PowerFilm

High Performance Digital Image Processing for the Kodak 3000DSV and 2400DSV

Addendum to Users Manual

Version 5.3 for Windows NT4, Windows 2000 and Windows XP



'Developer & Integrator of Information Capture & Retrieval Technologies'

PowerFilm version 5.3

Overview

This document is an addendum to the PowerFilm 5.0 user manual and discusses the changes and enhancements made to the PowerFilm software up to and including release 5.3. Please refer to the software release notes for further technical information on 5.3 and any last minute changes to the software that may not appear in this documentation.

PowerFilm Software Licensing Procedure 5.3

The PowerFilm software licensing system has been reengineered to make installation and registration of the software even easier. A new Licence Manager program is provided to allow users to easily configure their licenses. When the software is installed, a 14-day license is automatically enabled. The following section describes the steps involved in obtaining a permanent licence for the software. Please refer to the software registration form that you should have received with the software.

Licensing the Software

Once the 14-day license has expired, a **Software Licence KEY** is required to activate an unlimited licence. This key ties the installation of PowerFilm to the PC you are installing the software onto. The **Software Licence KEY** can be requested at any time during (or after) the 14-day period.

Software Site CODE

The **Software Site CODE** is an encoded number that uniquely identifies your PC. Your **Software** Licence *KEY* is generated from the **Software Site** *CODE* and so is only valid for the PC on which the **Software Site** *CODE* was generated. To generate your **Software Site CODE**, you need to run the Licence Manager. From the Windows Start menu, navigate to the **KODAK** Program Group and select **Licence Manager**'. The Licence Manager user interface is displayed.

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Fig 1. Licence Manager

The Licence Manager interface is divided into two sections; *Generate Site Code* and *Configured Licence Keys*.

Generating Site Codes

The *Generate Site Code* section allows you to enter the serial number (ref. Number) for the software (which can be found on the product packaging and on the software registration form) and generate your unique **Software Site Code**.

Enter your Software Serial Number (ref. Number) and press the Generate Site Code button.

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Site Code	86321A92CAAF7DEEB803D8171D7B4E0	7	Save Site Code File

Fig 2. Generate Site Code

You should now save a Site Code File (SiteCode.dat) by pressing the Save Site Code File button.

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Fig 3. Save Site Code File

By default the SiteCode.dat file will be saved in the software installation folder but you can save it to any available folder on your PC.

Software Licence KEY

You obtain your Software Licence KEY by sending the following details along with the SiteCode.dat file to the contact details provided on the software registration form.

- Your name and contact details
- Your company name and address
- Date the software was received
- Reference number for the software (on the product packaging)

Once your request for a **Software Licence Key** has been processed, you will be sent a Licence File that you can use to configure your licence in the Licence Manager.

Configuring Licence Keys

When you receive your Licence File (LicenceKey.dat), save it to the same location you used when saving the SiteCode.dat file and then run the Licence Manager again. This time using the **Load Licence File** button in the lower part of the Licence Manager interface, add the licence to the system.

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Fig 4. Open Licence Key File

Once you have opened the Licence File, you should receive confirmation that the licenses were successfully loaded.



Once you have loaded the Licence File, your configured licences will be displayed in the user interface.

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Fig 5. Loading Licenses

You may now close the Licence Manager program and start using the software.

Additional MARS Controller Support

PowerFilm now supports the MARS IV Roll Film Carrier Controller. Users are now able to navigate to, and scan, selected Blocks (Large blip), Batches (Medium blip) or Items (Small blips) on 16mm roll film. The PowerFilm user interface has been updated to support the MARS IV Controller. Some of the functionality is disabled when PowerFilm is used with a Mini MARS II Controller (for Dual level film).

Please refer the PowerFilm release notes to confirm the Roll Film Carriers that are supported and appropriate firmware revisions for the MARS IV controller and the carrier being used.

Setup and Configuration

The MARS Controller should be installed and tested using the units manual keypad before use with PowerFilm. Ensure that the configuration of the communications interface matches the parameters setup in PowerFilm.

PowerFilm Setup

From the Main PowerFilm interface select **Options** from the **File** menu. Select the **Controller** Tab.

In the Controller section select MARS II or MARS IV as appropriate.

