FCC ID: PA48E1587 User Manual Part 3

Returned cartridges are carefully inspected. Only components that meet strict quality standards are reused. Components that do not meet the standards are sent to recycling centers for reclamation.

This program is part of Kodak's commitment to reduce the environmental impact of our products.

To recycle your empty film cartridges:

1. Replace your empty film cartridges in their original packages. Return as few or as many as you like each time. You can tape up to three packages together and return them with a single label.
2. Apply a prepaid bar-coded shipping label to each package. Kodak labels are free of charge.
3. Call FedEx Ground at 1-800-463-3339 (U.S. only). Mention this program, and arrange for pickup the next working day. Include a signed "Return Pickup Record" with the packages when they are picked up. You will find one on the back of each shipping label.

To get your Kodak mailing labels, contact your authorized Kodak distributor.

For additional information on the Kodak Recycling Program in the U.S. and Canada, visit the Kodak Web Site: www.kodak.com/go/KES

Requesting a Calibration Test Print

To request a calibration print (step wedge):

NOTE: The system will interrupt a multi-sheet print job to produce the calibration print.

1. On the **System Functions** screen, touch the **Calibration** button.
2. Touch the desired **Drawer** button.
3. Touch the **Print** button.

Requesting a Density Test

To request a Density test print:

1. On the **System Functions** screen, touch the **Density** button.
2. Touch the desired **Drawer** button.
3. Touch the **Print** button.

Automatic Image Quality Control (AIQC)

The built-in densitometer is a key component in the patented Automatic Image Quality Control (AIQC) process. The AIQC feature allows the laser imager to automatically monitor and adjust density, contrast, and other

image quality parameters to ensure optimum image quality by monitoring the density patch printed on each film.

The laser imager adjusts the parameters each time the laser imager prints a calibration film to ensure image consistency from film-to-film and lot-to-lot. A calibration film is printed whenever:

- AIQC detects that a new film lot number has been loaded.
- You request a calibration test from the local panel.
- A calibration has not been performed on a film cartridge for 7 days.

Operating in Manual Mode

Under normal conditions, the AIQC is running to maintain consistent image-quality parameters. If errors occur, such as calibration failure, you will have the option to operate in manual mode until the error is corrected.

A film calibration failure is often film related. If you load a new film cartridge, the error is usually corrected. If the error reoccurs with a new film cartridge, call for support (see "Calling for Support" on page 4-25).

Until the condition is corrected, you can run the laser imager in manual mode, without AIQC.

Operator Maintenance

Cleaning the Laser Imager

Clean the outside surfaces of the laser imager as necessary. Use a soft cloth with warm water and mild soap.

CAUTION:
Do not use isopropyl alcohol to clean the exterior surfaces of the laser imager. Isopropyl alcohol can dissolve the exterior paint on the laser imager.

Installing New Charcoal Filters

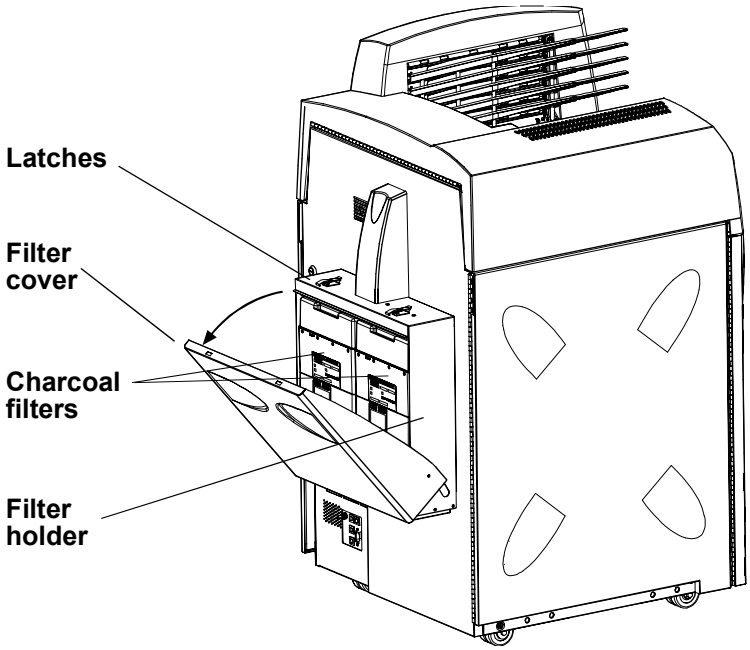
Two charcoal filters are in a filter holder that is mounted on the back of the laser imager.

Install new filters after every 20,000 film cycles.

NOTE: Kodak Field Engineers routinely install new filters during the 20,000 film cycle Preventive Maintenance procedure. You only need to change filters if you do not have a Kodak Preventive Maintenance Plan.

CAUTION:
Filters are considered to be non-hazardous waste by the US

EPA Resource Recovery Act. Under RCRA, you may dispose of the filters in a landfill or incinerator with energy recovery in a municipal, commercial or industrial facility. Contact your state or local government to determine if additional disposal requirements apply.



Replacing the Charcoal Filters

To install new filters:

1. Open the 2 latches and pull the filter holder forward.
2. Remove the two used charcoal filters.
3. Vacuum the filter holder, if necessary.
4. Record on the label of each of the new filters:
   - Cycle count
   - Date
5. Install the two new filters.
6. Close the filter holder and the 2 latches.

7. Discard the 2 used filters.

Preventive Maintenance

To maintain optimum performance from the laser imager, Kodak recommends that preventive maintenance is completed by a Kodak authorized Service Provider after every 20,000 film cycles.

The **Status** screen displays a “Preventive Maintenance” icon when the film count reaches 20,000 sheets of film. You can also monitor the “Prints to PM” line on the **System Information** screen.

Preventive Maintenance includes:

- Installation of new charcoal filters
- Image assembly cleaning
- Film processor cleaning

Call Service to schedule preventive maintenance (see “Calling for Support” on page 4-25).

Key Operator Information

A **Key Op** icon appears on every screen where Key Operator access is possible. This icon indicates when the Key Operator level is active. When active, the icon is hightlighted.

Key Operator access remains until any of the following conditions occurs:

- The system times out (xx minutes) and returns to the **Status** screen.
- You use the **Key Op** icon to cancel the access level.

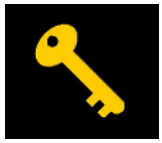
Up to 10 Key Operator accounts are allowed. Accounts are identified by a number between 1 and 10.

Passcodes are determined by the customer and activated by Kodak Authorized Service Providers.

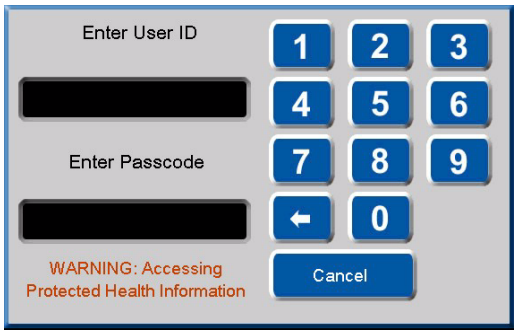
Key Operator Passcode

To access the **Key Operator Login** screen, touch the **Key Op** icon or select a screen that requires Key Operator access.

To enter your passcode:



1. Touch the **Key Op** icon on the local panel. The **Key Op Login** screen appears.



2. Enter your ID and touch the **Enter Passcode** box.

3. Enter your passcode. Touch **OK**.

When the **Key Op** access is activated, the icon appears highlighted.

Key Op access deactivates if the laser imager times out and returns to the **Status** screen or if you cancel the access level.

To deactivate **Key Op** access:

- Touch the **Key Op** icon.

Setting Time and Date

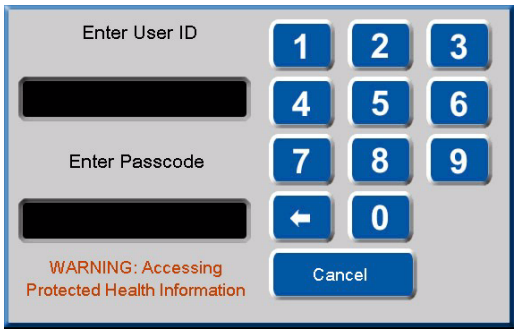
The time and date appears in the right side of the title bar.

Key Operators have the ability to set the time, time format, and date format.

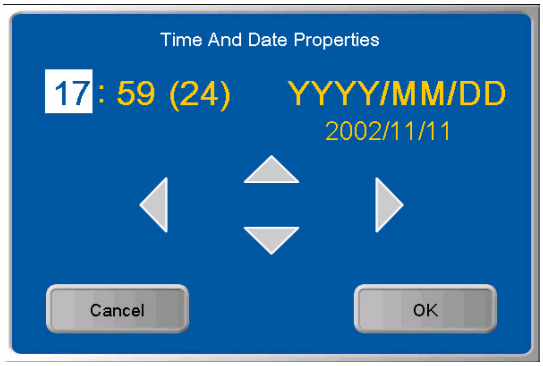
- Formats for time include AM/PM or 24-hour (military).
- Formats for date include
  - MM_DD_YYYY
  - DD_MM_YYYY
  - YYYY_MM_DD

To change the time and time format or date format:

1. Touch the time and date display on the title bar. The **Key OP Login** screen appears.



2. Enter your ID and touch the **Enter Passcode** box.
3. Enter your passcode. Touch **OK**. The **Time and Date Properties** screen appears.

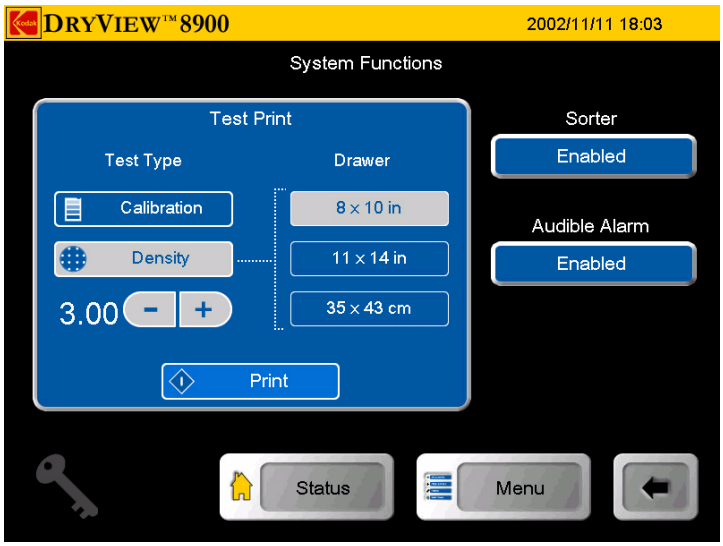


4. Use the left and right arrows to navigate to your desired time or date value.
5. Use the up and down arrows to change the time or date values.
6. Touch **OK**.

