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Dim/AGE Scan Multi PRO

E HARDWARE MANUAL

BEFORE YOU BEGIN

Thank you for purchasing this Minolta product. Please take the time to read through this instruction manual so you can enjoy all the features of your new scanner.

This manual contains information regarding products introduced before September, 2002. To obtain compatibility information for products released after this date, contact a Minolta Service Facility (www.minoltasupport.com). This product is designed to work with accessories manufactured and distributed by Minolta. Using accessories or equipment not endorsed by Minolta may result in unsatisfactory performance or damage to the product and its accessories.

Check the packing list before using this product. If any items are missing, immediately contact your dealer.







35mm Film Holder

Universal Holder UH-P1

FH-P1

Scanner unit



SCSI cable SC-P1



Slide Mount Holder

SH-P1

IEEE 1394 cable FC-P1



AC power cord (Shape of plug varies with destination)



Quick Reference Guide and Minolta International Warranty Certificate



DiMAGE Scan Utility CD-ROM, **DIMAGE Instruction Manuals-CD-ROM**

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Standard Attachment HA-P1 Glassless Attachment HA-P2



Film Mask Set FM-P1





Read and understand all warnings and cautions before using this product.

- Use only within the voltage range specified on the unit. Inappropriate current may cause damage or injury through fire or electric shock.
- Do not disassemble this product. Electric shock may cause injury if a high-voltage circuit inside the product is touched. Take the product to a Minolta Service Facility when repairs are required.
- Immediately unplug the unit and discontinue use if the product is dropped or subjected to an impact in which the interior is exposed. The continued use of a damaged product may cause injuries or fire.
- Store this product out of reach of children. Be careful when around children not to harm them with the product or parts.
- Do not operate this product or handle the power cord with wet hands. Do not place a container with liquid near the product. If liquid comes in contact with the product, immediately unplug the unit. The continued use of a product exposed to a liquid may cause damage or injury through fire or electric shock.
- Do not insert hands, inflammable objects, or metal objects such as paper clips or staples into this product. It may cause damage or injury through fire or electric shock. Discontinue use if an object enters the product.
- Do not use the product near inflammable gases or liquids such as gasoline, benzine, or paint thinner. Do not use inflammable products such as alcohol, benzine, or paint thinner to clean the product. The use of inflammable cleaners and solvents may cause an explosion or fire.
- When unplugging the unit, do not pull on the power cord. Hold the plug when removing the cord from an outlet.
- Do not damage, twist, modify, heat, or place heavy objects on the power cord. A damaged cord may cause damage or injury through fire or electric shock.
- If the product emits a strange odor, heat, or smoke, discontinue use. Immediately unplug the product. The continued use of a damaged product or part may cause injuries or fire.
- Take the product to a Minolta Service Facility when repairs are required.

- This product should only be operated in the upright position. Inappropriate placement may result in fire.
- Damage or injury through fire or electric shock may result if the product is used or stored in the following conditions:
 - In humid or dusty environments
 - In direct sunlight or hot environments
 - In smoky or oily areas
 - In unventilated areas
 - On unstable or unlevel surfaces
- Insert the plug securely into the electrical outlet.
- Do not use if the cord is damaged.
- Do not connect the ground to a gas pipe, telephone ground, or water pipe. Improper grounding can result in injury from electric shock.
- Unplug the product when cleaning or when the unit is not in use for long periods.
- Periodically check that the power cord is not damaged and the plug is clean. Dust and dirt that may collect between the prongs of the plugs may result in fire.

This manual contains information specific to this model scanner. This includes hardware setup and use as well as notes about software operation for this model scanner. See the supplied DiMAGE Scan Utility software manual for information on the installation and operation of the scanner software.

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SYSTEM REQUIREMENTS

The computer and the operating system must be guarantied by the manufacturer to support IEEE 1394 (FireWire), or SCSI interface.

Check the Minolta web site for the latest compatibility information:

Europe: http://www.minoltasupport.com

North America: http://www.minoltausa.com.

PC / AT compatible computers	Macintosh						
SCSI: Pentium 166MHz or later processor. IEEE 1394: Pentium II or later processor.	SCSI: PowerPC 604 or later FireWire: PowerPC G3 or later.						
A Pentium III processor is recommended when scanning with 16-bit color depth. For Digital ICE ³ requirements, see page18.	PowerPC G4 processor is recommended when scanning with 16-bit color depth. For Digital ICE ³ requirements, see page18.						
SCSI: preinstalled Windows 98, 98 Second Edition, Me, 2000 Professional, NT 4.0, XP. IEEE 1394: preinstalled Windows Me, 2000 Professional, XP.	Mac OS 8.6* to 9.2.2, and OS 10.1.3 to 10.1.5.						
Operation is not guarantied for custom or home-built n The scanner cannot be used with notebook computers	nachines. S.						
A minimum of 96 MB of RAM (Windows (128MB with Windows XP)) or 64 MB of RAM (Macintosh) in addi- tion to the requirements for the operating system and applications is required. 256 MB or more is necessary when scanning with 16-bit color depth; 512 MB or more is recommended. For Digital ICE ³ requirements, see page18.							
2 GB or more of available hard disk space is required. sary when scanning with 16-bit color depth; 8 GB or m For Digital ICE ³ requirements, see page18.	6 GB or more of available hard disk space is neces- nore is recommended.						
A High Color (16bit) 640 x 480 pixel monitor is required. 1024 x 768 pixels is recommended.	A 640 x 480 pixel monitor capable of displaying 32,000 colors is required. 1024 x 768 pixels is recommended.						
TWAIN driver compatible with Photoshop 4.0.1, 5.0.2, 5.5, 6.0, and 7.0, and PhotoshopLE 5.0.	Plug-in compatible with Photoshop 5.0.2, 5.5, 6.0, and 7.0, and PhotoshopLE 5.0.						
Recommended SCSI boards: Adaptec SCSI Card 19160, Adaptec SCSI Card 29160, Adaptec SCSI Card 29160N.	Recommended SCSI boards: Adaptec PowerDomain 29160N, PowerDomain 2930U, PowerDomain 2940UW, or PowerDomain 2940U2W.**						
Recommended IEEE boards: Adaptec Fireconnect 4300, PROCOMP SpeedDemon 400P. Standard OHCI compatible non-DV-dedicated IEEE 1394 ports guarantied by the computer manufacturer can be used.	Only the standard built-in IEEE interface supplied by Apple Computer, Inc.						

* To use preinstalled Mac OS 8.6 with a built-in FireWire port, a Firewire 2.2 to 2.3.3 extension must be installed. This software can be downloaded free of charge from the apple web site at http://www.apple.com.

**Boards must be guarantied by the manufacturer to work with the computer and operating system.



Removing the optics locking screw

Before the scanner can be used, the optics locking screw on the bottom panel of the scanner must be removed with a flat-head screwdriver. The locking screw is necessary to transport the scanner. Place the screw in the storage position toward the front of the scanner body for future use.



optics locking screw must be used. Before inserting the screw in the lock position, the scanner must be initialized with the DiMAGE Scan Utility.

With the scanner connected to the computer and the DiMAGE Scan Utility running, press the control (Windows) or command (Macintosh) key plus the shift and L keys simultaneously. A window indicating the command will be displayed; click the OK button to move the optics to the lock position.



Cancel

A message stating the completion of the operation will be displayed; click the OK button. Turn off the computer and scanner. Disconnect the cable and power cord from the scanner and screw the optic locking screw in the lock position.

Before connecting the scanner to a computer

Before connecting the scanner to a computer, the the DiMAGE Scan Utility must first be installed. Read the software instruction manual for the installation procedure.

The scanner should be placed on a level surface free from vibrations. It should be located away from direct sunlight and in a clean, dry, well-ventilated area.

Connecting the SCSI cable

The scanner is supplied with an ultra SCSI D-sub half-pitch 50-pin cable. Contact your dealer if a different cable is required.



The computer and all peripheral devices must be off before connecting the scanner.

The terminator dip switch on the back of the scanner eliminates the need for an external terminator. If the scanner is to be the only SCSI device connected to the computer or it is the last device in a daisy chain, switch number 1 should be in the on position; terminating the SCSI chain helps to suppress noise, not terminating a chain can cause slowdowns, data errors, and crashes. If the scanner is to be connected somewhere within a daisy chain, switch 1 should be in the off position. The initial setting for all the switches is on. Dip switch 4 must be in the on position to use a SCSI interface.



