

Nikon Scan 4

	.....	2 - 11
	.....	2 - 5
	.....	6
	.....	7 - 10
	.....	11
	.....	12 - 29
	.....	30 - 76
	.....	77 - 105
	.....	106 - 126
	Nikon View	127
	.....	128 - 131
	.....	131 - 139



Nikon Scan

Nikon Scan

Nikon

Nikon

가

가

- Scan Image Enhancer

가

(9000 ED, 5000 ED, 50 ED)

- Digital ICE

- Digital ROC

- Digital GEM

- Digital DEE

“ ”

(9000 ED, 5000 ED, 50 ED)

Nikon Scan

Adobe Photoshop

" 가 "

Nikon Scan

" " , " " " "

Adobe Acrobat Adobe
 Apple, Apple , Macintosh Mac OS Apple
 . Digital ICE4 Advanced Digital ICE, Digital ROC,
 Digital GEM, Digital DEE . Digital ICE⁴ Advanced Applied
 Science Fiction 가 . Petium Intel
 . Microsoft Windows MicroSoft
 Radius, ColorMatch Press View miro display
 Nikon



가 :

	가
	Nikon Scan
	Nikon Scan 가
	가 가

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SUPER COOLSCAN 5000ED가 Windows XP
. Mac OS X Windows

 _____

가

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Adobe Acrobat Reader File

Print

	
	
	
	
	World Wide Web ()

 _____

Nikon

가

- USA
-
-

<http://www.nikonusa.com/>
<http://www.europe-nikon.com/support>
<http://www.nikon-asia.com/>

(FAQs)



가

Nikon Scan

. Nikon Scan

가

:

CPU	300MHz		
OS	Windows XP, Windows 2000 Professional, Windows Me, Windows 98SE		
RAM*	128MB(512MB)		
	40MB	(200MB)	Nikon Scan 가 200MB
	16 bit	()	800*600
USB	USB 1.1/USB 2.0	IEEE 1394	OHCI IEEE 1394
	CD - ROM		

* , , bit , Digital ROC, Digital GEM Digital DEE
가 .

. Nikon Scan 가

12Mbps) USB (USB 2.0 : 48Mbps) (USB 1.1/USB 2.0 :
. USB 2.0 가 Windows XP Windows 2000 Professional USB

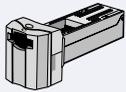


CPU	Power PC G3 (G4)
OS*	Mac OS 9 (9.1), Mac OS X(10.1.5)
RAM†	<ul style="list-style-type: none"> • Mac OS 9 : 64MB (256MB) • Mac OS X : 128MB (512MB)
	70MB (200MB), Nikon Scan 가 200MB(Mac OS 9) 550MB(Mac OS X)
	16bit () 800*600
USB **	USB : USB 1.1 , USB 2.0 ††
	CD-ROM

* Mac OS Nikon (3)
† , , bit , Digital ROC, Digitla GEM Digital DEE
‡ 가 Nikon Scan 가
** USB (USB 2.0 : 48 Mbps) (USB 1.1/USB 2.0 :
12 Mbps) . USB 2.0 가 Mac OS X USB
. USB 2.0 Mac OS X RATOC PCIU3U USB 2.0
(Ratoc <http://www.ratocsystems.com/english/index.html>).
†† 5000ED, COOLSCAN V COOLSCAN IV가 USB 2.0 가 (Mac OS 9
가 가)
. 가 Nikon (3)



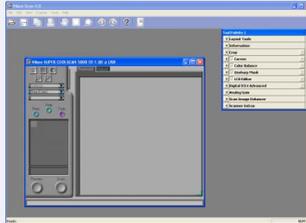
Nikon



Nikon Scan
Nikon View

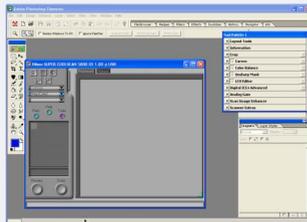
Nikon Scan

1



Nikon Scan

() Nikon Scan



Adobe Photoshop

Nikon Scan

Acquire Import
Nikon Scan

2

3

Preview

Preview

4



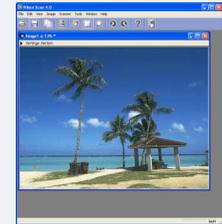
Tools

5

Scan

Scan

6



Save

Save As

Nikon View

Nikon View



Nikon Scan 4 :

- SUPER COOLSCAN 9000 ED (9000 ED)
- SUPER COOLSCAN 5000 ED (5000 ED)
- COOLSCAN V ED (50 ED)
- SUPER COOLSCAN 8000 ED (8000 ED)
- SUPER COOLSCAN 4000 ED (4000 ED)
- COOLSCAN IV ED (50 ED)

	/	
9000 ED 8000 ED	FH - 835M	35mm
	FH - 835S	35mm
	FH - 869S	(120/220, 2 1/4) ,
	FH - 869G	
	FH - 896GR	(120/220, 2 1/4) , , 35mm
	FH - 869M	(120/220, 2 1/4)
	FH - 816	16mm
	FH - 8G1	
5000 ED 4000 ED 50ED 40ED	MA - 21/MA - 20(S)	35mm ()
	SA - 21	35mm (2 - 6)
	FH - 3	35mm (1 - 6 ;)
	IA - 20 (S)	APS (IX - 240)
	FH - G1	()
5000 ED 4000 ED	SA - 30	35mm (2 - 40)
	SF - 210/SF - 200(S)	35mm (1.5 mm 50 ;)



Nikon Scan

- Nikon Scan () :
-
-

Nikon Scan , , 가
 Adobe Photoshop .