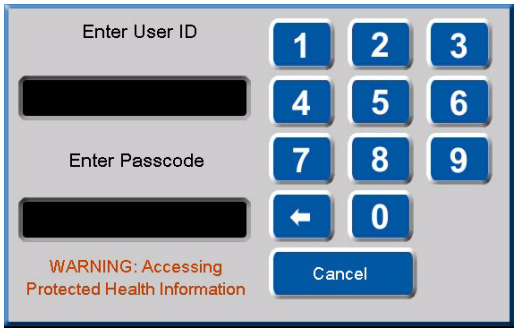
Audible Alarm (On/Off)

An audible alarm alerts operators when an error message or notice appears on the local panel. Key Operators have the ability to disable or enable the audible alarm function.

To enable or disable the audible alarm:



1. At the **Main Menu** screen, touch the **System Function** button.
2. At the **System Functions** screen, touch the **Audible Alarm** button. The **Key OP Login** screen appears.

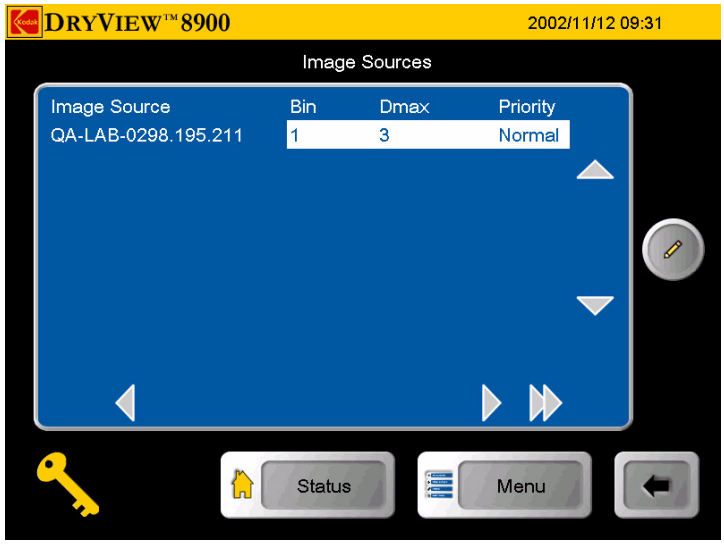


3. Enter your ID and touch the **Enter Passcode** box.

4. Enter your passcode. Touch **OK**.
5. At the **System Function** screen, touch the **Audible Alarm** button.

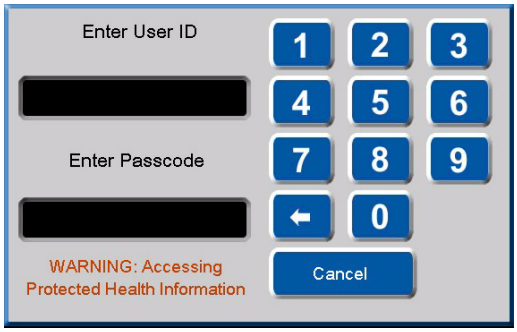
Selecting Bins

Key Operators have the ability to select bins for each available modality. To assign a modality to a bin:

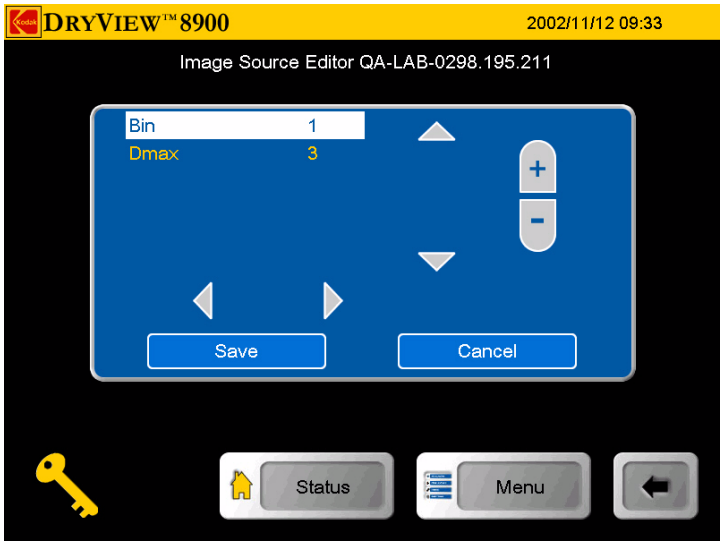


1. At the **Image Sources** screen, use the up and down arrow icons to select a modality.

2. Touch the **Edit** button. The **Key Op Login** screen appears.



3. Enter your ID and touch the **Enter Passcode** box.
4. Enter your passcode. Touch **OK**. The **Image Source Editor** screen appears.



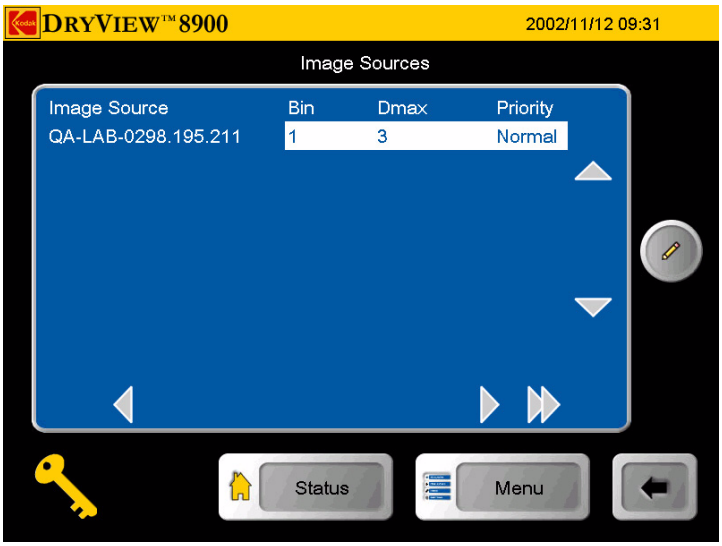
5. Touch the up or down navigation icons to hightlight **Bin**.
6. Touch the **+** or **-** icon to select your desired bin.
7. Touch the **Save** icon.

Changing Dmax

Key Operators have the ability to change the Dmax value for each for each available modality.

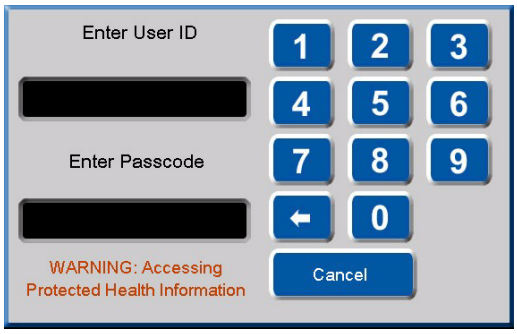
To change a Dmax value:

NOTE: Modality settings may override these settings.

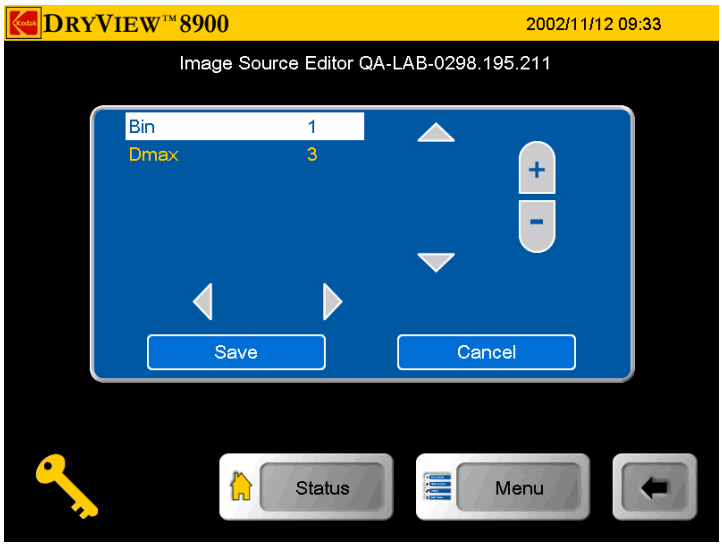


1. At the **Image Sources** screen, use the up and down arrows to select a modality.

2. At the **Image Sources** screen, touch the **Edit** button. The **Key Op Login** screen appears.



3. Enter your ID and touch the **Enter Passcode** box.
4. Enter your passcode and touch **OK**. The **Image Source Editor** screen appears.



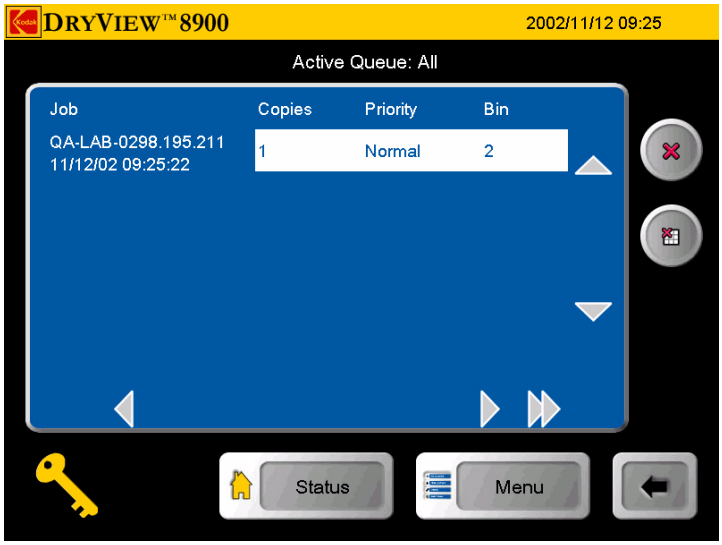
5. Use the up and down arrow icons to hightlight **Dmax**.
6. Touch the **+** or **-** icon to select your desired Dmax value.
7. Touch the **Save** icon.