Set the SCSI ID for the scanner by pressing the buttons above and below the ID number window. Devices in the same chain must have unique ID numbers. Depending on the computer system, some SCSI IDs may already be assigned:

IBM PC/AT Macintosh

- 7 SCSI host adapter
- 0 internal hard drive
 - 3 internal CD-ROM drive
 - 7 operating system

IDE Macintosh systems do not use SCSI ID 0 for the hard drive. SCSI ID 3 is available on the external bus on Macintosh systems with a dual bus.

Connect the scanner to the computer or SCSI chain with the cable. Either SCSI port can be used for the connection.

Plug the power cord into the back of the unit. The other end of the power cord should be plugged into a grounded outlet.



Connecting the IEEE1394 (FireWire) cable

The scanner is supplied with an IEEE 1394 (FireWire) cable. Up to 63 devices can be attached to a computer using this interface. However, the number of devices is limited to 16 when using a daisy-chain configuration.



The computer and all peripheral devices must be off before connecting the scanner.

Set dip switch number 4 to the off position to active the IEEE ports. Switch 4 must be moved to the on position if a SCSI cable is used.

Connect the scanner to the computer or IEEE peripheral chain with the cable. Either IEEE port can be used for the connection.

Plug the power cord into the back of the unit. The other end of the power cord should be plugged into a grounded outlet.





Auto Power Save

The scanner automatically turns the scanning light source off during long periods of inactivity to save energy and preserve the life of the fluorescent tube. Though not recommended, the auto-power-save function can be disabled by setting dip switch number 2 to the off position.



Handling film

To achieve the best possible reproduction from the scanner, the film and film holder should be free from dust and dirt. Always work with processed film in a clean, dust-free environment. Handle film by the edges or mount to prevent fingerprints and dirt marring the image area. Special lint free gloves are available from photographic equipment retailers for film handling as well as antistatic cloths, brushes, and blowers for removing dust. Film cleaner can be used to remove oil, grease, or dirt from film; carefully follow the manufacturer's instructions and precautions for the film cleaning solvent.

Where is the emulsion?

When film is scanned, the emulsion side of the film should be down. When viewing the film image, if the image is orientated correctly rather than a mirror image, the emulsion side is facing down. If the image is abstract or symmetrical so its orientation is difficult to determine, the emulsion is down if the frame numbers and edge markings can be read correctly. With mounted slides, the emulsion is on the same side of the mount as the film manufacturer's or processor's name is printed.

Loading 35mm film strips

The 35mm Film Holder FH-P1 is for unmounted 35mm film. Film strips up to six frames in length can be placed in the holder.

With the cover hinges away from you, open the holder by lifting on the latch on the cover.





With the emulsion down, place the film sideways into the holder and under the retaining tabs (1). Align the film frames with the holder windows. Carefully close the cover until the latch clicks. See page 15 for instructions on how to load the holder into the scanner.

Loading 35mm mounted slides

The Slide Mount Holder SH-P1 is for mounted 35mm film. Up to four slide can be placed in the holder. Slide mounts must be between 1mm and 2mm thick to fit the holder. Glass mounts cannot be used; the glass refracts the light resulting in distorted and unevenly illuminated scans.

With the cover hinges away from you, open the holder by lifting on the latch on the cover.





With the emulsion down, place the slide mounts sideways into the holder. The mount must be oriented as illustrated otherwise the top and bottom of the image will be cropped.

Carefully close the cover until the latch clicks. See page 15 for instructions on how to load the holder into the scanner.



When the slide mount holder is in the scanner, the last slide can be removed and a new slide inserted without ejecting the holder. A prescan should be made each time a slide is inserted when using the scanner's autofocus and auto exposure functions, see the DiMAGE Scan Utility manual.

Inserting attachments into the Universal Holder

The Universal Holder is used for scanning medium format film. All standard formats from 6X4.5 to 6X9 can be scanned. Two attachments with and without glass are supplied with the holder. An attachment must be inserted to hold the film.

With the hinge to the top, slide the left side of the attachment into the holder so the two protrusions on the attachment are aligned to the two slots in the Universal Holder.

Carefully press the right side of the attachment down until the latch in the Universal Holder clicks.



To remove an attachment, slide the latch (1) and lift the attachment from the front right corner.



Using the standard attachment

The standard attachment is equipped with glass to hold the film flat. A set of five masks are provided for standard formats: 6X4.5, 6X6, 6X7, 6X8, and 6X9. See page 11 for instructions on how to insert the attachment into the Universal Holder.

To open, press the latch on the attachment and lift the cover.

Slide the tabs of the appropriate mask into the corresponding slots on each side of the attachment hinge. Fit the holes on the other side of the mask (1) over the registration pins (2) on the base of the attachment. Always use a mask when scanning or newton rings and flare may degrade the image quality.







With the emulsion down, place the film on the mask. Align the frame with the mask aperture. Carefully close the cover until the latch clicks. See page 15 for instructions on how to load the holder into the scanner.

Using the glassless attachment

The glassless attachment allows scans without any extra glass surfaces in the optical path. See page 11 for instructions on how to insert the attachment into the Universal Holder.

To open, press the latch on the attachment and lift the cover.

Adjust the masking bars on the attachment to the film format. White markings indicate the format positions: 6X4.5, 6X6, 6X7, 6X8, and 6X9.



With the emulsion down, place the film on the attachment. Align the frame with the attachment aperture.

Carefully close the cover until the latch clicks. See page 15 for instructions on how to load the holder into the scanner.

Multi-format Set HS-P1 (sold separately)

The multi-format attachment allows non-standard film sizes to be scanned. The set includes the multi-format attachment cover (1), the multi-format attachment base (2), and a set of three masks (FM-P2)(3).



The Multi-format attachment is designed for non-standard film sizes, special technical films, and non-photographic transparent media. The maximum area that can be scanned at one time is 56.58 mm X 83.82 mm. This attachment can be used for 16 mm film, microfilm, or 24 X 65 mm panoramic images. TEM (transmission electron microscopy) film can also be scanned. However, since the image area of some TEM films is larger than the holder aperture, several scans need to be made and then the image must be reconstructed digitally.

Slide the left side of the attachment base into the Universal Holder so the two protrusions on the attachment are aligned to the two slots in the holder.

Carefully press the right side of the base down until the latch in the Universal Holder clicks.





Insert the two pin on the attachment cover into the two corresponding holes in the Universal Holder. Both pins should click into place.

LOADING THE FILM HOLDERS

With a straight edge and sharp knife, cut the aperture for the film from one of the masks. The aperture should be the same dimensions as the image area, not the film size; the mask should separate the film from the glass base of the attachment to prevent newton rings, and the aperture should only show the image area to eliminate flare from the surrounding clear film.



Slide the tab of the mask into the slot on the side of the Universal Holder. Fit the holes on the other side of the mask (2) over the registration pins on the base of the the holder on each side of the cover hinges.





With the emulsion down, place the film on the mask. Align the image area with the mask aperture.

Carefully close the cover until the latch clicks. See page 15 for instructions on how to load the holder into the scanner.

To remove the film, slide the latch toward the center of the holder and lift the cover.





To remove the multi-format attachment from the Universal Holder, slide the latch near the hinge (3) to remove the cover.

To remove the glass base of the attachment, slide the latch on the Universal Holder (4) and lift the base from the holder.

Loading a film holder into the scanner

Before using the scanner, install the DiMAGE Scan Utility; see the software instruction manual. Turn on the scanner and then start the computer. Launch the DiMAGE Scan Utility before inserting the film holder.

Do not insert the film holder into the scanner while the DiMAGE Scan Utility is launching or the scanner is initializing (the indicator lamp blinks during this period).

Insert the film holder into the scanner in the direction indicated by the white arrow. Hold the holder straight and level when inserting it into the scanner.

Ejecting a film holder

Use the eject button on the scanner body or in the DiMAGE Scan Utility window to remove the holder; the scanner automatically ejects the holder to its initial insertion position. Do not touch or hinder the holder while it is moving. When the indicator lamp goes out, remove the holder from the scanner.

Carefully push the holder into the scanner until the arrow mark (1) is aligned with the scanner door; the holder will be automatically fed into the scanner from that point. Never touch or hinder the holder while it is moving.







Easy Scan Utility

The Easy Scan Utility software is a simple scanning interface designed for individuals with no image processing or DTP experience. This software is not compatible with this scanner. The DiMAGE Scan Utility's custom wizard can be used to automate the scanning workflow, see the software instruction manual.

About the DiMAGE Scan Utility

Prescan size can be selected in the preferences dialog box with this scanner model. See setting scanner preferences in the advanced scanning section of the DiMAGE Scan Utility manual.