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- MARS Option	s			
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- COM Port				
Com 1	C Com 2	C Com 3	O Com	4
-Baud Rate				
9600	C 4800	O 2400	O 1200)
Parity				
None	O Odd	O Even		
- Stop Length -				
I Bit	C 2 Bit			
Character Len	igth			
8 Bit	C 7 Bit			

Fig. 6 The PowerFilm Options Dialog

Note: Ensure that all other sections on the **Controller** Tab are completed correctly. (COM Port, Baud Rate, Parity, etc.)

Press OK and restart PowerFilm.

When PowerFilm is restarted, the Film Control Tab will be displayed.

Hint: If the **Film** Tab does not appear PowerFilm may be having difficulty communicating with the MARS Controller. Check that the serial cable is fitted securely and that the COM Port setup is correct.

The Film Control Tab

The **Film** Control Tab is used to control the MARS IV and Mini MARS II Controller functionality for Single, Dual or Tri level blipped microfilm. Depending on the controller being used, certain functionality will be enabled/disabled.

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Fig. 7 The Film Control Tab (MARS IV)

The Film Control Tab is divided into the following sections.

MARS Control

The MARS Control options allow the user to set the film blip parameters, control the initial positioning of the first frame of the film and rewind the film cartridge.

Setup FilmApplies the parameters set in the Blip Configuration section.Note: This can only be done when the film is rewound and
ejected.Note: Until the Film Type is set, none of the controls on the
other sections on the Film Control Tab will be enabled.Once the Film Type is set, the Setup Film button will be
disabled. You should check that the parameters applied are
reflected on the front panel of the MARS Controller before
continuing.

Goto Start	Instructs the MARS Controller to go to the first frame on the film.
	Hint: Goto Start , instructs the MARS controller to position the film at Block 1, Batch 0, Frame 0 for Tri level film and Batch 1, Frame 0 for Dual Level Film. If the address of the first frame of each batch starts at 1 rather than 0, then you should set the MARS options accordingly on the Controller tab of the PowerFilm Options screen (File/Options).
Rewind	Rewinds and ejects the film cartridge.
	Hint: Rewind is also available from the button bar.

Blip Configuration (Image Marks)

The Blip Configuration options setup the polarity of the blips on the film and blip level of the film to be scanned.

Polarity	Defines whether the blip polarity is Opaque (Negative) or Transparent (Positive).
Level	Defines the blip level for the film to be scanned.
	A Channel Single Level - Single level blips in channel A B Channel Single Level - Single level blips in channel B A Channel Dual Level – Dual level blips in channel A B Channel Dual Level – Dual level blips in channel B A Channel Tri Level – Tri level blips in channel A B Channel Tri Level – Tri level blips in channel B
	Note: The Tri Level options only appear when a MARS IV controller has been configured.
	Two additional modes are only available with the MARS IV controller (even though they only relate to Dual level blips)
	B Channel Batch - A Channel Item – Batch (medium) level blips in Channel B and Item (small) level blips in channel B
	A Channel Batch - B Channel Item – Batch (medium) level blips in Channel A and Item (small) level blips in channel A
	Note: If the blip level is set incorrectly for the film type loaded, the MARS Controller will not be able to search the film correctly and the film may rewind and eject when Goto Start is pressed.

Search

The Search options provide a mechanism to navigate to the starting point from which you wish to begin scanning.

Block Only enabled if the Blip Configuration Level is set to one of the Tri options.

Enter the number of the Block you wish to search for.

Batch	Only enabled if the Blip Configuration Level is set to one of the Dual or Tri options.
	Enter the number of the batch you wish to search for.
Frame	Enter the number of the frame you wish to search for.
	Note: The MARS Controller may be configured to start counting item level blips from 0 or 1.
Search Button	Begins the search for the specified Block, Batch and Frame.
	Note: If you search for an address on the film that does not exist, the MARS controller may randomly rewind (re-file) the film. If this occurs, reload the film and search for an alternative address.

Move

The Move options provide a mechanism to move forward a number of frames from the Current Position.