Deleting Print Jobs

Key Operators have the ability to delete one or all print jobs in the print queue.

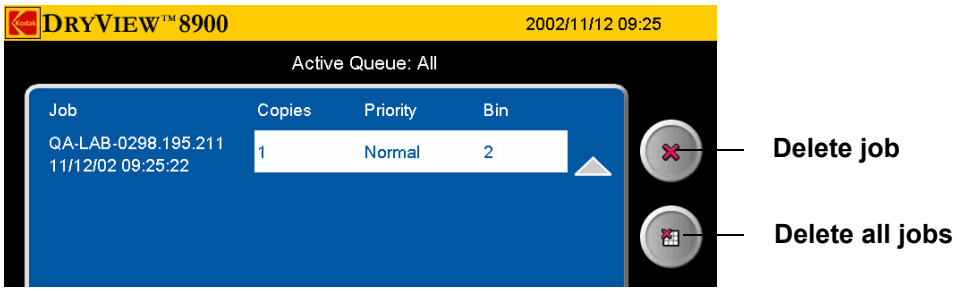
To delete a print job or all jobs in the queue:

1. At the **Job Management** screen, use the up and down arrow icons to select **Active, No Media** or **Undelivered - print queue.**
2. Touch the **View List** button. The **Selected Queue:** screen appears.

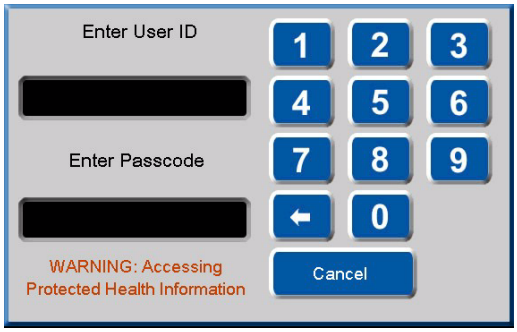


3. Use the up or down arrow icons to navigate to your desired print job.

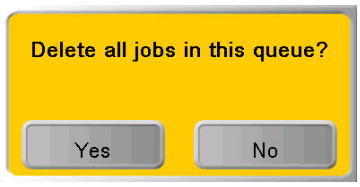
NOTE: Jobs can be deleted from the active queue as long as the delivery of that job has not started. After selecting a job(s) to delete from the **Active Queue** screen, there is no indication of deletion until the jobs which are currently printing are completed. When the current job is finished printing, the **Status** screen and **Job Management** screens show the selected jobs have been deleted.



4. Touch the **Delete** icon or the **Delete all Jobs** icon. The **Key Op Login** screen appears.



5. Enter your ID and touch the **Enter Passcode** box.
6. Enter your passcode and touch **OK**. The **Delete this job** or the **Delete all jobs in the queue** pop up menu appears.



7. Touch **Yes**.

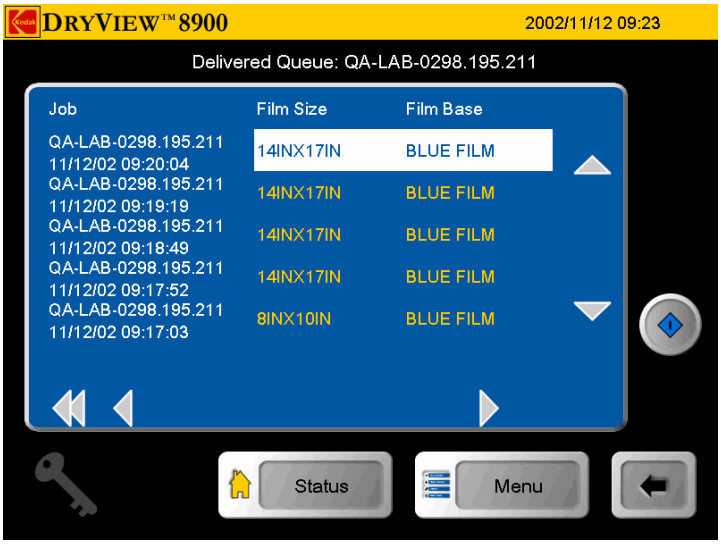
Reprinting Print Jobs

Key Operators have the ability to reprint completed print jobs.

To reprint a print job:

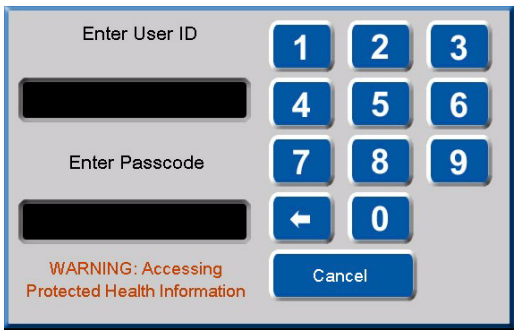
NOTE: The reprint capability of the laser imager enables Levels 2, 3, and 4 operators to command reprinting of images that may contain patient-identifiable data. Therefore, operation of the laser imager by operators at these levels is controlled by a login procedure that can assist operators in meeting requirements to control access to such information.

1. At the **Job Management** screen, use the up and down arrow icons to select **Delivered**.
2. Touch the **View List** button. The **Delivered Queue:** screen appears.



3. Use the up or down arrows to navigate to your desired print job.

4. Touch the **Reprint** icon. The **Key Op Login** screen appears.

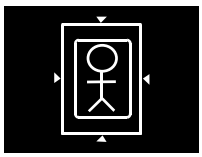


5. Enter your ID and touch the **Enter Passcode** box.
6. Enter your passcode and touch **OK**. The **Print Requested** pop up menu appears.

7. Touch **OK**.

Image Resizing Icons

If an image has been resized or cropped, an icon appears on the bottom corner of the film. There are three types of icons that appear.

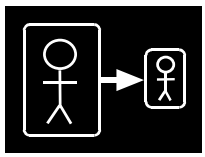


- **Crop**. The image perimeter is removed to allow the image to fit on the film and print at the same scale as the anatomical area of interest.

  An image might be cropped if it is too large to print on the selected film size, and the size of the area of interest is important to retain.

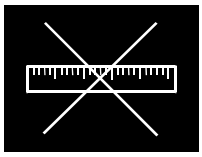
CAUTION:

If anatomical areas of interest are near an outer edge of the image, they might be removed from the image when it is printed.



- **Minify**. The image file is reduced by the removal of pixel data.

  An image might be minified if the image size is larger than the media in the imager. For example, a computer radiography (CR) image is requested to print 35 x 43 cm at the imager with 8x10 in. (20.32x25.4 cm) film selected. The image is minified and printed.



- **Scale**. The image file is reduced in scale.

  An image file is reduced in scale if it is sent from an image source with a requested image size that is not supported by the imager. The full image is printed, but the size of the image is reduced to allow it to print on the media size that is closest to the requested size.

4 Troubleshooting

Status, Error Messages, and Notifications

Occasionally, you may have to correct minor problems. If more serious malfunctions occur, you must contact a trained Kodak Authorized Service Provider. See "Calling for Support" on page 4-25 for more information.

To determine the operator action required, you should monitor imager operation and note the imager status and error messages.

Local Panel Status Messages

The local panel **Status** screen displays messages to provide information on the overall status and activities of the laser imager. The **Status** screen also displays more detailed information on each film drawer.

Main Status Screen	Details
Self Test	Occurs when the power is first applied to the machine control system.
Ready	The printer is online and the processor has reach operating temperature.
Warning = xx	The processor is currently warming. xx represents the number of minutes estimated until ready.
Stopped	An error has occurred that prevents printing.
Printing	The imager is currently printing.
Door Open	The front or back door is open.
Hood Open	The hood is open.
Printer Offline	Printing has been suspended.
Service Mode On	The Service Override switch is enabled.

Main Status Screen	Details
Preventive Maintenance indicator	Call Service to schedule Preventive Maintenance.
Film Drawer Status Messages	**Details**
Opening... Please wait	The film cartridge is currently opening.
Open	The film supply door is open.
Calibrating... Please wait	A calibration is in progress for this film cartridge.
Not Calibrated	The film cartridge is not calibrated.
Fail	An error has occurred, affecting normal operation.
No Cartridge	There is currently no cartridge in the film supply drawer.
Open Requested ... Please Wait	A request to open the film supply drawer is pending.
Job Manager Status Message	**Details**
Active	The imager can accept job requests and film is available.
No Media	The imager can accept job requests, but film is not available for at least 1 current job.
Offline	The imager will not accept any DICOM job requests.

Local Panel Error Messages or Notices

The following table lists the error messages displayed on the local panel. When an error message is displayed, perform the operator action listed in the table for that message.

When an error message occurs, an audible alarm will sound.

To silence the audible alarm:

1. When an error message appears, touch anywhere in the error popup menu.
2. When a no-media message appears, touch any tray button or the **Job Management** button on the **Status** screen.

NOTE: The laser imager prints a job only with the specified size/media base type requested. If the size/base is not loaded, the print request is put into the "No Media" queue and the laser imager waits for the correct type to be loaded.

If this action does not clear the error message, call for service. When you make a service call, be prepared to give the error message and message number to the call taker (See "Calling for Support").

Preventive Maintenance Icon

NOTE: The laser imager displays a local panel icon when preventive maintenance and cleaning are recommended. Preventive maintenance and cleaning ensure optimum imager performance. The preventive maintenance message will not interfere with normal operation and is intended to let you schedule a convenient time for preventive maintenance and cleaning performed by a Kodak authorized Service Provider.

Restart the Laser Imager

The action "Restart the laser imager" means to shut down and power up the laser imager. To shut down the laser imager:

1. Touch the **Power** icon on the local panel.
2. Touch the **Shut Down** icon.
3. When the laser imager has completely shut down, power up by holding the power switch to the **ON** position for two seconds.

The action to "open door manually" is described in "Film Drawers and Front Door Manual Override Latches" on page 3-14. The action to "close the film cartridge" is described in "Manually Closing the Film Cartridge

Lid" on page 4-17.