Film format and type settings

When scanning, the film type and format as well as the holder type must be selected in the main window of the DiMAGE Scan Utility. See scanner setup in the basic-scanning section of the software manual.

When using the Slide Mount Holder SH-P1 or the 35 mm Film Holder FH-P1, select the 35 mm option from the film-format drop-down menu. When scanning medium-format film with the stan-

dard or glassless attachment in the universal holder, select the appropriate format from the drop-down menu: 6 X 4.5, 6 X 6, 6 X 7, 6 X 8, or 6 X 9. When using the optional Multi-format attachment HS-P1, two menu options are available depending on the film used: Multi Format 35mm and Multi Format 6X9. The type of holder must also be specified between glass and glassless from the holder-type drop-down menu when the Universal Holder is used.

Film type can be selected between color and black and white, positive and negative film. Film for prints is negative film. Slide film is positive film. The transpar-



ent-media option is for use with the optional Multi-format attachment when scanning specialized film or non-photographic originals such as microfilm or microscope slides. Also for the Multi-format attachment, the TEM film option is for transmission electron microscopy film.

Disconnecting the scanner SCSI cable

The scanner and computer must be turned off before the SCSI cable can be disconnected. If the scanner is connected to a SCSI chain, all the devices in the chain must be turned off before disconnecting the cable.

IEEE 1394 (FireWire) cable

The easiest and safest way to disconnect the scanner from the computer is to turn both devices off as well as any peripheral devices and remove the cable. However, the following procedures can be used depending on the operating system employed.

Windows 98, 98SE, 2000 professional, XP, and Macintosh

Quit the DiMAGE Scan Utility. Confirm that the scanner indicator lamp is not blinking. Turn the scanner off and then disconnect the cable.

Windows Me



To disconnect the scanner, quit the DiMAGE Scan Utility. Left click on the unplug-oreject-hardware icon located on the task bar. A small window will open indicating the device to be stopped.



Digital ICE³ system requirements

Digital ICE³ is a collection of powerful image-processing tools. To make use of the Digital ROC and GEM functions, the following system requirements must be met:

PC/AT compatible computers										
Interface	Color	Format	Minim	um syster	n requirements					
Intenace	depth	l	Hard disk space	RAM	CPU					
		35 mm	1.2GB	128MB						
	8 bit	Multi-format 35 mm	2GB							
8081		6 X 9	4GB		Pontium 166MHz or lator					
3031		35 mm	2GB	256MB	Fentium roowinz or later					
	16 bit	Multi-format 35 mm	3GB							
		6 X 9	6GB							
		35 mm	1.2GB	128MB						
	8 bit	Multi-format 35 mm	2GB							
		6 X 9	4GB		Pontium II or lator					
		35 mm	2GB	256MB	Ferilium n or later					
	16 bit	Multi-format 35 mm	3GB							
		6 X 9	6GB	1						
		Recommen	ded system require	ements						
		35 mm	2GB							
	8 bit	Multi-format 35 mm	4GB							
SCSI		6 X 9	6GB	510MB	Pontium III or lator					
IEEE 1394		35 mm	3GB							
	16 bit	Multi-format 35 mm	4GB							
		6 X 9	8GB							
		Macin	tosh comput	ers						
		35 mm	1.2GB	96MB						
	8 bit	Multi-format 35 mm	2GB	102MB	PowerPC 604 or later					
		6 X 9	4GB	192IVID	(SCSI)					
		35 mm	2GB		PowerPC G3 or later					
	16 bit	Multi-format 35 mm	3GB	256MB	(FireWire)					
SCSI		6 X 9	6GB	1						
or		Reco	mmended system	requireme	ents					
FireWire		35 mm	2GB							
	8 bit	Multi-format 35 mm	4GB	384MB						
		6 X 9	6GB		PowerPC G4 or later					
		35 mm	3GB							
	16 bit	Multi-format 35 mm	4GB	512MB						
		6 X 9	8GB							

When determining the RAM available for a Macintosh computer, the volume required for the operating system and any application in use must be subtracted from the total memory allocation of the computer.

Scanner resolution

The maximum resolution of this scanner is 4800 X 4800 dpi. The maximum optical resolution varies with the format of the film: 35 mm film - 4800 X 4800, medium-format film - 3200 X 4800. Scans of medium-format film can have a final resolution of 4800 X 4800 dpi through interpolation. The minimum resolution is 300 dpi for 35mm and 200 dpi for medium-format film.

Scanner color profiles

When the DiMAGE Scan Utility is installed, the scanner profiles listed below are automatically installed for this model scanner. These profiles have been included for advanced color matching with profile-to-profile conversions in sophisticated image-processing or DTP applications. When using these profiles, the color reproduced may not be the same as the color matching system in the utility software.

MLTF5000.icc - used with positive film at any color depth other than 16-bit linear. MLTF5000p.icc - used with positive film with 16-bit linear color depth.

The profiles are located in the following locations:



JOB FILE LISTS

Jobs can be used to make scan settings based on the final use of the image. See making-thefinal-scan section in the DiMAGE Scan Utility manual. The following charts list the parameters of the scanner's Job files:

35mm

Category	Job name	Input res.	Output res.	Mag.	Unit	Inpu	t size	Lock (input)	Output	size	Lock (output)	Input	pixels
						w	н		w	н		W	н
		4800				37.08	25.02					7008	4728
Default	Default	1200	300	400	pixel	1752	1182	OFF	1752	1182	OFF	1752	1182
ColorLaserPrinter	A4Full	4800	600	800	mm	35.38	25.02	OFF	283	200.152	ON	6685	4728
	A4Half	3550	600	591	mm	35.53	25.04	OFF	210	148	ON	4960	3496
	A4Quarter	2518	600	419	mm	35.32	25.06	OFF	148	105	ON	3496	2480
	LetterFull	4800	600	800	inch	1.26	0.99	OFF	10.1	7.88	ON	6060	4728
	LetterHalf	3494	600	582	inch	1.46	0.94	OFF	8.5	5.45	ON	5100	3270
	LetterQuarter	2589	600	431	inch	1.26	0.99	OFF	5.45	4.25	ON	3270	2550
Photosensitive	A3Full	4749	400	1187	mm	35.38	25.02	OFF	420	297	ON	6614	4677
	A4Full	3358	400	839	mm	35.4	25.03	OFF	297	210	ON	4677	3307
	A5Full	2366	400	591	mm	35.53	25.04	OFF	210	148	ON	3307	2330
	LetterFull	3452	400	863	inch	1.26	0.99	OFF	10.9	8.5	ON	4360	3400
	LetterHalf	2329	400	582	inch	1.46	0.94	OFF	8.5	5.45	ON	3400	2180
	LetterQuarter	1726	400	431	inch	1.26	0.99	OFF	5.45	4.25	ON	2180	1700
	8x10	3249	400	812	inch	1.23	0.99	OFF	10	8	ON	4000	3200
	11x14	4460	400	1115	mm	31.93	25.02	OFF	356	279	ON	5606	4393
	10x12	4061	400	1015	mm	30.05	25.02	OFF	305	254	ON	4803	4000
	PostCard4x6	1644	400	411	inch	1.46	25.05	OFF	6	4	ON	2803	2000
Ink-Jet &	SuperB	3945	300	1315	mm	36.73	25.02	OFF	483	329	ON	5704	3885
Dye-SubPrinter	A3Full	3561	300	1187	mm	35.38	25.02	OFF	420	297	ON	4960	3507
	A4Full	2518	300	839	mm	35.4	25.03	OFF	297	210	ON	3507	2480
	A4Half	1775	300	591	mm	35.53	25.04	OFF	210	148	ON	2480	1748
	A4Quarter	1259	300	419	mm	35.32	25.06	OFF	148	105	ON	1748	1240
	LetterFull	2569	300	603	inch	1.20	0.99	OFF	10.9	0.0 E 4E	ON	3270	2000
	LetterQuarter	1205	300	421	inch	1.90	0.04	OFF	0.J	4.25	ON	1625	1035
	Photo/w6	1255	300	404	mm	27.12	24.75	OFF	150	4.20	ON	1771	12/3
	Photo3x5	1068	300	356	mm	35.67	24.75	OFF	127	89	ON	1500	1051
WebPage	1240x836	850	72	1180	pixel	1240	836	OFF	1240	836	ON	1240	836
	1112x750	762	72	1058	pixel	1112	750	OFF	1112	750	ON	1112	750
	984x663	674	72	936	pixel	984	663	OFF	984	663	ON	984	663
	792x534	543	72	754	pixel	792	534	OFF	792	534	ON	792	534
	760x512	521	72	/23	pixel	760	512	OFF	760	512	ON	760	512
	600x404 320x240	411	72	5/0	pixel	320	404	OFF	320	404	ON	320	404
	3202240	300	12	410	pixer	320	240	011	320	240	OIN	320	240
PhotoCD	PhotoCD2048x3072	2105	300	701	pixel	3072	2048	OFF	3072	2048	ON	3072	2048
	PhotoCD1024x1536	1053	300	351	pixel	1536	1024	OFF	1536	1024	ON	1536	1024
	PhotoCD512X768	527	300	1/5	pixei	/68	512	OFF	/68	512	ON	/68	512
Screen	1920x1200	1316	72	1827	pixel	1920	1200	OFF	1920	1200	ON	1920	1200
	1600x1200	1219	72	1693	pixel	1600	1200	OFF	1600	1200	ON	1600	1200
	1280x1024	1040	72	1444	pixel	1280	1024	OFF	1280	1024	ON	1280	1024
	1280x960	975	72	1354	pixel	1280	960	OFF	1280	960	ON	1280	960
	1152x870	884	72	1227	pixel	1152	870	OFF	1152	870	ON	1152	870
	1024x768	780	72	1083	pixel	1024	768	OFF	1024	768	ON	1024	768
	832x624	837	72	1162	pixel	832	824	OFF	832	824	ON	832	824
	800x600	610	72	847	pixel	800	600	OFF	800	600	ON	800	600
	640x480	488	72	677	pixel	640	480	OFF	640	480	ON	640	480
Document	A4Half	426	72	591	mm	35.53	25.04	OFF	210	148	ON	595	419
	A4Quarter	302	72	419	mm	35.32	25.06	OFF	148	105	ON	419	297
	A4Eighth	300	72	416	mm	25.24	17.79	OFF	105	74	ON	297	209
	LetterHalf	420	72	583	inch	1.46	0.93	OFF	8.5	5.45	ON	612	392
	LetterQuarter	311	72	431	inch	1.26	0.99	OFF	5.45	4.25	ON	392	306
	LetterEighth	300	72	416	inch	1.02	0.65	OFF	4.25	2.72	ON	306	195
FilmRecorder	4K	2806	2400	116	pixel	4096	2731	OFF	4096	2731	ON	4096	2731
	2К	1403	2400	58	pixel	2048	1365	OFF	2048	1365	ON	2048	1365