Nikon Scan	
Nikon Scan 4 () Nikon Scan 4	"Acquire" "Import" Nikon Scan
Nikon Scan Preference	가 Scan
Nikon Scan	
Nikon Scan	

Nikon Scan ()
 가 Nikon Scan Nikon Scan

Nikon Scan ()
 Nikon Scan Dock 가 가 Nikon Scan (Mac OS X)
 가 Nikon Scan (Mac OS 9).

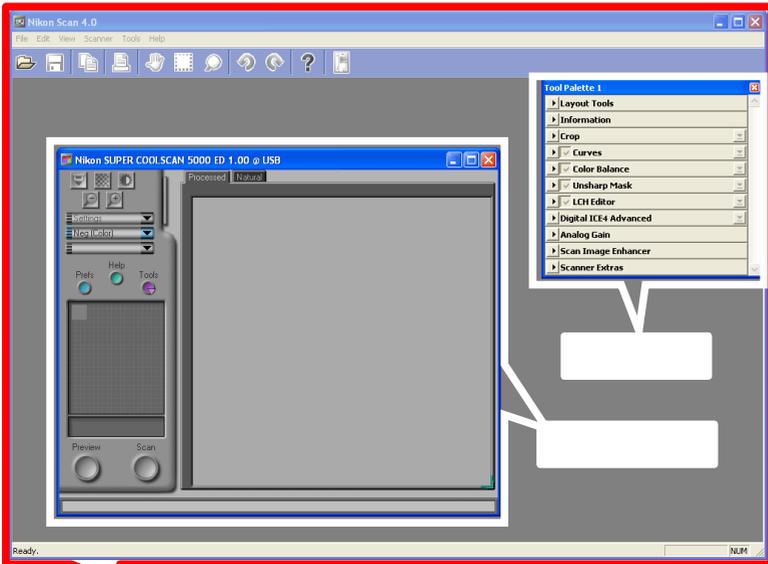
(9000 ED, 8000 ED)
 9000 ED 가 LED가 1 2 LED
 Nikon Scan 8000 ED Nikon Scan
 LED가

Nikon Scan

Nikon Scan

(Windows)

()

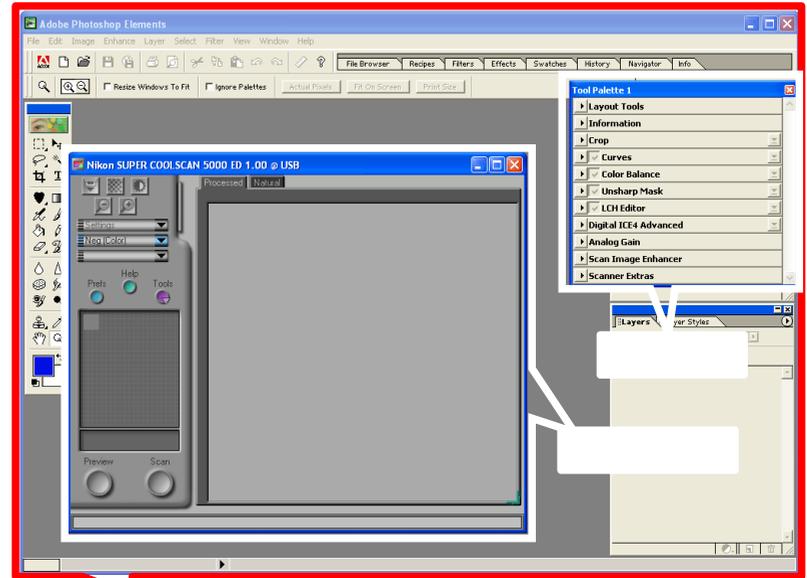
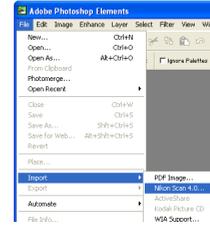


()

acquire import

가

.