Number	Message display	Message Details	Operator Action
02-104	Inadequate Disk Space for New Job	Too many undelivered jobs are queued.	1. Delete jobs in the Undelivered Queued. 2. Load requested media for jobs in Pending Queue.
03-111	Undelivered Job due to Rendering Error	Job failed because of bad image data.	1. Delete job from the Undelivered Queue.
20-208	Front Door Failed to Open	Jobs will continue to be queued. Film affected by the error will be reprinted.	1. Open the door manually. 2. If the error persists, call Service.
20-914	Internal Image Data Transfer Failed	Jobs will continue to be queued. Film affected by the error will be reprinted.	1. Restart the laser imager. 2. If the error persists, call Service.
20-915	Internal Image Data Transfer Failed	Jobs will continue to be queued. Film affected by the error will be reprinted.	1. Restart the laser imager. 2. If the error persists, call Service.
21-116	Film Jam in Area 1: Film Pickup	Jobs will continue to be queued. Printing will continue from any other supply drawer.	1. Open the drawer. 2. Close the cartridge to prevent film from fogging. 3. Remove any film. 4. Close the drawer.
21-118	Internal Hardware Failure: Film Pickup	Jobs will continue to be queued. Printing will continue from any other supply drawer.	1. Restart the laser imager. 2. If the problem persists, call Service.
21-119	Internal Hardware Failure: Film Pickup	Jobs will continue to be queued. Printing will continue from any other supply drawer.	1. Restart the laser imager. 2. If the error persists, call Service.
21-120	Internal Hardware Failure: Film Pickup	Jobs will continue to be queued. Printing will continue from any other supply drawer.	1. Restart the laser imager. 2. If the error persists, call Service.

Number	Message display	Message Details	Operator Action
21-125	Internal Hardware Failure: Feed Rollers	Jobs will continue to be queued. Printing will continue from any other supply drawer.	1. Restart the laser imager. 2. If the error persists, call Service.
21-126	Film Jam in Area 1: Feed Rollers	Jobs will continue to be queued. Film affected by the error will be reprinted.	1. Open the drawer. 2. Close the cartridge to prevent film from fogging. 3. Remove any film. 4. Close the drawer.
21-135	Drawer Failed to Open	Jobs will continue to be queued. Film affected by the error will be reprinted.	1. Open the drawer manually. 2. If the error persists, call Service.
21-139	Unable to Identify Film Cartridge	Jobs will continue to be queued. Printing will continue from any other supply drawer.	1. Try a new film cartridge. 2. If the error persists, call Service.
21-145	Unsupported Media Type	Jobs will continue to be queued. Printing will continue from any other supply drawer.	1. Try a new film cartridge. 2. If the error persists, call Service.
21-146	Unsupported Media Size	Jobs will continue to be queued. Printing will continue from any other supply drawer.	1. Try a new film cartridge. 2. If the error persists, call Service.
21-175	Rollback failed to Engage Cartridge	Jobs will continue to be queued. Printing will continue from any other supply drawer.	1. Try a new film cartridge. 2. If the error persists, call Service.
21-176	Film Cartridge Failed to Fully Open	Jobs will continue to be queued. Printing will continue from any other supply drawer.	1. Try a new film cartridge. 2. If the error persists, call Service.
21-177	Film Cartridge Failed to Close	Jobs will continue to be queued. Printing will continue from any other supply drawer.	1. Open the drawer. 2. Close the cartridge to prevent film from fogging. 3. Close the drawer. 4. If the error persists, call Service.

Number	Message display	Message Details	Operator Action
21-178	Film Cartridge Failed to Open	Jobs will continue to be queued. Printing will continue from any other supply drawer.	1. Try a new film cartridge. 2. If the error persists, call Service.
21-179	Film Cartridge Failed to Close	Jobs will continue to be queued. Printing will continue from any other supply drawer.	1. Open the drawer. 2. Close the cartridge to prevent film from fogging. 3. Close the drawer. 4. If the error persists, call Service.
21-631	Calibration Failed: Film Dmin Outside Target	Jobs will continue to be queued. Printing will continue from any other supply drawer.	1. Try a new film cartridge. 2. If the error persists, disable the AIQC for this film cartridge.
21-632	Calibration Failed: Film Dmax Outside	Jobs will continue to be queued. Printing will continue from any other supply drawer.	1. Try a new film cartridge. 2. If the error persists, disable the AIQC for this film cartridge.
21-624	Calibration Failed: Film Density Readings not Monotonic	Jobs will continue to be queued. Printing will continue from any other supply drawer.	1. Try a new film cartridge. 2. If the error persists, call Service.
22-116	Film Jam in Area 1: Film Pickup	Jobs will continue to be queued. Printing will continue from any other supply drawer.	1. Open the drawer. 2. Close the cartridge to prevent film from fogging. 3. Remove any film. 4. Close the drawer.
22-118	Internal Hardware Failure: Film Pickup	Jobs will continue to be queued. Printing will continue from any other supply drawer.	1. Restart the laser imager. 2. If the error persists, call Service.
22-119	Internal Hardware Failure: Film Pickup	Jobs will continue to be queued. Printing will continue from any other supply drawer.	1. Restart the laser imager. 2. If the error persists, call Service.

Number	Message display	Message Details	Operator Action
22-120	Internal Hardware Failure: Film Pickup	Jobs will continue to be queued. Printing will continue from any other supply drawer.	1. Restart the laser imager. 2. If the error persists, call Service.
22-125	Internal Hardware Failure: Feed Rollers	Jobs will continue to be queued. Printing will continue from any other supply drawer.	1. Restart the laser imager. 2. If the error persists, call Service.
22-126	Film Jam in Area 1: Feed Rollers	Jobs will continue to be queued. Film affected by the error will be reprinted.	1. Open the drawer. 2. Close the cartridge to prevent film from fogging. 3. Remove any film. 4. Close the drawer.
22-135	Drawer Failed to Open	Jobs will continue to be queued. Film affected by the error will be reprinted.	1. Open the drawer manually. 2. If the error persists, call Service.
22-139	Unable to Identify Film Cartridge	Jobs will continue to be queued. Printing will continue from any other supply drawer.	1. Try a new film cartridge. 2. If the error persists, call Service.
22-145	Unsupported Media Type	Jobs will continue to be queued. Printing will continue from any other supply drawer.	1. Try a new film cartridge. 2. If the error persists, call Service.
22-146	Unsupported Media Size	Jobs will continue to be queued. Printing will continue from any other supply drawer.	1. Try a new film cartridge. 2. If the error persists, call Service.
22-175	Rollback Failed to Engage Cartridge	Jobs will continue to be queued. Printing will continue from any other supply drawer.	1. Try a new film cartridge. 2. If the error persists, call Service.
22-176	Film Cartridge Failed to Open	Jobs will continue to be queued. Printing will continue from any other supply drawer.	1. Try a new film cartridge. 2. If the error persists, call Service.

Number	Message display	Message Details	Operator Action
22-177	Film Cartridge Failed to Close	Jobs will continue to be queued. Printing will continue from any other supply drawer.	1. Open the drawer. 2. Close cartridge to prevent the film from fogging. 3. Close the drawer. 4. If the error persists, call Service.
22-178	Film Cartridge Failed to Open	Jobs will continue to be queued. Printing will continue from any other supply drawer.	1. Try a new film cartridge. 2. If the error persists, call Service.
22-179	Film Cartridge Failed to Close	Jobs will continue to be queued. Printing will continue from any other supply drawer.	1. Open the drawer. 2. Close the cartridge to prevent film from fogging. 3. Close the drawer. 4. If the error persists, call Service.
22-631	Calibration Failed: Film Dmin Outside Target	Jobs will continue to be queued. Printing will continue from any other supply drawer.	1. Try a new film cartridge. 2. If the error persists, disable the AIQC for this film cartridge.
22-632	Calibration Failed: Film Dmax Outside Target	Jobs will continue to be queued. Printing will continue from any other supply drawer.	1. Try a new film cartridge. 2. If the error persists, disable the AIQC for this film cartridge.
22-624	Calibration Failed: Film Density Readings not Monotonic	Jobs will continue to be queued. Printing will continue from any other supply drawer.	1. Try a new film cartridge. 2. If the error persists, call Service.
23-116	Film Jam in Area 1	Jobs will continue to be queued. Printing will continue from any other supply drawer.	1. Open the drawer. 2. Close the cartridge to prevent film from fogging. 3. Remove any film. 4. Close the drawer.

Number	Message display	Message Details	Operator Action
23-118	Internal Hardware Failure: Film Pickup	Jobs will continue to be queued. Printing will continue from any other supply drawer.	1. Restart the laser imager. 2. If the error persists, call Service.
23-119	Internal Hardware Failure: Film Pickup	Jobs will continue to be queued. Printing will continue from any other supply drawer.	1. Restart the laser imager. 2. If the error persists, call Service.
23-120	Internal Hardware Failure: Film Pickup	Jobs will continue to be queued. Printing will continue from any other supply drawer.	1. Restart the laser imager. 2. If the error persists, call Service.
23-125	Internal Hardware Failure: Feed Rollers	Jobs will continue to be queued. Printing will continue from any other supply drawer.	1. Restart the laser imager. 2. If the error persists, call Service.
23-126	Film Jam in Area 1: Feed Rollers	Jobs will continue to be queued. Film affected by the error will be reprinted.	1. Open the drawer. 2. Close the cartridge to prevent film from fogging. 3. Remove any film. 4. Close the drawer.
23-135	Drawer Failed to Open	Jobs will continue to be queued. Film affected by the error will be reprinted.	1. Open the drawer manually. 2. If the error persists, call Service.
23-139	Unable to Identify Film Cartridge	Jobs will continue to be queued. Printing will continue from any other supply drawer.	1. Try a new film cartridge. 2. If the error persists, call Service.
23-145	Unsupported Media Type	Jobs will continue to be queued. Printing will continue from any other supply drawer.	1. Try a new film cartridge. 2. If the error persists, call Service.
23-146	Unsupported Media Size	Jobs will continue to be queued. Printing will continue from any other supply drawer.	1. Try a new film cartridge. 2. If the error persists, call Service.
23-175	Rollback Failed to Engage Cartridge	Jobs will continue to be queued. Printing will continue from any other supply drawer.	1. Try a new film cartridge. 2. If the error persists, call Service.