6 X 4.5

Category	Job name	Input res.	Output res.	Mag.	Unit	Inpu	t size	Lock (input)	Output	size	Lock (output)	Input	pixels
						W	н	1	W	н	1	W	н
		3200				42.67	56.58					5376	7128
Default	Default	800	300	266	pixel	1344	1782	OFF	1344	1782	OFF	1344	1782
ColorLaserPrinter	A3Full	4454	600	742	mm	40.03	56.6	OFF	297	420	ON	7015	9921
	A4Full	3150	600	525	mm	40	56.57	OFF	210	297	ON	4960	7015
	A4Half	2227	600	371	mm	39.89	56.6	OFF	148	210	ON	3496	4960
	A4Quarter	1570	600	261	mm	40.23	56.71	OFF	105	148	ON	2480	3496
	LetterFull	3036	600	506	inch	1.68	2.15	OFF	8.5	10.9	ON	5100	6540
	LetterHalf	2290	600	381	inch	1.43	2.23	OFF	5.45	8.5	ON	3270	5100
	LetterQuarter	1518	600	253	inch	1.68	2.15	OFF	4.25	5.45	ON	2550	3270
Photosensitive	A3Full	2970	400	742	mm	40.03	56.6	OFF	297	420	ON	4677	6614
	A4Full	2100	400	525	mm	40	56.57	OFF	210	207	ON	3307	4677
	ASEUII	1485	400	371	mm	30.80	56.6	OFF	148	210	ON	2330	3307
	Lottor Full	2024	400	500	inch	1.69	2.15	OFF	9.5	10.0	ON	2400	4260
	LetterHolf	1527	400	381	inch	1.00	2.13	OFF	5.45	85	ON	2180	3400
	LetterOuerter	1012	400	301	inch	1.43	2.23	OFF	4.25	0.0 E 4E	ON	1700	2190
		1012	400	200	inch .	1.00	2.15	000	4.20	0.40	ON	0000	2100
	0010	1905	400	4/0	inch	1.00	2.1	OFF	0	10	ON	3200	4000
	11X14	2015	400	003	mm	42.73	54.52	OFF	2/9	350	ON	4393	5000
	10x12	2381	400	595	mm	42.69	51.26	OFF	254	305	ON	4000	4803
	2L	1259	400	314	mm	38.22	56.69	OFF	120	1/8	ON	1889	2803
	PostCard4x6	1078	400	269	inch	1.49	2.23	OFF	4	6	ON	1600	2400
Ink-Jet &	SuperB	2561	300	853	mm	38.57	56.62	OFF	329	483	ON	3885	5704
Dye-SubPrinter	A3Full	2227	300	742	mm	40.03	56.6	OFF	297	420	ON	3507	4960
	A4Full	1575	300	525	mm	40	56.57	OFF	210	297	ON	2480	3507
	A4Half	1114	300	371	mm	39.89	56.6	OFF	148	210	ON	1748	2480
	A4Quarter	785	300	261	mm	40.23	56.71	OFF	105	148	ON	1240	1748
	LetterFull	1518	300	506	inch	1.68	2.15	OFF	8.5	10.9	ON	2550	3270
	LetterHalf	1145	300	381	inch	1.43	2.23	OFF	5.45	85	ON	1635	2550
	LetterQuarter	759	300	253	inch	1.68	2.15	OFF	4.25	5.45	ON	1275	1635
	Photo4x6	796	300	265	mm	37.74	56.6	OFF	100	150	ON	1181	1771
	Photo3x5	674	300	224	mm	39.73	56.7	OFF	89	127	ON	1051	1500
WebPage	1240x935	557	72	773	pixel	935	1240	OFF	935	1240	ON	935	1240
	1112x839	500	72	694	pixel	839	1112	OFF	839	1112	ON	839	1112
	984x742	442	72	613	pixel	742	984	OFF	742	984	ON	742	984
	792x597	356	72	494	pixel	597	792	OFF	597	792	ON	597	792
	760x573	342	72	475	pixel	573	760	OFF	573	760	ON	573	760
	600x452	270	72	375	nixel	452	600	OFF	452	600	ON	452	600
	320x240	200	72	277	nixel	240	320	OFF	240	320	ON	240	320
					P								
PhotoCD	PhotoCD2048x3072	1380	300	460	pixel	2048	3072	OFF	2048	3072	ON	2048	3072
	PhotoCD1024x1536	690	300	230	pixel	1024	1536	OFF	1024	1536	ON	1024	1536
	PhotoCD512x768	345	300	115	pixel	512	768	OFF	512	768	ON	512	768
Screen	1920x1200	862	72	1197	pixel	1200	1920	OFF	1200	1920	ON	1200	1920
	1600x1200	719	72	998	pixel	1200	1600	OFF	1200	1600	ON	1200	1600
	1280x1024	610	72	847	pixel	1024	1280	OFF	1024	1280	ON	1024	1280
	1280x960	575	72	798	pixel	960	1280	OFF	960	1280	ON	960	1280
	1152x870	518	72	719	pixel	870	1152	OFF	870	1152	ON	870	1152
	1024x768	460	72	638	pixel	768	1024	OFF	768	1024	ON	768	1024
	832x624	374	72	519	pixel	624	832	OFF	624	832	ON	624	832
	800x600	360	72	500	pixel	600	800	OFF	600	800	ON	600	800
	640x480	288	72	400	pixel	480	640	OFF	480	640	ON	480	640
Document	A4Half	268	72	372	mm	39.79	56.45	OFF	148	210	ON	419	595
	A4Quarter	200	72	277	mm	37.91	53.43	OFF	105	148	ON	297	419
	A4Eighth	200	72	277	mm	26 71	37 91	OFF	74	105	ON	209	297
	LetterHalf	200	79	381	inch	1.43	2 2 2 3	OFF	5.45	85	ON	302	612
	LetterQuarter	200	72	277	inch	1.53	1.07	OFF	4.25	5.45	ON	306	302
	LetterFighth	200	72	277	inch	0.00	1.57	OFF	2 70	4.95	ON	105	306
	Louis Lightin	200	12	2//	- 2011	0.50	1.55	UT	2.72	4.20	514	185	300