()

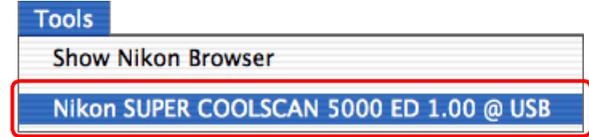


- Tools



- File
-  Open Twain Source

- Tools

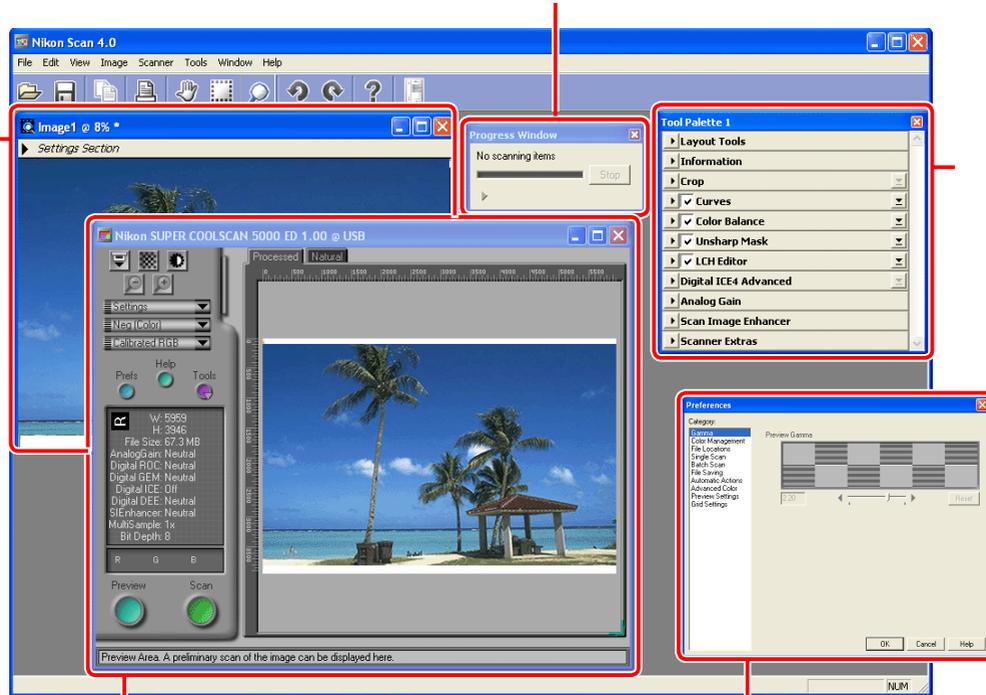


(22)

(106)

(30)

가



(12)

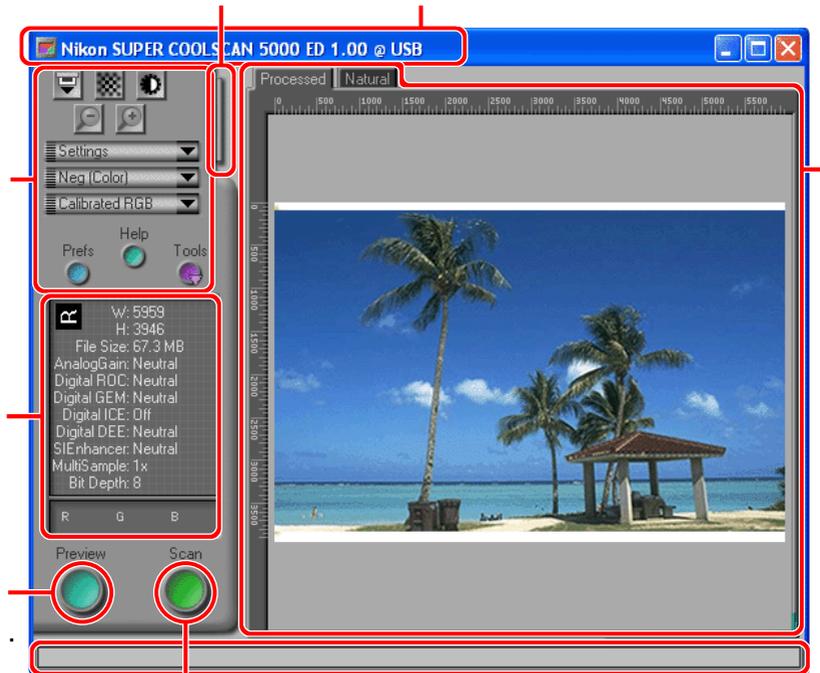
(77)

23)

13)

25)

26)



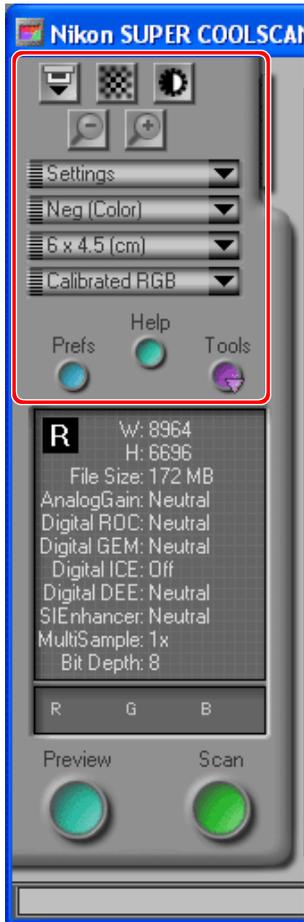
27)