Number	Message display	Message Details	Operator Action
23-176	Film Cartridge Failed to Open	Jobs will continue to be queued. Printing will continue from any other supply drawer.	1. Try a new film cartridge. 2. If the error persists, call Service.
23-177	Film Cartridge Failed to Close	Jobs will continue to be queued. Printing will continue from any other supply drawer.	1. Open the drawer. 2. Close the cartridge to prevent film from fogging. 3. Close the drawer. 4. If the error persists, call Service.
23-178	Film Cartridge Failed to Open	Jobs will continue to be queued. Printing will continue from any other supply drawer.	1. Try a new film cartridge. 2. If the error persists, call Service.
23-179	Film Cartridge Failed to Close	Jobs will continue to be queued. Printing will continue from any other supply drawer.	1. Open the drawer. 2. Close the cartridge to prevent film from fogging. 3. Close the drawer. 4. If the problem persists, call Service.
23-631	Calibration Failed: Film Dmin Outside	Jobs will continue to be queued. Printing will continue from any other supply drawer.	1. Try a new film cartridge. 2. If the error persists, disable the AIQC for this film cartridge.
23-632	Calibration Failed: Film Dmax Outside Target	Jobs will continue to be queued. Printing will continue from any other supply drawer.	1. Try a new film cartridge. 2. If the error persists, disable the AIQC for this film cartridge.
23-624	Calibration Failed: Film Density Readings not Monotonic	Jobs will continue to be queued. Printing will continue from any other supply drawer.	1. Try a new film cartridge. 2. If the error persists, call Service.
24-931	Internal Communications Failure: Film Cartridge Controller	Jobs will continue to be queued. Printing will continue from any other supply drawer.	1. Restart the laser imager. 2. If the error persists, call Service.

Number	Message display	Message Details	Operator Action
24-154	Internal Communications Failure: Film Cartridge Controller	Jobs will continue to be queued. Film affected by the error will be reprinted.	1. Restart the laser imager. 2. If the error persists, call Service.
25-154	Internal Communications Failure: RF Tag	Jobs will continue to be queued. Film affected by the error will be reprinted.	1. Restart the laser imager. 2. If the error persists, call Service.
25-922	Internal Diagnostic Failure: RF Tag	Jobs will continue to be queued. Film affected by the error will be reprinted.	1. Restart the laser imager. 2. If the error persists, call Service.
25-931	Internal Communications Failure: RF Tag	Jobs will continue to be queued. Film affected by the error will be reprinted.	1. Restart the laser imager. 2. If the error persists, call Service.
26-164	Film Jam in Area 2: Platen	Jobs will continue to be queued. Film affected by the error will be reprinted.	1. Open the front door. 2. Remove any film. 3. Close the door.
26-165	Film Jam in Area 3: Transport	Jobs will continue to be queued. Film affected by the error will be reprinted.	1. Open the front door. 2. Remove any film. 3. Close the door.
26-166	Film Jam in Area 4: Transport	Jobs will continue to be queued. Film affected by the error will be reprinted.	1. Open the front door. 2. Remove any film. 3. Close the door.
26-167	Film Jam in Area 2: Transport	Jobs will continue to be queued. Film affected by the error will be reprinted.	1. Open the front door. 2. Remove any film. 3. Close the door.
26-169	Film Jam in Area 3: Platen	Jobs will continue to be queued. Film affected by the error will be reprinted.	1. Open the front door. 2. Remove any film. 3. Close the door.
26-542	Film Jam in Area 4: Processor	Jobs will continue to be queued. Film affected by the error will be reprinted.	1. Open the hood. 2. Remove any film. 3. Close the hood.

Number	Message display	Message Details	Operator Action
26-543	Film Jam in Area 5: Processor	Jobs will continue to be queued. Film affected by the error will be reprinted.	1. Open the hood. 2. Remove any film. 3. Close the processor cover and hood.
26-544	Film Jam in Area 5: Densitometer	Jobs will continue to be queued. Film affected by the error will be reprinted.	1. Open the hood. 2. Remove any film. 3. Close the hood.
26-545	Film Jam in Area 5: Sorter	Jobs will continue to be queued. Film affected by the error will be reprinted.	1. Open the hood. 2. Remove any film. 3. Close the hood.
26-546	Film Jam in Area 6: Sorter	Jobs will continue to be queued. Film affected by the error will be reprinted.	1. Open the hood. 2. Remove any film. 3. Close the hood.
27-121	Internal Hardware Failure: Optics	Jobs will continue to be queued. Film affected by the error will be reprinted.	1. Restart the laser imager. 2. If the error persists, call Service.
27-123	Internal Hardware Failure: Optics	Jobs will continue to be queued. Film affected by the error will be reprinted.	1. Restart the laser imager. 2. If the error persists, call Service.
27-124	Internal Hardware Failure: Platen	Jobs will continue to be queued. Film affected by the error will be reprinted.	1. Restart the laser imager. 2. If the error persists, call Service.
27-127	Internal Hardware Failure: Platen	Jobs will continue to be queued. Film affected by the error will be reprinted.	1. Restart the laser imager. 2. If the error persists, call Service.
27-128	Internal Hardware Failure: Platen	Jobs will continue to be queued. Film affected by the error will be reprinted.	1. Restart the laser imager. 2. If the error persists, call Service.
27-154	Internal Hardware Failure: Optics	Jobs will continue to be queued. Film affected by the error will be reprinted.	1. Restart the laser imager. 2. If the error persists, call Service.

Number	Message display	Message Details	Operator Action
27-601	Calibration Failed: Optics	Jobs will continue to be queued. Film affected by the error will be reprinted.	1. Restart the laser imager. 2. If the error persists, call Service.
27-602	Calibration Failed: Optics	Jobs will continue to be queued. Film affected by the error will be reprinted.	1. Restart the laser imager. 2. If the error persists, call Service.
27-603	Calibration Failed: Optics	Jobs will continue to be queued. Film affected by the error will be reprinted.	1. Restart the laser imager. 2. If the error persists, call Service.
27-604	Calibration Failed: Optics	Jobs will continue to be queued. Film affected by the error will be reprinted.	1. Restart the laser imager. 2. If the error persists, call Service.
27-605	Calibration Failed: Optics	Jobs will continue to be queued. Film affected by the error will be reprinted.	1. Restart the laser imager. 2. If the error persists, call Service.
27-606	Calibration Failed: Optics	Jobs will continue to be queued. Film affected by the error will be reprinted.	1. Restart the laser imager. 2. If the error persists, call Service.
27-607	Calibration Failed: Optics	Jobs will continue to be queued. Film affected by the error will be reprinted.	1. Restart the laser imager. 2. If the error persists, call Service.
27-611	Internal Hardware Failure: Optics	Jobs will continue to be queued. Film affected by the error will be reprinted.	1. Restart the laser imager. 2. If the error persists, call Service.
27-640	Internal Hardware Failure: Optics	Jobs will continue to be queued. Film affected by the error will be reprinted.	1. Restart the laser imager. 2. If the error persists, call Service.
27-641	Internal Diagnostic Failure: Optics	Jobs will continue to be queued. Film affected by the error will be reprinted.	1. Restart the laser imager. 2. If the error persists, call Service.

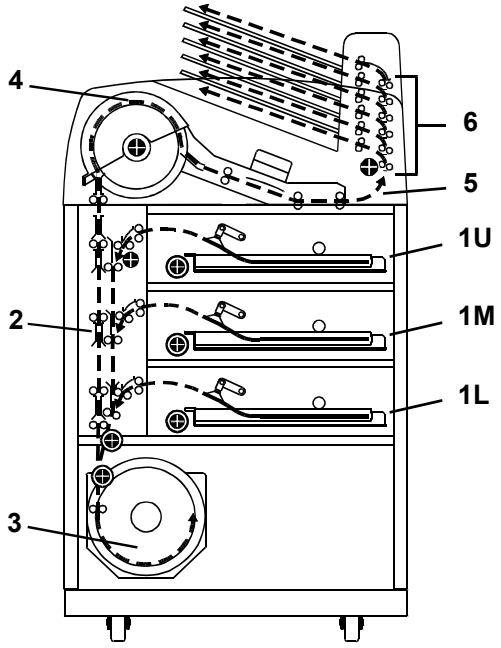
Number	Message display	Message Details	Operator Action
27-642	Internal Hardware Failure: Optics	Jobs will continue to be queued. Film affected by the error will be reprinted.	1. Restart the laser imager. 2. If the error persists, call Service.
27-643	Internal Diagnostic Failure: Optics	Jobs will continue to be queued. Film affected by the error will be reprinted.	1. Restart the laser imager. 2. If the error persists, call Service.
27-644	Internal Communications Failure: Optics	Jobs will continue to be queued. Film affected by the error will be reprinted.	1. Restart the laser imager. 2. If the error persists, call Service.
27-645	Internal Hardware Failure: Optics	Jobs will continue to be queued. Film affected by the error will be reprinted.	1. Restart the laser imager. 2. If the error persists, call Service.
27-646	Internal Hardware Failure: Optics	Jobs will continue to be queued. Film affected by the error will be reprinted.	1. Restart the laser imager. 2. If the error persists, call Service.
27-914	Internal Image Transfer Failure: Optics	Jobs will continue to be queued. Film affected by the error will be reprinted.	1. Restart the laser imager. 2. If the error persists, call Service.
27-915	Internal Image Transfer Failure: Optics	Jobs will continue to be queued. Film affected by the error will be reprinted.	1. Restart the laser imager. 2. If the error persists, call Service.
27-916	Internal Diagnostic Failure: Optics	Jobs will continue to be queued. Film affected by the error will be reprinted.	1. Restart the laser imager. 2. If the error persists, call Service.
27-931	Internal Communications Failure: Optics	Jobs will continue to be queued. Film affected by the error will be reprinted.	1. Restart the laser imager. 2. If the error persists, call Service.
28-154	Internal Communications Failure: Processor	Jobs will continue to be queued. Film affected by the error will be reprinted.	1. Restart the laser imager. 2. If the error persists, call Service.