JOB FILE LISTS

6 X 6

Category	Job name	Input res.	Output res.	Mag.	Unit	Inpu	size	Lock (input)	Output	size	Lock (output)	Input	pixels
						W	н		W	н		W	н
		3200				56.58	56.58					7128	7128
						2.23	2.23						
Default	Default	800	300	266	pixel	1782	1782	OFF	1782	1782	OFF	1782	1782
ColorLaserPrinter	A3Full	3150	600	525	mm	56.57	56.57	OFF	297	297	ON	7015	7015
	A4Full	2227	600	371	mm	56.6	56.6	OFF	210	210	ON	4960	4960
	A4Half	1570	600	261	mm	56.71	56.71	OFF	148	148	ON	3496	3496
	A4Quarter	1114	600	185	mm	56.76	56.76	OFF	105	105	ON	2480	2480
	LetterFull	2290	600	381	inch	2.23	2.23	OFF	8.5	8.5	ON	5100	5100
	LetterHalf	1469	600	244	inch	2.23	2.23	OFF	5.45	5.45	ON	3270	3270
	LetterQuarter	1145	600	190	inch	2.24	2.24	OFF	4.25	4.25	ON	2550	2550
Photosensitive	A3Full	2100	400	525	mm	56.57	56.57	OFF	297	297	ON	4677	4677
	A4Full	1485	400	371	mm	56.6	56.6	OFF	210	210	ON	3307	3307
	A5Full	1047	400	261	mm	56.71	56.71	OFF	148	148	ON	2330	2330
	LetterFull	1527	400	381	inch	2.23	2.23	OFF	8.5	8.5	ON	3400	3400
	LetterHalf	979	400	244	inch	2.23	2.23	OFF	5.45	5.45	ON	2180	2180
	LetterQuarter	764	400	191	inch	2.23	2.23	OFF	4.25	4.25	ON	1700	1700
	8x10	1437	400	359	inch	2.23	2.23	OFF	8	8	ON	3200	3200
	14x17	2517	400	629	mm	56.6	56.6	OFF	356	356	ON	5606	5606
	11x14	1973	400	493	mm	56.59	56.59	OFF	279	279	ON	4393	4393
	10x12	1796	400	449	mm	56.57	56.57	OFF	254	254	ON	4000	4000
	2L	898	400	224	mm	56.7	56.7	OFF	127	127	ON	2000	2000
	PostCard4x6	719	400	179	inch	2.23	2.23	OFF	4	4	ON	1600	1600
Ink-Jet &	SuperB	1745	300	581	mm	56.63	56.63	OFF	329	329	ON	3885	3885
Dve-SubPrinter	A3Full	1575	300	525	mm	56.57	56.57	OFF	297	297	ON	3507	3507
	A4Full	1114	300	371	mm	56.6	56.6	OFF	210	210	ON	2480	2480
	A4Half	785	300	261	mm	56.71	56.71	OFF	148	148	ON	1748	1748
	A4Quarter	557	300	185	mm	56.76	56.76	OFF	105	105	ON	1240	1240
	LetterFull	1145	300	381	inch	2.23	2.23	OFF	8.5	8.5	ON	2550	2550
	LetterHalf	735	300	245	inch	2.22	2.22	OFF	5.45	5.45	ON	1635	1635
	LetterQuarter	573	300	191	inch	2.23	2.23	OFF	4.25	4.25	ON	1275	1275
	Photo4x6	531	300	177	mm	56.5	56.5	OFF	100	100	ON	1181	1181
	Photo3x5	472	300	157	mm	56.69	56.69	OFF	89	89	ON	1051	1051
WebPage	1240x1240	557	72	773	pixel	1240	1240	OFF	1240	1240	ON	1240	1240
	1112x1112	500	72	694	pixel	1112	1112	OFF	1112	1112	ON	1112	1112
	984x984	442	72	613	pixel	984	984	OFF	984	984	ON	984	984
	792x792	356	72	494	pixel	792	792	OFF	792	792	ON	792	792
	760x760	342	72	475	pixel	760	760	OFF	760	760	ON	760	760
	600x600	270	72	375	pixel	600	600	OFF	600	600	ON	600	600
	320x240	200	72	277	pixel	320	240	OFF	320	240	ON	320	240
PhotoCD	PhotoCD2048x3072	1380	300	460	pixel	3072	2048	OFF	3072	2048	ON	3072	2048
	PhotoCD1024x1536	690	300	230	pixel	1536	1024	OFF	1536	1024	ON	1536	1024
	PhotoCD512x768	345	300	115	pixel	768	512	OFF	768	512	ON	768	512
Screen	1920x1200	862	72	1197	pixel	1920	1200	OFF	1920	1200	ON	1920	1200
	1600x1200	719	72	998	pixel	1600	1200	OFF	1600	1200	ON	1600	1200
	1280x1024	575	72	798	pixel	1280	1024	OFF	1280	1024	ON	1280	1024
	1280x960	575	72	798	pixel	1280	960	OFF	1280	960	ON	1280	960
	1152x870	518	72	719	pixel	1152	870	OFF	1152	870	ON	1152	870
	1024x768	460	72	638	pixel	1024	768	OFF	1024	768	ON	1024	768
	832x624	374	72	519	pixel	832	624	OFF	832	624	ON	832	624
	800x600	360	72	500	pixel	800	600	OFF	800	600	ON	800	600
	640x480	288	72	400	pixel	640	480	OFF	640	480	ON	640	480
Document	A4Half	200	72	277	mm	53.43	53.43	OFF	148	148	ON	419	419
	A4Quarter	200	72	277	mm	37.91	37.91	OFF	105	105	ON	297	297
	A4Eighth	200	72	277	mm	26.71	26.71	OFF	74	74	ON	209	209
	LetterHalf	200	72	277	inch	1.97	1.97	OFF	5.45	5.45	ON	392	392
	LetterQuarter	200	72	277	inch	1.53	1.53	OFF	4.25	4.25	ON	306	306
	LetterEighth	200	72	277	inch	0.97	0.97	OFF	2.69	2.69	ON	193	193