(가)



28)





(14)		
(15)		가 ()
(16)		
(16)		
(17)	Settings	
(19)	Neg (Color)	
(20)	Calibrated RGB	
(20) (9000 ED/8000 ED)	6 x 4.5 (cm)	
(21)	Prefs	가
(21)	Help	
(27)	Tools	가





9000 ED/8000 ED



5000 ED/4000 ED/50 ED/40 ED



MA - 21/MA - 20(S)	
SA - 21	
IA - 20(S) ()	
SA - 30 () (5000 ED/4000 ED 가)	
SF - 210/SF - 200(S) (5000 ED/4000 ED 가)	Ctrl(), ()

MA - 21.MA - 20(S)

MA - 21/MA - 20(S)가



가

(가 가

Settings

Ctrl()

가

Layout Tools

"Layout Tools"



- Preferences 가
- Preferences Automatic Actions
Perform autofocus when focus point is moved 가
 - Preferences Single Scan
Before Scan Auto focus
Scan
 - Preferences Batch Scan
Before each image Auto focus 가
 - Preferences Preview Settings
Settings to be applied to preview Auto focus

.  ()

Preferences

Single Scan, Batch Scan

Preview Setting

Auto exposure for positive film

Auto exposure for negative film

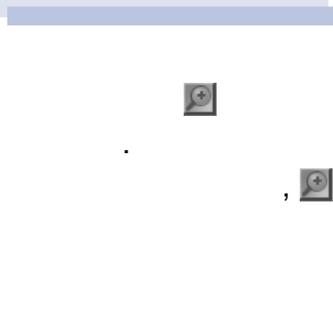
가

가

. , (/ 가)

(,)

 ()

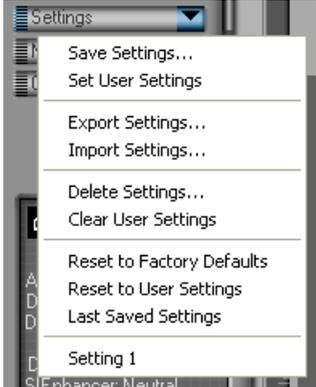


 (Preview)

Preview



- , , ,
- , Curves, Color Balance, LCD Editor, Unsharp Mask, Digital ICE4 Advanced



Crop, Curves, Color Balance, LCH Editor, Unsharp Mask, Digital ICE4 Advanced



“Save Settings...” / “Export Settings...”

Save Settings

Export Setting

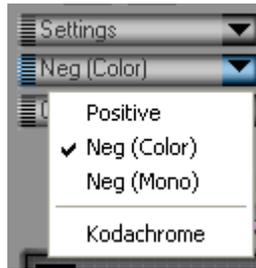


가

Save Settings	가
Set User Settings	Reset to User Setting 9000 ED/8000 ED 가 SA - 21, IA - 20(S), SA - 30 가
Export Settings	.set
Import Settings	Export Settings
Delete Settings	Save Settings
Clear User Settings	Set User Settings
Restore Factory Defaults	
Reset User Settings	Set User Settings 9000 ED/8000 ED SA - 30 SA - 21, IA - 20(S)

Last Saved Settings	Save Settings, Set User Setting, Export Settings 가
Saved settings list	





Positive	가 가
Neg (Color)	가 가 가
Neg (Mono)	가
Kodachrome	"Kodachrome"

9000 ED/8000 ED

가

()

4000 ED/50 ED/5000 ED)

FH - G1(LS - 40 ED/
FH - 8G1(LS - 8000 ED/9000 ED)



()

(CMS) (가)

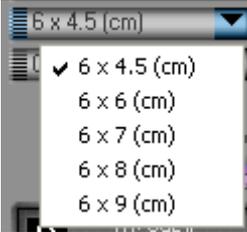
(CMS on)



FH - 869S (120/200,2 1/4)

FH - 869G ()

(가)



Grayscale	
Calibrated RGB (CMS on)	
RGB (CMS off)	RGB

6 x 4.5 (cm)	4
6 x 6 (cm)	3
6 x 7 (cm)	2
6 x 8 (cm)	
6 x 9 (cm)	

ICC

ICC

" (78)

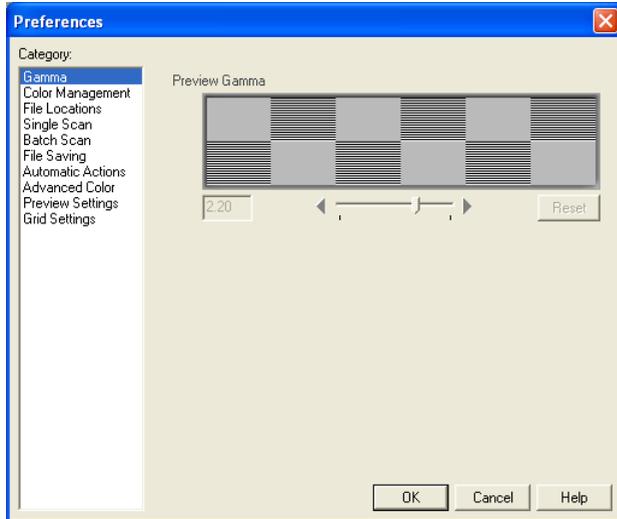
Calibrated RGB/RGB

Preferences Color Management Calibrated RGB

RGB

Prefs
가
Preferences

Preferences
(77)