Number	Message display	Message Details	Operator Action
28-155	Internal Communications Failure: Processor	Jobs will continue to be queued. Film affected by the error will be reprinted.	1. Restart the laser imager. 2. If the error persists, call Service.
28-501	Internal Hardware Failure: Processor	Jobs will continue to be queued. Film affected by the error will be reprinted.	1. Restart the laser imager. 2. If the error persists, call Service.
28-506	Internal Communications Failure: Processor	Jobs will continue to be queued. Film affected by the error will be reprinted.	1. Restart the laser imager. 2. If the error persists, call Service.
28-509	Processor Warm-up Failure	Jobs will continue to be queued. Film affected by the error will be reprinted.	1. Restart the laser imager. 2. If the error persists, call Service.
28-551	Processor Heater Failure	Jobs will continue to be queued. Film affected by the error will be reprinted.	1. Restart the laser imager. 2. If the error persists, call Service.
28-554	Processor Over Temperature	Jobs will continue to be queued. Film affected by the error will be reprinted.	1. Restart the laser imager. 2. If the error persists, call Service.
28-931	Internal Communications Failure: Processor	Jobs will continue to be queued. Film affected by the error will be reprinted.	1. Restart the laser imager. 2. If the error persists, call Service.
29-154	Internal Communications Failure: Densitometer	Jobs will continue to be queued. Film affected by the error will be reprinted.	1. Restart the laser imager. 2. If the error persists, call Service.
29-924	Internal Diagnostic Failure: Densitometer	Jobs will continue to be queued. Film affected by the error will be reprinted.	1. Restart the laser imager. 2. If the error persists, call Service.
29-925	Internal Diagnostic Failure: Densitometer	Jobs will continue to be queued. Film affected by the error will be reprinted.	1. Restart the laser imager. 2. If the error persists, call Service.

Number	Message display	Message Details	Operator Action
29-926	Internal Diagnostic Failure: Densitometer	Jobs will continue to be queued. Film affected by the error will be reprinted.	1. Restart the laser imager. 2. If the error persists, call Service.
29-927	Internal Diagnostic Failure: Densitometer	Jobs will continue to be queued. Film affected by the error will be reprinted.	1. Restart the laser imager. 2. If the error persists, call Service.
29-931	Internal Communications Failure: Densitometer	Jobs will continue to be queued. Film affected by the error will be reprinted.	1. Restart the laser imager. 2. If the error persists, call Service.
30-154	Internal Communications Failure: Sorter	Jobs will continue to be queued, but new film will not be initiated.	1. Restart the laser imager. 2. If the error persists, call Service.
30-930	Internal Hardware Failure: Sorter	Jobs will continue to be queued, but new film will not be initiated.	1. Restart the laser imager. 2. If the error persists, call Service.
30-931	Internal Communications Failure: Sorter	Jobs will continue to be queued, but new film will not be initiated.	1. Restart the laser imager. 2. If the error persists, call Service.
31-931	Internal Communications Failure: FPGA	Jobs will continue to be queued, but new film will not be initiated.	1. Restart the laser imager. 2. If the error persists, call Service.
10-001	Delivery Server Internal Error		1. Restart the laser imager. 2. If the error persists, call Service.
10-003	Delivery Server Image Datapath Error		1. Restart the laser imager. 2. If the error persists, call Service.
10-910	MCS Communication Down	Jobs will continue to be queued, but new film will not be initiated.	1. Restart the laser imager. 2. If the error persists, call Service.

Clearing Film Jams

The numbers in the illustration identify key areas on the path from film pickup to exposure, through development and onto the film sorter.



Jam Areas

1 Film pickup from the cartridge.

2 Vertical film path between the film pickup area and the film platen, and between the film platen and the processor drum.

3 Exposure platen.

4 Film processor drum.

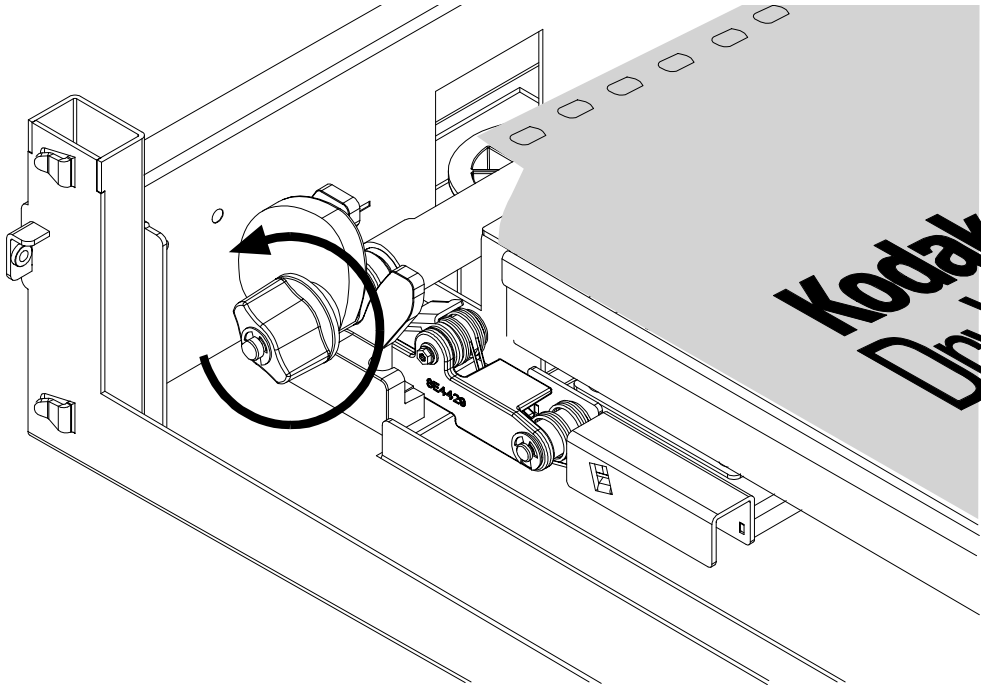
5 Film feed through the densitometer and onto the sorter.

6 Film feed within the sorter.

Manually Closing the Film Cartridge Lid

Film cartridges need to be closed manually if the drawers are opened without the film cartridge closing automatically.

NOTE: If the drawers are opened without the film cartridge closing, several sheets of film at the top of the cartridge will be exposed (fogged) and should be discarded. Before opening the drawer, make the room as dark as possible to minimize exposure.



Film Cartridge Rollback Knob

To manually close the film cartridge:

1. Lift up the desired drawer override latch.
2. Pull the film drawer out to its furthest extension.
3. Turn the rollback knob counterclockwise until the film cartridge lid is closed. Continue turning the rollback knob until it cannot be rotated further.

Film Pickup Problems in Area 1U, 1M, or 1L

The area where the film is removed from the film cartridge and positioned to the drive rollers is Area 1. If the laser imager cannot properly pick up a sheet of film and position the film to the drive, an error message occurs on

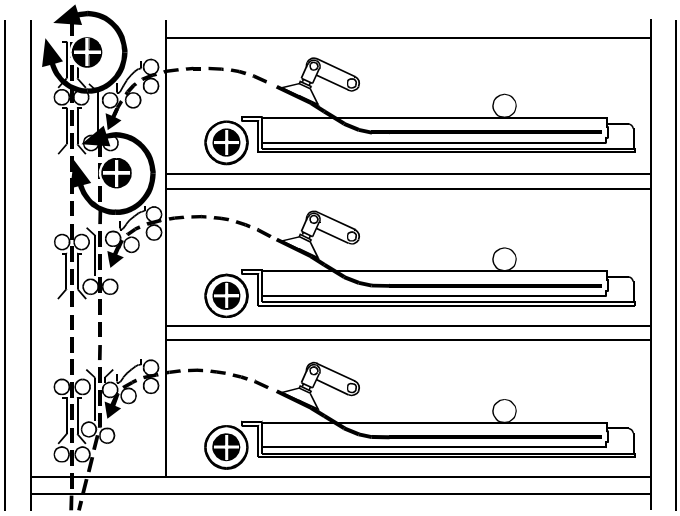
the local panel.

NOTE: When problems occur in Area 1, the film cartridge remains open. When you open the drawer, the top sheets of film in the cartridge will be exposed (fogged). Before opening the drawer, make the room as dark as possible to minimize exposure. Discard any fogged film.

1. The Film Jam in Area 1: message appears.
2. Touch the **Show Jam** button. The **Door Control** screen appears and the affected drawer is highlighted.
3. Touch the affected drawer icon. The drawer opens.
4. Pull the drawer out to its furthest extension.
5. Remove any film outside the cartridge box and then turn the rollback knob counterclockwise to manually close the cartridge lid (see "Manually Closing the Film Cartridge Lid" on page 4-17).
6. If you cannot resolve the problem, call Service.
7. Close the drawer.

Clearing Film Jams from Area 2

The vertical transport between the film pickup area and the film platen, and between the film platen and the processor drum is Area 2. If film stalls in this area, an error message appears on the local panel.

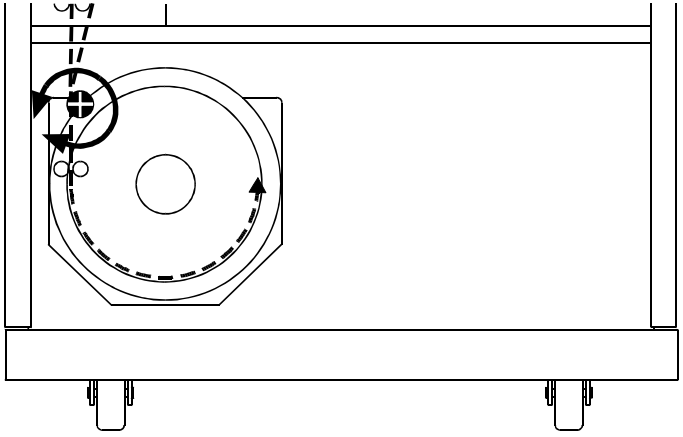


Vertical Transport Rollback Knobs

1. The Film Jam in Area 2: error message appears.
2. Touch the **Show Jam** button. The **Door Control** screen appears and the affected area is highlighted.
3. Touch the front door icon. The front door opens.
4. Locate the jammed film in the vertical transport.
5. Remove the jammed film. If the film is jammed in one of the feed roller sets, turn the rollback knob in the appropriate direction to free the film.
6. Close the front door.
7. If you cannot clear the jammed film, call Service.