Category	Job name	Input res.	Output res.	Mag.	Unit	Inpu	t size	Lock (input)	Output	size	Lock (output)	Input	pixels
						W	н		w	н		W	н
		3200				70.10	56.58					8832	7128
						2.76	2.23						
Default	Default	800	300	266	pixel	2208	1782	OFF	2208	1782	OFF	2208	1782
ColorLaserPrinter	A3Full	3595	600	599	mm	70.12	49.58	OFF	420	297	ON	9921	7015
	A4Full	2542	600	423	mm	70.21	49.65	OFF	297	210	ON	7015	4960
	A4Half	1798	600	299	mm	70.23	49.5	OFF	210	148	ON	4960	3496
	A4Quarter	1267	600	211	mm	70.14	49.76	OFF	148	105	ON	3496	2480
	LetterFull	2370	600	395	inch	2.76	2.15	OFF	10.9	8.5	ON	6540	5100
	LetterHalf	1848	600	308	inch	2.76	1.77	OFF	8.5	5.45	ON	5100	3270
	LetterQuarter	1185	600	197	inch	2.77	2.16	OFF	5.45	4.25	ON	3270	2550
Photosensitive	A3Full	2397	400	599	mm	70.12	49.58	OFF	420	297	ON	6614	4677
	A4Full	1695	400	423	mm	70.21	49.65	OFF	297	210	ON	4677	3307
	A5Full	1199	400	299	mm	70.23	49.5	OFF	210	148	ON	3307	2330
	LetterFull	1580	400	395	inch	2.76	2.15	OFF	10.9	8.5	ON	4360	3400
	LetterHalf	1232	400	308	inch	2.76	1.77	OFF	8.5	5.45	ON	3400	2180
	LetterQuarter	790	400	197	inch	2.77	2.16	OFF	5.45	4.25	ON	2180	1700
	8x10	1450	400	362	inch	2.76	2.21	OFF	10	8	ON	4000	3200
	14x17	2517	400	629	mm	68.68	56.6	OFF	432	356	ON	6803	5606
	11x14	2032	400	508	mm	70.08	54.92	OFF	356	279	ON	5606	4393
	10x12	1796	400	449	mm	67.93	56.57	OFF	305	254	ON	4803	4000
	2L	1016	400	254	mm	70.08	50	OFF	178	127	ON	2803	2000
	PostCard4x6	870	400	217	inch	2.77	1.84	OFF	6	4	ON	2400	1600
Ink-Jet &	SuperB	2756	400	689	mm	70.1	47.75	OFF	483	329	ON	7606	5181
Dye-SubPrinter	A3Full	2397	400	599	mm	70.12	49.58	OFF	420	297	ON	6614	4677
	A4Full	1271	300	423	mm	70.21	49.65	OFF	297	210	ON	3507	2480
	A4Half	899	300	299	mm	70.23	49.5	OFF	210	148	ON	2480	1748
	A4Quarter	634	300	211	mm	70.14	49.76	OFF	148	105	ON	1748	1240
	LetterFull	1185	300	395	inch	2.76	2.15	OFF	10.9	8.5	ON	3270	2550
	LetterHalf	924	300	308	inch	2.76	1.77	OFF	8.5	5.45	ON	2550	1635
	LetterQuarter	593	300	197	inch	2.77	2.16	OFF	5.45	4.25	ON	1635	1275
	Photo4x6	642	300	214	mm	70.09	46.73	OFF	150	100	ON	1771	1181
	Photo3x5	544	300	181	mm	70.17	49.17	OFF	127	89	ON	1500	1051
WebPage	1240x1000	450	72	625	pixel	1240	1000	OFF	1240	1000	ON	1240	1000
	1112x897	403	72	559	pixel	1112	897	OFF	1112	897	ON	1112	897
	984x794	357	72	495	pixel	984	794	OFF	984	794	ON	984	794
	792x639	287	72	398	pixel	792	639	OFF	792	639	ON	792	639
	760x613	276	72	383	pixel	760	613	OFF	760	613	ON	760	613
	600x484	218	72	302	pixel	600	484	OFF	600	484	ON	600	484
	320x240	200	72	277	pixel	320	240	OFF	320	240	ON	320	240
PhotoCD	PhotoCD2048x3072	1114	300	371	pixel	3072	2048	OFF	3072	2048	ON	3072	2048
	PhotoCD1024x1536	557	300	185	pixel	1536	1024	OFF	1536	1024	ON	1536	1024
	PhotoCD512x768	279	300	93	pixel	768	512	OFF	768	512	ON	768	512
Screen	1920x1200	696	72	966	pixel	1920	1200	OFF	1920	1200	ON	1920	1200
	1600x1200	580	72	805	pixel	1600	1200	OFF	1600	1200	ON	1600	1200
	1280x1024	464	72	644	pixel	1280	1024	OFF	1280	1024	ON	1280	1024
	1280x960	464	72	644	pixel	1280	960	OFF	1280	960	ON	1280	960
	1152x870	418	72	580	pixel	1152	870	OFF	1152	870	ON	1152	870
	1024x768	372	72	516	pixel	1024	768	OFF	1024	768	ON	1024	768
	832x624	302	72	419	pixel	832	624	OFF	832	624	ON	832	624
	800x600	290	72	402	pixel	800	600	OFF	800	600	ON	800	600
	640x480	232	72	322	pixel	640	480	OFF	640	480	ON	640	480
Document	A4Half	215	72	298	mm	70.13	49.33	OFF	209	147	ON	592	416
	A4Quarter	200	72	277	mm	53.07	37.55	OFF	147	104	ON	416	294
	A4Eighth	200	72	277	mm	37.55	26.53	OFF	104	73.5	ON	294	208
	LetterHalf	222	72	308	inch	2.76	1.77	OFF	8.5	5.45	ON	612	392
	LetterQuarter	200	72	277	inch	1.97	1.53	OFF	5.45	4.25	ON	392	306
	LetterEighth	200	72	277	inch	1.53	0.97	OFF	4.25	2.7	ON	306	194
1	1					1	1		1				

6 X 7

JOB FILE LISTS

6 X 8

Category	Job name	Input res.	Output res.	Mag.	Unit	Inpu	t size	Lock (input)	Output	size	Lock (output)	Input	pixels
						W	н		W	н		w	н
		3200				77.15	56.58					9720	7128
Default	Default	800	300	266	pixel	2430	1782	OFF	2430	1782	OFF	2430	1782
ColorLaserPrinter	A3Full	3200	600	533	mm	77.2	55.72	OFF	411.48	297	ON	9720	7015
	A4Full	2310	600	385	mm	77.14	54.55	OFF	297	210	ON	7015	4960
	A4Half	1633	600	272	mm	77.21	54.41	OFF	210	148	ON	4960	3496
	A4Quarter	1151	600	191	mm	77.49	54.97	OFF	148	105	ON	3496	2480
	LetterFull	2290	600	381	inch	2.86	2.23	OFF	10.9	8.5	ON	6540	5100
	LetterHalf	1680	600	280	inch	3.04	1.95	OFF	8.5	5.45	ON	5100	3270
	LetterQuarter	1145	600	190	inch	2.87	2.24	OFF	5.45	4.25	ON	3270	2550
Photosensitive	A3Full	2178	400	544	mm	77.21	54.6	OFF	420	297	ON	6614	4677
	A4Full	1540	400	385	mm	77.14	54.55	OFF	297	210	ON	4677	3307
	A5Full	1089	400	272	mm	77.21	54.41	OFF	210	148	ON	3307	2330
	LetterFull	1527	400	381	inch	2.86	2.23	OFF	10.9	8.5	ON	4360	3400
	LetterHalf	1120	400	280	inch	3.04	1.95	OFF	8.5	5.45	ON	3400	2180
	LetterQuarter	764	400	191	inch	2.85	2.23	OFF	5.45	4 25	ON	2180	1700
	8x10	1437	400	359	inch	2 79	2.23	OFF	10		ON	4000	3200
	14x17	2517	400	629	mm	68.68	56.6	OFF	432	356	ON	6803	5606
	11x14	1973	400	493	mm	72 21	56 59	OFF	356	279	ON	5606	4393
	10v12	1796	400	449	mm	67.93	56.57	OFF	305	254	ON	4803	4000
	21	923	400	230	 mm	77 39	55.22	OFF	178	127	ON	2803	2000
	PostCard4x6	791	400	197	inch	3.05	2.03	OFF	6	4	ON	2400	1600
Int. Int. B	0	1070	000	coc		77.40	50.50	055	400		01	5704	0005
Ink-Jel &	Superb ADE-II	16/6	300	020	mm	77.10	52.50	OFF	463	329	ON	5704	3005
Dye-SubPrinter	ASFUI	1633	300	544	mm	77.21	54.6	OFF	420	297	ON	4960	3507
	A4Full	1155	300	365	mm	77.14	54.55	OFF	297	210	ON	3507	2460
	A4Hait	817	300	2/2	mm	//.21	54.41	OFF	210	148	ON	2480	1/48
	A4Quarter	5/6	300	192	mm	77.08	54.69	OFF	148	105	ON	1/48	1240
	Letter-ull	1145	300	381	inch	2.86	2.23	OFF	10.9	8.5	ON	3270	2550
	LetterHait	840	300	280	inch	3.04	1.95	OFF	8.5	5.45	ON	2550	1635
	LetterQuarter	573	300	191	inch	2.85	2.23	OFF	5.45	4.25	ON	1635	1275
	Photo4x6	584	300	194	mm	77.32	51.55	OFF	150	100	ON	1771	1181
	Photo3x5	494	300	164	mm	77.44	54.27	OFF	127	89	ON	1500	1051
WebPage	1240x909	409	72	568	pixel	1240	909	OFF	1240	909	ON	1240	909
	1112x815	367	72	509	pixel	1112	815	OFF	1112	815	ON	1112	815
	984x721	324	72	450	pixel	984	721	OFF	984	721	ON	984	721
	792x580	261	72	362	pixel	792	580	OFF	792	580	ON	792	580
	760x557	251	72	348	pixel	760	557	OFF	760	557	ON	760	557
	600x440	200	72	277	pixel	600	440	OFF	600	440	ON	600	440
	320x240	200	72	277	pixel	320	240	OFF	320	240	ON	320	240
PhotoCD	PhotoCD2048x3072	1012	300	337	pixel	3072	2048	OFF	3072	2048	ON	3072	2048
	PhotoCD1024x1536	506	300	168	pixel	1536	1024	OFF	1536	1024	ON	1536	1024
	PhotoCD512x768	253	300	84	pixel	768	512	OFF	768	512	ON	768	512
Screen	1920x1200	633	72	879	pixel	1920	1200	OFF	1920	1200	ON	1920	1200
	1600x1200	539	72	748	pixel	1600	1200	OFF	1600	1200	ON	1600	1200
	1280x1024	460	72	638	pixel	1280	1024	OFF	1280	1024	ON	1280	1024
	1280x960	431	72	598	pixel	1280	960	OFF	1280	960	ON	1280	960
	1152x870	391	72	543	pixel	1152	870	OFF	1152	870	ON	1152	870
	1024x768	345	72	479	pixel	1024	768	OFF	1024	768	ON	1024	768
	832x624	281	72	390	pixel	832	624	OFF	832	624	ON	832	624
	800x600	270	72	375	pixel	800	600	OFF	800	600	ON	800	600
	640x480	216	72	300	pixel	640	480	OFF	640	480	ON	640	480
Document	A4Half	200	72	277	mm	75.81	53.43	OFF	210	148	ON	595	419
	A4Quarter	200	72	277	mm	53.43	37.91	OFF	148	105	ON	419	297
	A4Eighth	200	72	277	mm	37.91	26.71	OFF	105	74	ON	297	209
	LetterHalf	202	72	280	inch	3.04	1.95	OFF	8.5	5.45	ON	612	392
	LetterQuarter	200	72	277	inch	1.97	1.53	OFF	5 45	4 25	ON	392	306
	LetterEighth	200	72	277	inch	1.53	0.98	OFF	4 25	2 72	ON	306	195