Preferences



Nikon Scan

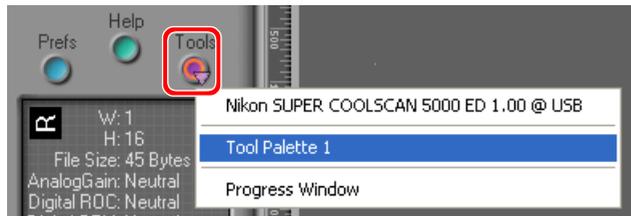


Edit (, Mac OS 9)
(Mac OS X) Preferences

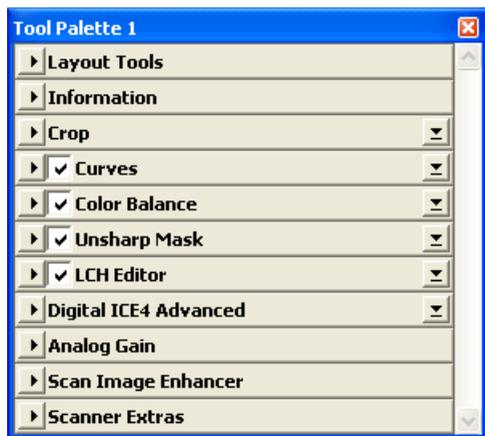
Preferences



가

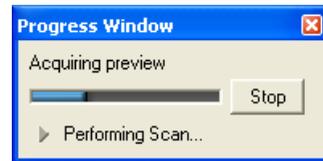


Tools Palette 1



Progress Window

Stop



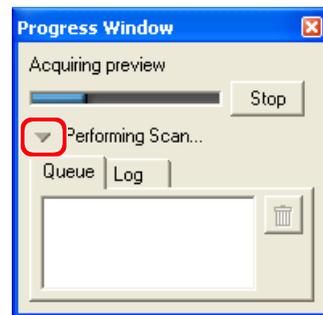
Queue()

Log()

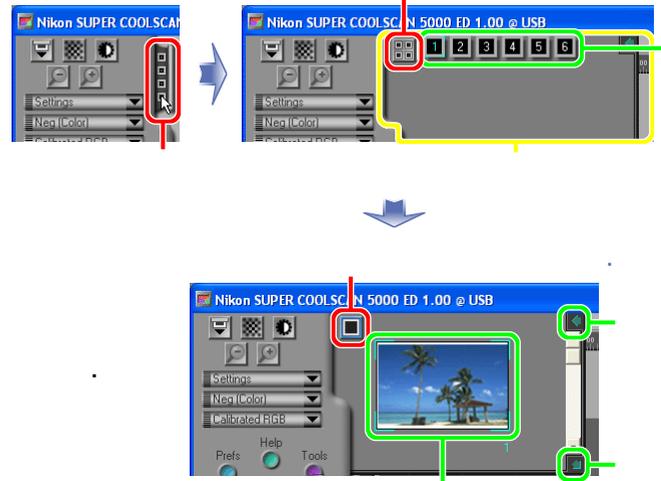
Queue()



Log()



, Ctrl() ()



MA - 21/MA - 20(S)(LS - 40 ED/4000 ED/50 ED/5000 ED), SF - 210/SF - 200(S)(LS - 4000 ED/5000 ED 가),
 FH - 869GR(LS - 8000 ED/9000 ED). 가



9000 ED/8000 ED	
FH - 835M	FH - 835S
FH - 869S	FH - 869G()
FH - 869M()	FH - 816()
FH - 8G1()	

5000 ED/4000 ED/50 ED/40 ED	
SA - 21	IA - 20(S)()
SA - 30 (5000 ED/4000 ED 가 ,)	
SF - 210/SF - 200(S) (5000 ED/4000 ED 가 ,)	



 - ()
가 가 . / .