Distance	Enter the number of frames you want to move forward by.
Move Button	Begins the move forward operation.
	Note: With the MARS IV you may only move forward in increments greater than 1 within the same batch (medium level) on the film. Move forward one frame at a time will cross Batch boundaries.
	Hint: Move forward one frame at a time is available from the button bar.

Microfilm Control

The Microfilm Control section allows the user to specify the range of images and batches that should be scanned.

Scan All Frames	Instructs the MARS Controller to scan all frames from the current position when the Scan button on the button bar is pressed. Scanning will cross Block and Batch boundaries until the end of the film has been reached.
Scan Next <i>n</i> Blocks	Instructs the MARS Controller to scan the specified number of Blocks from the current position when the Scan button on the button bar is pressed. Only available if the Blip Configuration Level is set to one of the Tri level options.

Scan Next <i>n</i> Batches	Instructs the MARS Controller to scan the specified number of batches from the current position when the Scan button on the button bar is pressed. Only enabled if the Blip Configuration Level is set to one of the Tri or Dual level options.
	Note: On Tri level film, if you specify that PowerFilm should scan more batches than exist in the current Block, only the Batches in the current Block will be scanned.
Scan Next <i>n</i> Frames	Instructs the MARS Controller to scan the specified number of frames from the current position when the Scan button on the button bar is pressed.
	Note: Scanning any number of frames will cross Batch and Block boundaries on the film.

Current Position

The Current Position section is an information only display, which indicates the current block, batch and frame position on the film.

Block	Current Block number (only enabled for Tri level film)
Batch	Current Batch number (only enabled for Tri or Dual level film)
Frame	Current Frame number.
Note:	The Current Position on the film indicator will only be correct if PowerFilm was used to locate the batch and frame. If the MARS Controller was used manually to move to a different frame the Current Position indicator will not be updated until scanning starts or a new search or move is instigated from PowerFilm.

Image Annotation

Users are now able to add annotations to TIFF images displayed in the PowerFilm image viewer.

Annotation Menu

There are four items available in the Annotation menu.

Show Annotation Toolbar Displays the annotation toolbar.

Show/Hide Annotations	Choose to display or hide annotations, prior to making them
	permanent.

This function displays or hides the annotations on the currently selected image. Users will be prompted to save the image with the annotations displayed or hidden.

Delete Selected Annotations	Choose to remove the selected annotations.
Burn In Annotations	Makes annotations permanent. Effectively writes to the TIFF file; creates a new TIFF.

Using Annotations

PowerFilm allows you to highlight a particular area of an image, blank out information on an image or add a note to an image before printing, faxing, emailing or saving to the batch. You can use this feature to mask confidential information or add a customer message on a requested image.

To launch the annotation toolbar select the **Annotation** Menu and choose **Show Annotation Toolbar**. This brings up the following toolbar:



This toolbar contains various annotation options.

Select Annotations. This allows the user to select any previously created annotations so it can be moved, resized, deleted or to modify its properties.

You are not able to reselect Burned-in annotations.



Freehand Line. This allows the user to create free-form lines. This could be used to call attention to something specific on an image.

Highlighter. This allows the user to draw a rectangle highlighting a specific area with a transparent colour. This could be used to call attention to something specific on an image.

Straight Line. This allows the user to draw straight lines. This could be used to call attention to something specific on an image.



Adding Annotations

To add an Annotation, launch the Annotation Toolbar by choosing **Annotation Toolbar** from the **Annotation** Menu.

Now select your annotation type (refer to the list above) and add them to your image. It is possible to modify font and background properties if appropriate, as well as resize annotations by dragging the edges of the images as required.

Once you have made all annotations to each image, if you need to make them permanent, choose **Burn In Annotations** from the **Annotation** Menu to do this.

Note: This operation is permanent and cannot be undone.

Editing Annotations

You are able to edit the characteristics of an annotation such as the background colour, pen colours and text styles. To edit an Annotation, choose the **Select Annotations** tool and right click on the desired annotation with the mouse. A mini menu will appear to allow you to choose which aspect of the annotations characteristics you would like to change.

Pen color	
Text color	
Back color	
Pen width	
Font	
BackStyle	•
Locked	
✓ Moveable	
Text orientation	•
✓ Sizeable	
Text locked	
Hatch style	•
Hatch color	
Text justification	×
Nudge down	
Send to back	
Cut	
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Delete	

Note: It is not possible to edit an annotation that has already been "burned in".