6 X 9 and Multi-format 6 X 9

Category	Job name	Input res.	Output res.	Mag.	Unit	Inpu	t size	Lock (input)	Output	size	Lock (output)	Input	pixels
						W	н		W	н		W	н
		3200				83.82	56.58					10560	7128
						3.30	2.23						
Default	Default	800	300	266	pixel	2640	1782	OFF	2640	1782	OFF	2640	1782
ColorLaserPrinter	A3Full	3150	600	525	mm	80	56.57	OFF	420	297	ON	9921	7015
	A4Full	2227	600	371	mm	80.05	56.6	OFF	297	210	ON	7015	4960
	A4Half	1570	600	261	mm	80.46	56.71	OFF	210	148	ON	4960	3496
	A4Quarter	1114	600	185	mm	80	56.76	OFF	148	105	ON	3496	2480
	LetterFull	2290	600	381	inch	2.86	2.23	OFF	10.9	8.5	ON	6540	5100
	LetterHalf	1546	600	257	inch	3.31	2.12	OFF	8.5	5.45	ON	5100	3270
	LetterQuarter	1145	600	190	inch	2.87	2.24	OFF	5.45	4.25	ON	3270	2550
Photosensitive	A3Full	2100	400	525	mm	80	56.57	OFF	420	297	ON	6614	4677
	A4Full	1485	400	371	mm	80.05	56.6	OFF	297	210	ON	4677	3307
	A5Full	1047	400	261	mm	80.46	56.71	OFF	210	148	ON	3307	2330
	LetterFull	1527	400	381	inch	2.86	2.23	OFF	10.9	8.5	ON	4360	3400
	LetterHalf	1031	400	257	inch	3.31	2.12	OFF	8.5	5.45	ON	3400	2180
	LetterQuarter	764	400	191	inch	2.85	2.23	OFF	5.45	4.25	ON	2180	1700
	8x10	1437	400	359	inch	2.79	2.23	OFF	10	8	ON	4000	3200
	14x17	2517	400	629	mm	68.68	56.6	OFF	432	356	ON	6803	5606
	11x14	1973	400	493	mm	72.21	56.59	OFF	356	279	ON	5606	4393
	10x12	1796	400	449	mm	67.93	56.57	OFF	305	254	ON	4803	4000
	2L	898	400	224	mm	79.46	56.7	OFF	178	127	ON	2803	2000
	PostCard4x6	728	400	182	inch	3.3	2.2	OFF	6	4	ON	2400	1600
Ink-Jet &	SuperB	1745	300	581	mm	83.13	56.63	OFF	483	329	ON	5704	3885
Dye-SubPrinter	A3Full	1575	300	525	mm	80	56.57	OFF	420	297	ON	4960	3507
	A4Full	1114	300	371	mm	80.05	56.6	OFF	297	210	ON	3507	2480
	A4Half	785	300	261	mm	80.46	56.71	OFF	210	148	ON	2480	1748
	A4Quarter	557	300	185	mm	80	56.76	OFF	148	105	ON	1748	1240
	LetterFull	1145	300	381	inch	2.86	2.23	OFF	10.9	8.5	ON	3270	2550
	LetterHalf	773	300	257	inch	3.31	2.12	OFF	8.5	5.45	ON	2550	1635
	LetterQuarter	573	300	191	inch	2.85	2.23	OFF	5.45	4.25	ON	1635	1275
	Photo4x6	537	300	179	mm	83.8	55.87	OFF	150	100	ON	1771	1181
	Photo3x5	472	300	157	mm	80.89	56.69	OFF	127	89	ON	1500	1051
WebPage	1240x837	376	300	125	nixel	1240	837	OFF	1240	837	ON	1240	837
	1112x751	338	300	112	pixel	1112	751	OFF	1112	751	ON	1112	751
	984x664	299	300	99	pixel	984	664	OFF	984	664	ON	984	664
	792x534	240	300	80	pixel	792	534	OFF	792	534	ON	792	534
	760x513	231	300	77	pixel	760	513	OFF	760	513	ON	760	513
	600x405	200	300	66	pixel	600	405	OFF	600	405	ON	600	405
	320x240	200	300	66	pixel	320	240	OFF	320	240	ON	320	240
PhotoCD	PhotoCD2048x3072	931	300	310	pixel	3072	2048	OFF	3072	2048	ON	3072	2048
	PhotoCD1024x1536	466	300	155	pixel	1536	1024	OFF	1536	1024	ON	1536	1024
	PhotoCD512x768	233	300	77	pixel	768	512	OFF	768	512	ON	768	512
Screen	1920x1200	582	72	808	pixel	1920	1200	OFF	1920	1200	ON	1920	1200
	1600x1200	539	72	748	pixel	1600	1200	OFF	1600	1200	ON	1600	1200
	1280x1024	460	72	638	pixel	1280	1024	OFF	1280	1024	ON	1280	1024
	1280x960	431	72	598	pixel	1280	960	OFF	1280	960	ON	1280	960
	1152x870	391	72	543	pixel	1152	870	OFF	1152	870	ON	1152	870
	1024x768	345	72	479	pixel	1024	768	OFF	1024	768	ON	1024	768
	832x624	281	72	390	pixel	832	624	OFF	832	624	ON	832	624
	800x600	270	72	375	pixel	800	600	OFF	800	600	ON	800	600
	640x480	216	72	300	pixel	640	480	OFF	640	480	ON	640	480
Document	A4Half	200	72	277	mm	75.81	53.43	OFF	210	148	ON	595	419
	A4Quarter	200	72	277	mm	53.43	37.91	OFF	148	105	ON	419	297
	A4Eighth	200	72	277	mm	37.91	26.71	OFF	105	74	ON	297	209
	LetterHalf	200	72	277	inch	3.07	1.97	OFF	8.5	5.45	ON	612	392
	LetterQuarter	200	72	277	inch	1.97	1.53	OFF	5.45	4.25	ON	392	306
	LetterEighth	200	72	277	inch	1.53	0.98	OFF	4.25	2.72	ON	306	195

Multi-format 35mm

Category	Job name	Input res.	Output res.	Mag.	Unit	Input	size	Lock (input)	Output	size	Lock (output)	Input	pixels
						w	Н		W	н		W	н
		4800				83.82	25.02					15840	4728
						3.30	0.99						
Default	Default	1200	300	400	pixel	3960	1182	OFF	3960	1182	OFF	3960	1182

This section covers minor problems with scanner operation. For major problems or damage, or if a problem continues to reoccur frequently, contact your dealer or a Minolta service facility.

Symptom or message	Solution
The computer will not start up after connecting the scanner.	Turn off the computer and any devices in the SCSI or IEEE (FireWire) chain. Check the scanner cable and power cord are connected correctly and the dip switches are in the correct position for the interface.
The scanner does not appear in the import list of an application.	Confirm the DiMAGE Scan Utility plug-in has been placed in the application's plug-in import folder, see the DiMAGE Scan Utility manual.
The scanner indicator lamp is off and the unable-to-establish-connec- tion message appears	Turn on the scanner and restart the computer.
The setup-remove-holder message appears.	Eject the film holder and click the OK button. Wait for the DiMAGE Scan Utility to open before inserting the film holder.
Indicator lamp is red.	Confirm the optic locking screw is removed from the lock position on the bottom panel of the scanner (p. 7). If the screw is removed and the lamp is still red, contact a Minolta service facility.
The set-film message appears.	Confirm film has been loaded into the holder.
The set-film-holder message appears.	The holder in the scanner and the film type selected in the main window of the DiMAGE Scan Utility do not match. Change the holder or film type option.
The insufficient-memory message appears.	Increase the memory allocation for the host applica- tion. If multiple images have been selected for scan- ning, close and relaunch the application.
The setup-remove-holder message appears when no holder is in the scanner.	The scanner lamp must be replaced. Contact a Minolta service facility.
Scanning time is unusually long.	With Windows 98 or Me operating systems, scanning images larger than 950MB can cause long scanning times. Change the input resolution to reduce the file size, see the DiMAGE Scan Utility manual. With Macintosh, scanning time can be reduced by opening the utility through an image-processing application.