Clearing Film Jams from Area 3

The exposure platen is Area 3. If film stalls in this area, an error message appears on the local panel.



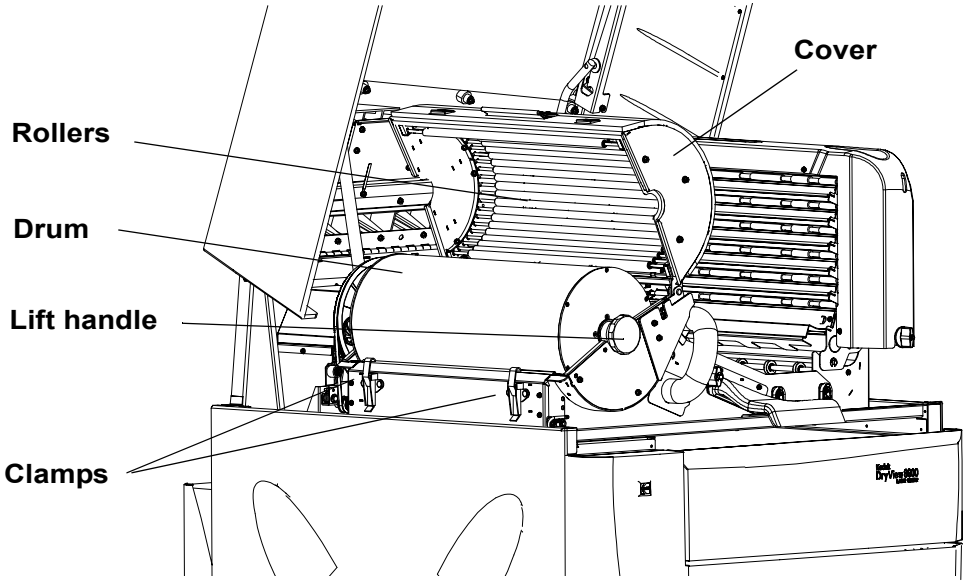
Clearing Film Jam Area 3

1. The Film Jam in Area 3: error message appears.
2. Touch the **Show Jam** button. The **Door Control** screen appears and the affected area is highlighted.

3. Touch the front door icon. The front door opens.
4. Locate and remove the jammed film in the platen or vertical transport.
5. If the film is jammed in one of the feed roller sets, turn the rollback knob in the appropriate direction to free the film.
6. Close the front door.
7. If you cannot clear the jammed film, call Service.

Clearing Film Jams from Area 4

The film processor drum is Area 4. If film stalls in this area, an error message occurs on the local panel.



Clearing Film Jam Area 4

1. The Film Jam in Area 4: error message appears.
2. Touch the **Show Jam** button. The **Door Control** screen appears and the affected area is highlighted.
3. Open the upper hood to its first locking position.

⚠ CAUTION:
Hot Surface. Drum and rollers inside the processor are hot.

Exercise caution when removing jammed film from the processor.

4. Release the two clamps at the left of the processor.

CAUTION:
Whenever you raise or lower the drum cover, grasp the cover only on the lift handle to avoid the possibility of pinching your fingers.

5. Open the drum cover.

CAUTION:
To prevent damage to the surface of the processor drum, do not use any type of tool to remove jammed film.

6. Clear the jammed film from the processor area. There may be more than one sheet.

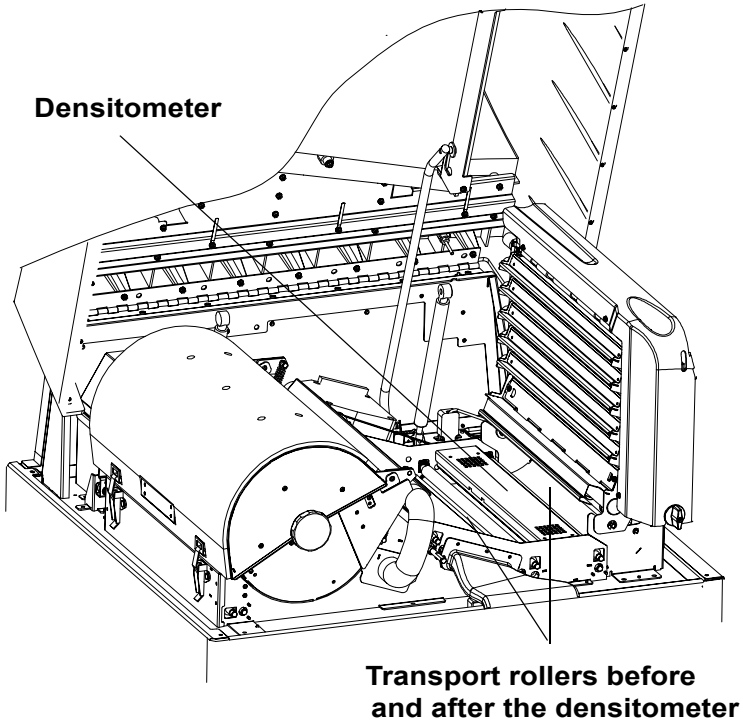
NOTE: If the film is jammed in the lower section of Area 4, you will need to open the front door to remove the film (see "Clearing Film Jams from Area 2" on page 4-19).

7. Close the drum cover and secure it with the two clamps.
8. Close the upper hood.
9. If you cannot clear the jammed film, call Service.

NOTE: The processor has to warm up to operating temperature before the processor can print.

Clearing Film Jams from Area 5

The drive rollers prior to the sorter is Area 5. If film stalls in this area, an error message occurs on the local panel.



Clearing Film Jam 5

1. The Film Jam in Area 5: error message appears.
2. Touch the **Show Jam** button. The **Door Control** screen appears and the affected area is highlighted.
3. Open the upper hood to its first locking position.

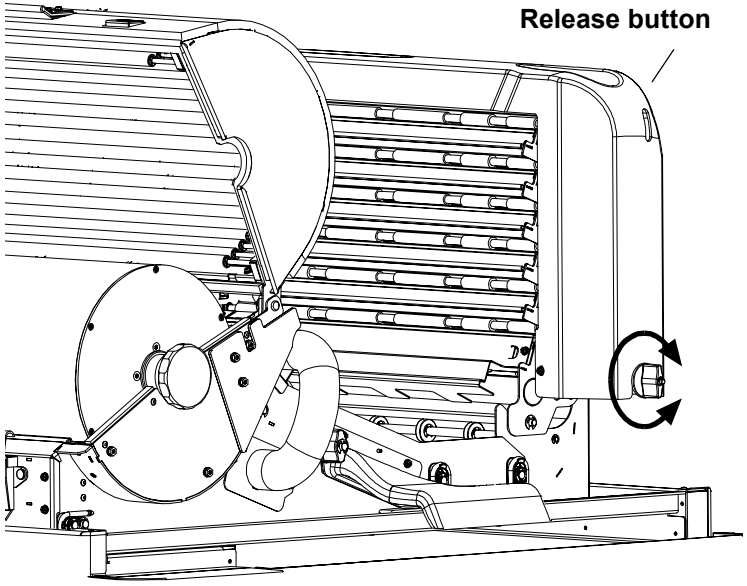
CAUTION:
Hot Surface. Drum and rollers inside the processor are hot. Exercise caution when removing jammed film from the processor.

4. Remove the jammed film in the film path from the processor to the sorter.
5. Grasp the film and pull at 90°.

6. Close the upper hood.
7. If you cannot clear the jammed film, call Service.

Clearing Film Jams from Area 6

The sorter is Area 6. If film stalls in this area, an error message appears on the local panel.



Sorter Knob

1. The Film Jam in Area 6: error message appears.
2. Touch the **Show Jam** button. The **Door Control** screen appears and the affected area is highlighted.
3. Open the upper hood to its first locking position.

CAUTION:
Hot Surface. Drum and rollers inside the processor are hot. Exercise caution when working in the drum area.

4. Inspect the sorter rollers on the left side of the sorter. Remove any film. If the film is jammed in one of the feed roller sets, turn the sorter knob in the appropriate direction to free the film.
5. Tilt the sorter backward to access the inside area of the sorter:

a. Hold the sorter with one hand.

b. Press down on the release button.

c. Carefully tilt the sorter to the left until it is in a resting position.

6. Remove any jammed film. If the film is jammed in one of the feed roller sets, turn the sorter knob in the appropriate direction to free the film.
7. Carefully tilt the sorter back to its locked position.
8. If you cannot clear the jammed film, call Service.

Calling for Support

If you cannot repair the machine and need help, you should call for support. Before you call, have the following information ready:

- Model number: 8900
- K-number:
- Phone Support number: 1-800-328-2910 (U.S. only)

5 Specifications

Dimensions

Height:	60 in. (152 cm)
Width:	32 in. (81 cm)
Depth:	39 in. (99 cm)
Weight:	1028 lb (466 kg)

Electrical

Voltage:	120 V ±10%, 60 Hz ±3 Hz 230 V ±10%, 50 Hz ±3 Hz 100 V ±10%, 50/60 Hz ±3 Hz
Current Draw:	120 V: less than 12 A 240 V: less than 7 A 100 V: less than 15 A
Power Consumption:	• 1440 W peak for line voltages between 90 V and 106 V (and tapped at 100 V) • 1150 W peak for line voltages between 108 V and 127 V (and tapped at 120 V) • 1450 W peak for line voltages between 180 V and 212 V (and tapped at 200 V) • 1530 W peak for line voltages between 198 V and 233 V (and tapped at 220 V) • 1530 W peak for line voltages between 233 V and 254 V (and tapped at 240 V)

Laser Specifications

Wavelength:	810 nm
Power:	100 mW
Class:	3B
Type	Diode

Operating Environment

Temperature:	15° to 35° C (59° to 95° F)
Humidity:	20% to 75% RH, non condensing
Airflow	0.5 cubic feet per minute of fresh outside air, per square foot of floor area, assuming a maximum occupancy of 10 persons/1000 square feet in the room where the laser imager is located.
Magnetic Field:	< 50 Gauss

Storage Environment

Temperature:	-35° C to 60° C (-31° F to 140° F)
Humidity:	10% to 90% RH, non condensing

Environmental Effects

Heat Dissipation:	3000 BTU/hour (average)
Acoustical Noise:	Less than 55 dB at one meter (70 dB momentary)
	Less than 80 dB, non-repetitive tasks such as door open/close

Film Sizes

The 8900 Laser Imager processes the following film sizes:

- 8 x10 in. *DryView* Film
- 10 x 12 in. *DryView* Film
- 11 x 14 in. landscape *DryView* Film
- 14 x 14 in. *DryView* Film
- 14 x 17 in. *DryView* Film

Film Types

The 8900 Laser Imager processes the following film types:

- *DryView* Blue Film
- *DryView* Clear Film

Film Throughput

The film throughput is approximately 180 films per hour.