 Film Offset()
FH - 869S, FH - 869G, SA - 21, SA - 30
Tool Palette1 Scanner Extras Strip Film Offset

 SA - 30(LS - 4000 ED/5000 ED) 40 가 SA - 21(LS - 40 ED/
4000 ED/50 ED/5000 ED) 6 가
9000 ED, 8000 ED  가

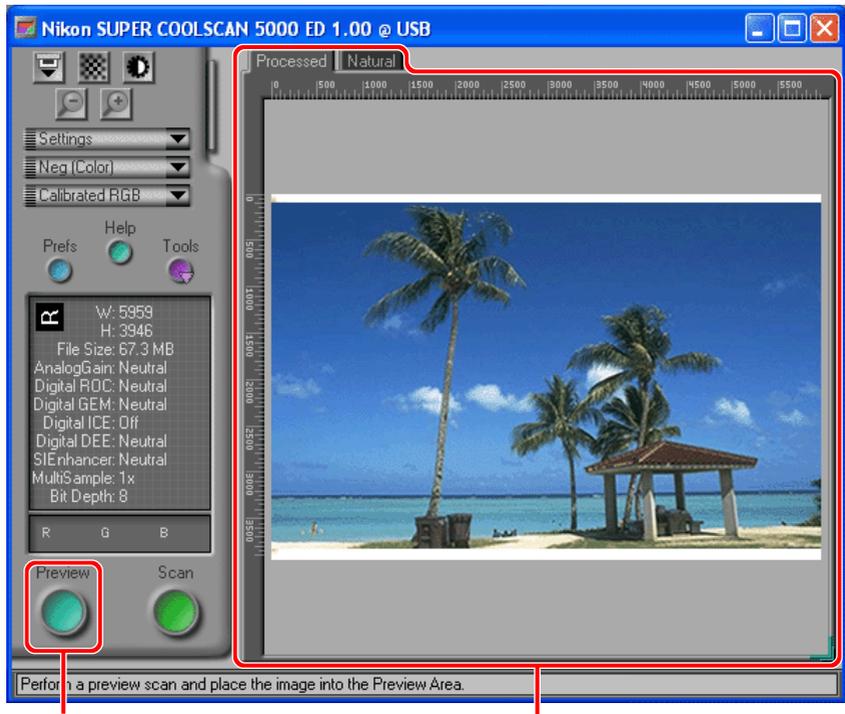






	"R" 가	•Layout Tools (33)
	가 (,)	•Crop (36)
	ICE4 Advanced, Analog Gain, Scan Image Enhancer 가	<ul style="list-style-type: none"> •Analog Gain (69) •Digital ICE⁴ Advanced (61) •Scan Image Enhancer (70)
	bit (가) Multi sample scanning((LS - 4000 ED/5000 ED/8000 ED/9000 ED)	•Scanner Extras (71)
	가 Natural Processed	<ul style="list-style-type: none"> •Curves (41) •Color Balance (51) •LCH Editor (56)

가 Preview



(LS - 8000 ED/9000 ED)
Strip Film Offset

Digital ICE⁴ Advanced

Scanner Extras

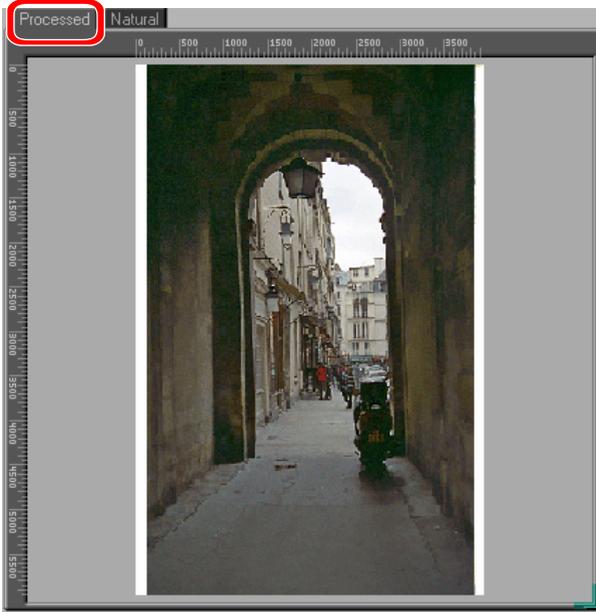
Preview



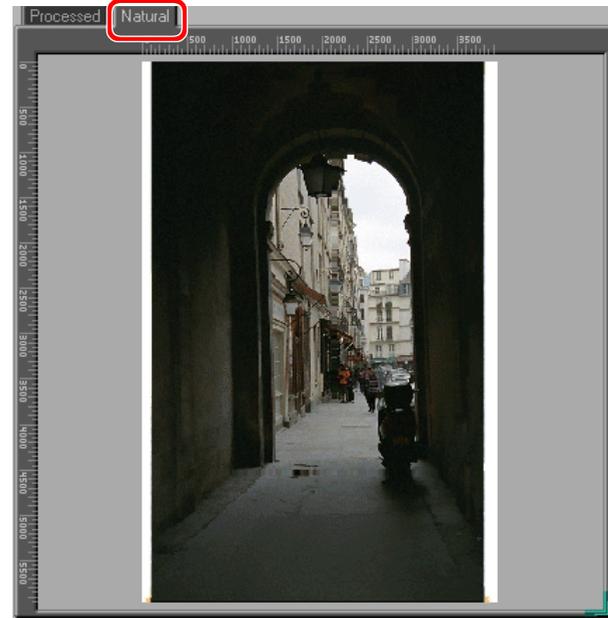
; Natural
Natural, Processed

Processed

가 가 가



Processed()



