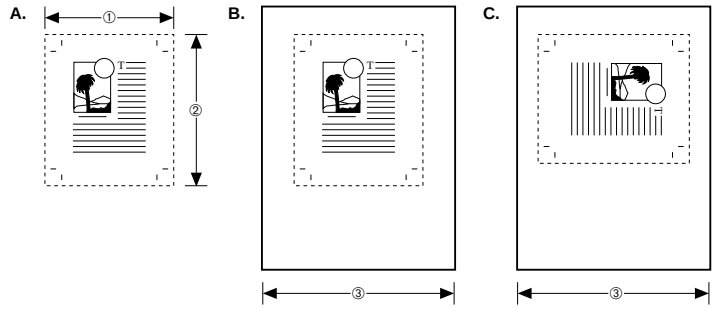


Figure A.1 Media optimization.
A. Hypothetical image. ①—Width, 8" (203 mm). ②—Depth, 10" (254 mm).
B. As imaged media with media optimization off. ③—16" (406 mm)
C. As imaged with optimization on. ③—16" (406 mm)

Changing the Media Savings Percentage

To change the media savings percentage in the SET_M_O.ON tool:

1. Open the SET_M_O.ON PostScript file using any text editor that can open PostScript files.
2. Scroll down to the following line of code:

   0 % <== EDIT this number to change the media savings percentage.

3. Enter a different number at the beginning of this line. The sample above shows 0 in this position. Enter any number from 0 to 100.
4. Save the file and exit the text editor.

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