Deleting Annotations

To delete an Annotation, choose the **Select Annotations** tool and right click on the desired annotation with the mouse.

Choose Delete from the mini menu.

Insert Scanning

Users are now able to choose to insert pages into the middle of a batch rather than append pages to the end of the batch during scanning. New menu items; **Insert Pages** and **Append Pages** have been added to the **Action** menu. The default is **Append Pages**. This new feature allows users to scan images anywhere in an open batch to insert images that may have been missed when the batch was originally scanned.

When **Insert Pages** is chosen, images are inserted immediately after the currently selected image in the PowerFilm image viewer.

PowerFilm will revert to Append Pages when the program is restarted.

PDF Support

The option for PDF output is now a standard feature of the software in version 5.3. The PDF options are displayed in the **Output** options section of the **Batch** tab. When the *Output Format* is set to PDF, the *Output Type* has the following effect:

PDF Only / Single Document	A single PDF file is created for all the images scanned in the batch.
PDF Only / MPage Doc Per Batch	As above but the number of images in the PDF file is controlled by the Max Pages setting. Setting Max Pages to 1, results in a PDF file being created for every image scanned.

PDF Only / MPage Doc Boundary

When scanning blipped microfilm, a new PDF file is automatically created for every Chapter (level II image address) on the film.

Save As PDF

The manual 'Save Image As' functionality accessed from the File menu has been enhanced to support the saving of single or multiple images as PDF files as well as single or multipage TIFF files.

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Fig. 8 Save Image as PDF File

Support for UNC Paths

A new browse dialog has been added to set the output path base directory set on the **Batch** tab. This allows users to define UNC paths as the output path for scanned batched. Additionally, users may create new folders from this dialog.

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Fig. 9. Set the Output Path for the Base Directory

Note: Windows NT does not offer the option to 'Make New Folder' If you are running under Windows NT, you should ensure that the output folder has already been created.

Show 2 Image Viewers During Scanning

In addition to the options to display 1, 4 or 6 image viewers during the scanning process, users are now able to choose to display 2 image viewers. Users can choose to display the image viewers horizontally or vertically by choosing the appropriate **Viewer Alignment** option on the **Settings** tab of the 'PowerFilm Options' dialog (accessed from the **File** menu).

Viewer Alignment	
 Vertical 	 Horizontal

Fig. 10. Choose Viewer Alignment

Image Merge Function

When more than one image has been scanned, this new option merges the currently selected image underneath the previous image. The second image is then discarded.

This feature is especially useful on the 2400DSV scanner. With the 2400DSV, the standard 'Custom Duplex (Merge)' functionality may result in a low definition merged image because the user needs to zoom out to a high degree to fit front and back images into the scanner display screen at the same time. The 'Merge with previous page' functionality allows the user to scan the front image fully zoomed in to obtain maximum image definition, then scan the back image, then merge the two together. The result is a high definition merged image. To use this feature:

1. Scan two images.



Fig. 11. Two Images Scanned

2. From the Action menu, choose Merge with Previous Page.

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Fig. 12. Images 1 and 2 Merged

The second image scanned is merged underneath the first image scanned and the batch only contains one image. A small area of white space separates the two images.

Application Startup Password

For access control purposes, administrators are now able to define an application start-up password that users must enter before they can use the software. To configure an application start-up password, follow this procedure:

- 1. From the File menu, select Options.
- 2. Select the **Password** tab.

The following dialog is displayed:

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Please enter	the new supervise	or password	
Confirm the I	new supervisor pas	ssword	
Passwor	d required for appli	ication start	
Please enter	the application pa	assword	
Confirm the	application passwo	rd	
	ок	Cancel	1

Fig. 13. Password Options

- 3. Enter the supervisor password. The supervisor password was setup when the software was first installed.
- 4. Enable the **Password required for application start** check box.
- 5. Enter and confirm the startup password and press OK.

The password will be required the next time the program is started.

Image Byte Count Display

For convenience, the status bar in the main user interface now indicates the size of each image scanned (in Kb) along with the image file name.

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Fig. 14. Image Byte Count Displayed