Natural ()

 Natural, Processed

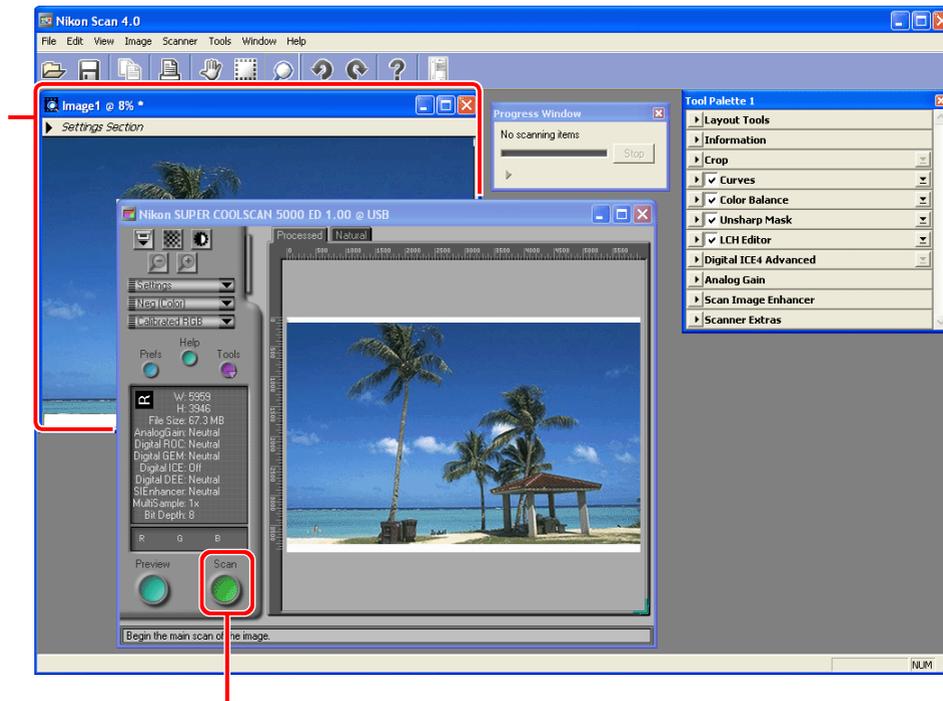
Natural/Processed Ctrl - T()/ -T()

Natural, Processed

 (Analog Gain)/ (Scan Image Enhancer)
"Natural", "Processed"



) . , 가 , 가



가

TWAIN

Adobe Photoshop





가 . Scan

(23)

Scan

1.

2.

3. (17)
(Save Settings)

4.

5.

(, ;)

6. Scan

1.

2.

3. Scan

SF - 210/SF - 200(S)
5000 ED 4000 ED 가 ()

- 1.
2. Scanner Extras (76)
(Feed Image)
3. Scan

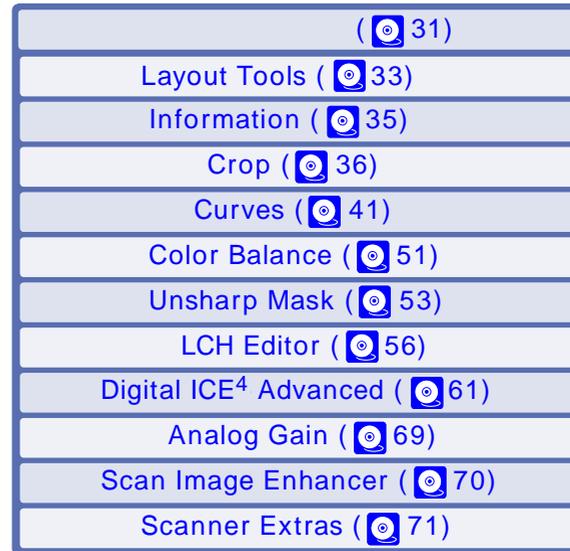
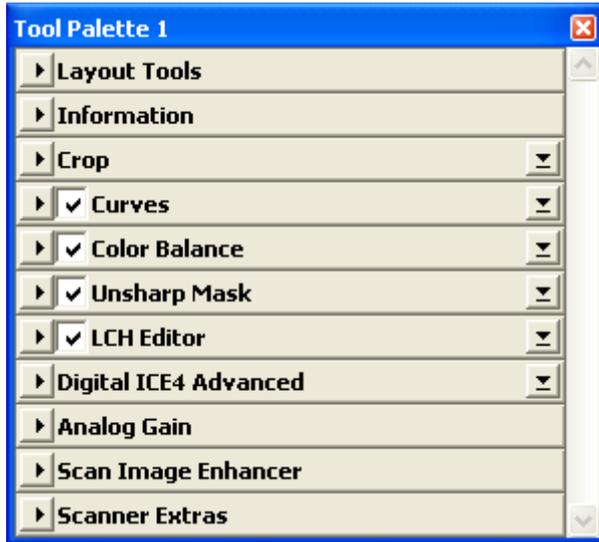
 Scan