Agency Compliance

See "Safety and Related Information" on page 1-1 in this manual.

6 Film Technical Information

General Description

This section describes the characteristics of ***Kodak DryView*** Laser Imaging Film, not the operation of the 8900 laser imager.***DryView*** Laser Imaging Film is a high-resolution, infrared-sensitive, photothermographic film designed specifically for the family of ***DryView*** Laser Imagers.

DryView Laser Imaging Film is packaged in daylight load packages, available in blue or clear, 7-mil polyester base, and is available in the following five sizes:

- 8 x 10 in.
- 10 x 12 in.
- 11 x 14 in.
- 14 x 14 in.
- 14 x 17 in.

Spectral Sensitivity

DryView Laser Imaging Film is infrared sensitive and has been sensitized to the infrared laser diode of ***DryView*** Laser Imagers. When handled according to instructions on the daylight-load film package, safelights are not needed. It is not recommended, but if you remove undeveloped film from the daylight load package, you will need a darkroom setting and a green safelight.

Sensitometric Characteristics

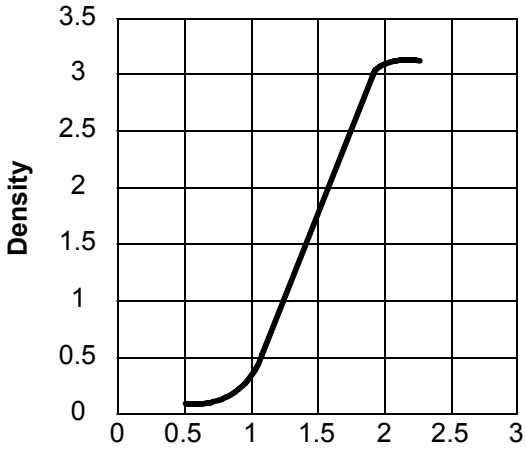


Image Quality

DryView Laser Imaging Film delivers diagnostic-quality, continuous-tone images along with sharp alphanumerics and optimum contrast. This high-quality, silver-based film provides radiologists with the same diagnostic information they are accustomed to viewing - including the spatial resolution, contrast and grey levels. Because it is a totally dry imaging process, there is no image quality variability due to “wet” chemistry.

Automatic Image Quality Control

DryView Laser Imaging Film is system-matched for the Kodak patented Automatic Image Quality Control (AIQC) technology. This fully automated system, which is a standard feature of *DryView* Laser Imagers, is designed to ensure that contrast, density and other image quality parameters meet preset user preferences, film-to-film, lot-to-lot.

An RF-TAG mounted on each film cartridge lets the laser imager automatically determine film type, the number of sheets remaining, and the film manufacturing lot. The AIQC uses this information to automatically calibrate the imager's electronics and optimize image quality without operator intervention.

The AIQC system reads a special density patch printed on each sheet of *DryView* Laser Imaging Film as it passes through a built-in densitometer.

Slight density variations are corrected automatically.

Environmental Impact

Tests show that *DryView* Laser Imaging Film is not considered hazardous to the environment. As a result, you can develop, recycle, and dispose of film with less impact on the environment than if you were using wet-developed silver halide films.

DryView Laser Imaging Film

US Environmental Regulations Comparison

	Wet Silver Halide				DryView
	Developer	Fixer	Wash	Film	Film
Product Regulations					
OSHA MSDS	Required	Required	Not required	Not required	Provided
DOT	Hazardous	Hazardous	No limits	No limits	No limits
Use permits	Local	Local	None	None	None
Disposal* Regulations					
EPA	Hazardous	Hazardous	No	No	No
DOT	Hazardous	Hazardous	No	No	No

Note: There is not SUPERFUND liability with DryView Laser Imaging Film.

* State and local laws vary. Consult appropriate regulations or authorities prior to disposal.

Storing and Handling Undeveloped Film

To achieve consistent results up to the expiration date indicated on the film package, *DryView* Laser Imaging Film must be stored in a cool, dry place (41° F/5° C to 77° F/25° C) and protected from radiation and chemistry fumes.

The film can withstand short-term temperature spikes (up to 95° F/35° C) for several hours during transit without any significant effect on film quality or performance. Transit temperatures above 95° F/35° C will gradually diminish shelf life. If the AIQC encounters film that has been damaged by improper handling, the AIQC will automatically alert system operators.

Handling Developed Film

Handling *DryView* Laser Imaging Film requires reasonable care. Spills, humidity and other moisture typically have no significant effect on

developed films. However, prolonged exposure to intense light or excessive heat (130° F/54.4° C) for more than 3 hours, may cause some gradual darkening of images. Leaving films in vehicles in hot climates for extended periods of time is not recommended.

For best results, store film in sleeves when not being reviewed. DryView Laser Imaging Film can be left on a light box for more than 24 hours; in extreme cases in which light boxes are exceptionally hot (120° F/49° C), Kodak recommends removing them prior to 8 hours of continuous exposure.

Take care when using spotlight viewing for more than 30 seconds because temperatures near the light source may exceed 180° F/82.2° C. Use in slide projectors is not recommended due to the high temperatures generally found in these devices.

With DryView technology, a small amount of final development occurs when the film exits the laser imager and is initially exposed to ambient or view-box lighting. This is virtually undetectable and has no effect on image quality (i.e., typically 0.02 change in density). This small density increase is uniform and permanent upon full exposure of the film under normal handling conditions (i.e., room light or view box).

Archiving Developed Film

DryView Laser Imaging Film has been tested and can be archived for more than 100 years when stored at American National Standards Institute (ANSI) recommended storage conditions (77° F/25° C). Developed films may be stored at higher temperatures; however, that may reduce the number of years the film can be stored. For example, storing films at a constant elevated temperature of 90° F/32.2° C may reduce archive capability to 30 years.

Exposing to Moisture

DryView Laser Imaging Films typically withstand humidity, spills and other forms of water without any significant effect on image quality or film integrity. If needed, film can be cleaned with a clean, damp cloth.

Dissipating Odor

DryView technology eliminates virtually all unpleasant odors. While some low-level odors are produced during the development process, they pose no known adverse health risks. Processing odor levels are further reduced by a non-hazardous, recyclable filter in the laser imager. This filter traps most low-level odors and prevents them from dissipating into the work environment. To help maintain optimum performance, the filter requires

periodic replacement. *DryView* Laser Imagers require no special venting.

Dissipating Heat

DryView Laser Imagers use controlled heat to develop *DryView* Laser Imaging Film. The heat has virtually no effect on the air temperature of the work area. The amount of heat dissipated into an area during a day is typically less than the heat generated by four 100-watt light bulbs.

Recycling Film

According to the Environmental Protection Agency (EPA) standards, *DryView* Laser Imaging Film is not considered hazardous and requires no special disposal procedures. However, the film does contain silver and polyester that may be recovered by using one of several recycling processes.

Call your local Kodak sales representative or go to the Kodak website www.kodak.com/go/KES

Refer to Publication J700 and see “End of Life Management' section.

Glossary

AIQC	Automatic Image Quality Control.
CR	Computed Radiography, the process of creating digital radiographic images.
CT	Computed Tomography, the process of creating digital tomographic images.
Restart the laser imager	Restart means to shut down and restart the laser imager.
DICOM	Digital Imaging and Communications in Medicine. A TCP/IP-based protocol for transmitting and receiving medical imaging and related data over a network.
Dmax	Dmax means maximum density. Dmax is the density of an area on the film which has received maximum exposure.
Dmin	Dmin means minimum density. Dmin is the density of an unexposed area on the film.
dPatch	dPatch means density patch. A small patch of specified density in the trailing edge of each film that AIQC uses to monitor density change on film.
DR	Digital radiography, the process of creating digital radiographic images.
DRE	DICOM rastor engine.
DSA	Digital Subtraction Angiography.
DVB	*DryView* Blue Film.
DVC	*DryView* Clear Film.
FAZ	Fatty acids (FAZ). A by-product from the processing of *DryView* Film. As film is processed (heated), solvents in the film emulsion are let go as a gas. Some of these gases condense into FAZ.
Film model	The film model defines the print characteristics for a particular lot of film.
Key operator	The person(s) designated by the department manager to receive applications training and allowed access to password-protected areas to make system changes.
LED	Light Emitting Diode.
MCS	Machine Control System. A microprocessor system on a printed circuit board that runs code to control the subsystems with the laser imager.
Modality	Medical equipment that actually generates medical images (for example, an

	MRI).
Monotonic	Continuously increasing. When a calibration sheet, which consists of strips of increasing density (Dmin) to maximum density (Dmax), is read by the densitometer, the density values must be monotonic (continuously increasing). If they are not, an error message is generated.
MR	Magnetic Resonance.
GSM	Gray Scale Manager.
N/A	Not available or not applicable
PACS Link (MIM)	Picture Archiving Communication System Link - Medical Image Manager. A family of store-and-forward software applications that is developed by Kodak.
Platen	The metal surface on which the film rests as it is exposed.
RF Tag	Radio frequency tag.
Service image	An image used by service personnel for troubleshooting.
Shutdown	The process of exiting current tasks and applications and turning the power off.
SMPTE test pattern	A Society of Motion Picture and Television Engineering monitor test pattern that is used for analyzing image-quality problems.
SST	Synergy Service Tool.
Test type	The type of test film that will be printed. Two film test types are available: a density test film (SMPTE pattern) and a calibration film.
TFT	Transfer Function Tables.
Undelivered queue	The queue of jobs that cannot be printed because of problems with the job description.
UPS	Uninterruptible Power Supply. This device provides power to the computer during periods of power outage to provide power during a controlled shutdown.
Version	A different rendition of an image. A second version of an image is processed using a second set of image processing parameters.

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