Checking software installation – Windows

If the scanner was connected to the computer before the DiMAGE Scan Utility was installed, the computer may not recognize the scanner unit. Windows 2000 Professional and XP users should log on with the administrator privilege. With Windows 2000 Professional and XP, the "Digital signatures not found" message may appear when the computer first detects the scanner. The additional message "Installing hardware...Window log test is not passed" may appear when Windows XP is launched. Simply click the OK (2000) or continue button (XP).

- 1. Turn off the computer and disconnect the scanner. Restart the computer.
- 2. Windows 98, 2000, Me: right click on the My-computer icon. Select properties from the dropdown menu.

Windows XP: from the start menu go to the control panel. Click on the performance and maintenance category. Click the system button to open the system properties window.

3. Windows 2000 and XP: select the hardware tab in the properties window and click the devicemanager button.

Windows 98 and Me: click the device-manager tab in the properties window.

4. The driver file should be located in the imaging-device location of the device manager. Click on the location to display the files. When using a SCSI interface with Windows 98 or Me, Minolta#2887 should be listed as the imaging device. For Windows 2000 Professional and XP, Minolta DiMAGE Scan Multi PRO should be listed as the imaging device. When using an IEEE interface, Minolta DiMAGE Scan Multi PRO should be listed as the imaging device.

If these files are not located in the imaging-device location, open the other-devices location of the device manager. If Minolta#2887, Minolta DiMAGE Scan Multi PRO, or minolta SCANNER 2887 IEEE 1394 SBP2 Device is listed, follow steps 5 through 9 to delete and reinstall the correct driver.

- 5. Click on the driver to select it for deletion.
- 6. Windows 2000 and XP: click on the action button to display the drop-down menu. Select uninstall. A confirmation screen will appear. Clicking the yes button will remove the driver from the system.

Windows 98 and Me: click the remove button. A confirmation screen will appear. Clicking the yes button will remove the driver from the system.

- 7. Restart the computer.
- 8. Install the DiMAGE Scan software; refer the software manual.
- 9. Turn off the computer and connect the scanner.

If the computer does not recognize the scanner, repeat steps 1 through 4 to confirm the correct driver was installed in the imaging-device location of the device manager.

Technical support

Please contact your dealer for information regarding installation, SCSI or IEEE 1394 interface recommendations, or application compatibility. If your dealer is unable to help you, contact an authorized Minolta service facility listed on the back cover. Please have the following information ready when calling Minolta technical support:

- 1. The name and model of your computer.
- 2. The available application RAM.
- 3. Other connected IEEE 1394 or SCSI devices.
- 4. DiMAGE Scan Utility version number. The version number is displayed by placing the mouse pointer on the status bar in the main window.
- 5. A description of the problem.
- 6. Any message that appears on the screen when the problem occurs.
- 7. The frequency of occurrence.

Warranty and product registration

Please take the time to fill in the warranty and product registration card. Technical support, scanner software upgrades, and product information are available when the product is registered.

Image data sheet

On the following page you find a data sheet.

Keeping records when scanning is important. It allows for results to be reproduced as well as a good reference for settings when new images are scanned. Records are also a useful learning tool; they document both successes and failures.

The data sheet may be copied and used to record scanner settings.

Details on the film, exposure, and any special filters or processing used can be noted.

Image:			Date:
Film:	Exposure:	Filtration:	Processing:
Image processing	Image-correction Job:		
Brightness, contrast, & color balance palette	Hue, saturation & light- ness palette	Unsharp mask	Selective-color palette
Brightness:	Hue:	Amount:	Cyan: R/G/B/C/M/Y/
Contrast:	Saturation:	Radius:	Magenta: R/ G/ B/ C/ M/ Y/
Red:	Lightness:	Threshold:	Yellow R/ G/ B/ C/ M/ Y/
Green:		Shadow:	Black: R/ G/ B/ C/ M/ Y/
Blue:	Digital ICE:	Digital ROC:	Digital GEM:
Exposure control	Exposure-control setting	file:	
Master:	Red:	Green:	Blue:
Scan settings	Job name:	1	
Input resolution:	Input size (W):	Input size (H):	Magnification:
Output resolution:	Output size (W):	Output size (H):	Unit:
Color matching	Color space:	ICC pro	ofile:
Preferences	Auto exposure:	Color depth:	Multi-sample scan:
Notes:	-	•	

TECHNICAL SPECIFICATIONS

Туре:	Multi-format film scanner
Scan method:	Fixed film, moving sensor, single-pass scan
Light source:	Three wavelength cold cathode fluorescent
Imaging sensor:	Three-line RGB CCD with 7,260 pixels per line
Maximum scan resolution:	4,800 X 4,800
Scanning dimensions:	35 mm - 25.0 X 37.1 mm
	Medium format - 56.58 X 83.82 mm
Film types:	Negative or positive, color or monochrome 35 mm,
	120, and 220 film (6X4.5, 6X6, 6X7, 6X8, 6X9)
Color depth:	Input - 16 bit, output - 8 or 16 bit
Dynamic range:	4.2 (tested)
Scan times (approximate):	

Film	Scan type	Time (IBM PC/AT)	Time (Macintosh)
35mm color positive	Prescan	9 seconds	10 seconds
	Scan	49 seconds	56 seconds
6 X 9 color positive	Prescan	13 seconds	16 seconds
	Scan	3 minutes	3 minutes 50 seconds

Test conditions: IBM PC/AT:

IBM PC/AT:	Pentium IV 1.8 GHz CPU, 1GB RAM, Windows
	2000 Professional operating system, IEEE1394
	interface with an Adaptec AFW-4300 board, Adobe
	Photoshop 7.0, no auto-exposure, no Digital ICE ³
	processing.
Macintosh	PowerPC G4 533MHz CPU, 1.5GB RAM, Mac OS
	9.2.2, FireWire interface, Adobe Photoshop 7.0, no
	auto-exposure, no Digital ICE ³ processing.

Times listed above do not include transfer time to the computer. Scanning times change according to the preferences settings used. Scan times for negative film can be longer than positive film.

Focus control:	Automatic or manual
Interface:	Ultra SCSI or IEEE 1394
Power supply:	100 - 240V AC, 50/60 Hz
Power consumption:	40W maximum
Dimensions:	168 (W) X 128 (H) X 377 (D) mm
	6.6 (W) X 5.0 (H) X 14.8 (D) in.
Weight:	Approximately 4kg / 8.8lb
Operating environment:	10° - 35°C / 50° - 95°F, 15% - 80% humidity

Specifications are based on the latest information available at the time of printing and are subject to change without notice.

MINOLTA HISTORY



Why does a manufacturer of high-quality 35 mm cameras produce a medium-format scanner? This is not as strange as it may seem. After all, Minolta's first product was a roll-film camera.

The Nifcarette folding camera started the company in 1926. Minolta was also the first Japanese manufacture to make a twin lens reflex (TLR) camera in 1937, the Minolta Flex. We continued to design and produce medium-format cameras until the mid 60s. The last TLR released by Minolta was the 1965 Autocord CdS.



1927 Nifcarette - Minolta's first camera

1937 Minolta Flex

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As an ENERGY STAR Partner, Minolta has determined that this product meets the ENERGY STAR guidelines for energy efficiency.



This mark certifies that this product meets the requirements of the EU (European Union) concerning interference causing equipment regulations. CE stands for Conformité Européenne.

Film Scanner: DiMAGE Scan Multi PRO AF-5000

Tested to comply with FCC standards.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. Do not remove the ferrite cores from the cables.

This Class B digital apparatus complies with Canadian ICES-003. Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada. Tested by the Minolta Corporation 101 Williams Drive Ramsey, New Jersey 07446 USA

The sound pressure level is less than 70dB according to ISO 3744 or ISO 7779.

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