 Preferences > Batch Scan
Preferences Batch Scan (96)
가



()



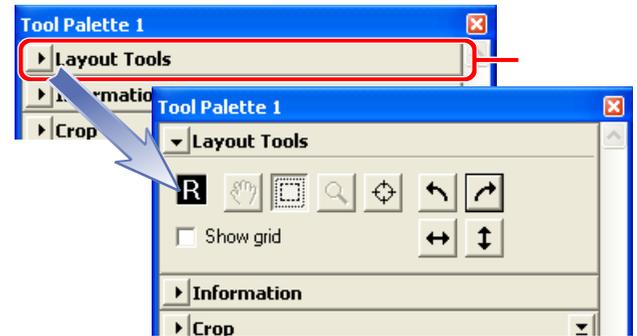
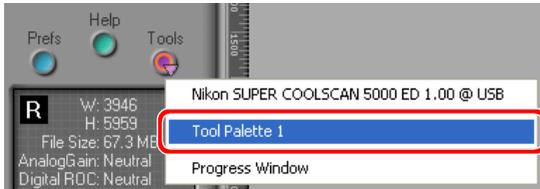
Crop, Digital ICE⁴ Advanced, Analog Gain, Scan Image Enhancer, Scanner Extras

() ()

가

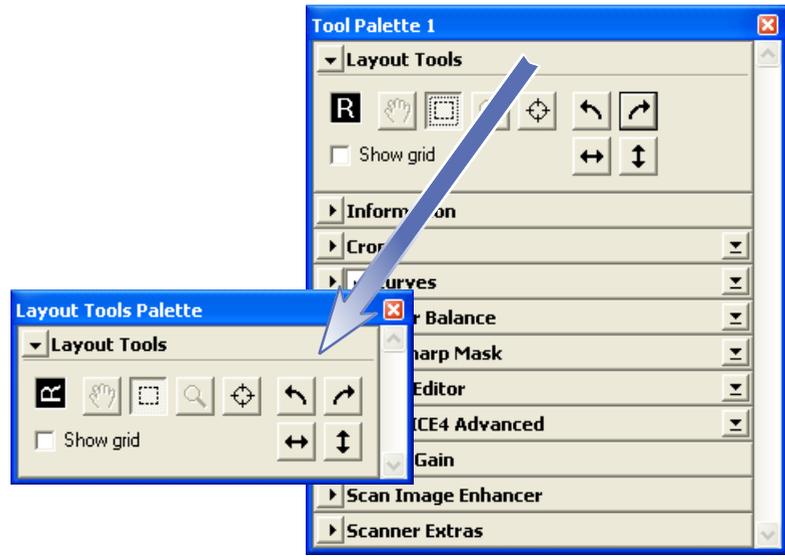
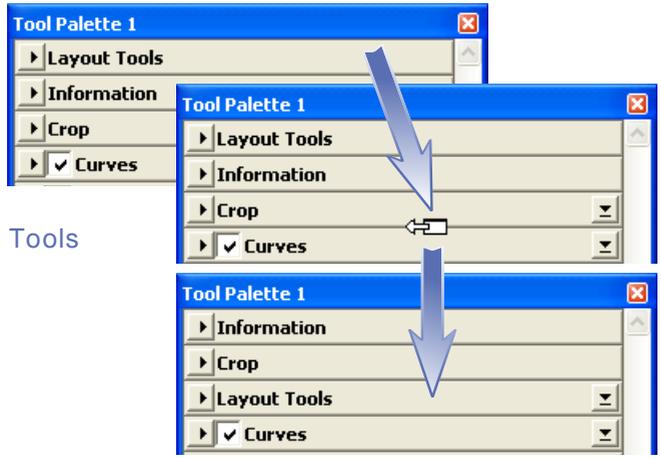


Tool Palette1



가

Layout Tools
Crop



가

가



가

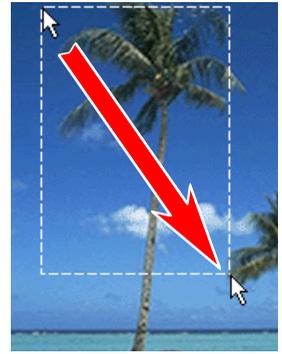
Layout Tools

R

Show grid

가

		—	✓
		✓	✓
		—	✓
		✓	—
		✓	✓
		✓	✓





, Alt() ()

View



가

(15)



"R"

	가 90	가 90
	ABC → ABC	ABC → ABC



"R"

가 가 " "

	가	ABC → ABC
	가	ABC → VBC

Preferences
(105)

Grid Setting



가

Information		
X: 1596	R: 181	L: 0
Y: 1630	G: 200	T: 0
	B: 177	W: 5959
		H: 3946

Calibrated RGB/RGB

Information		
X: 3709	L: 93	L: 0
Y: 2696		T: 0
		W: 5959
		H: 3946

Grayscale

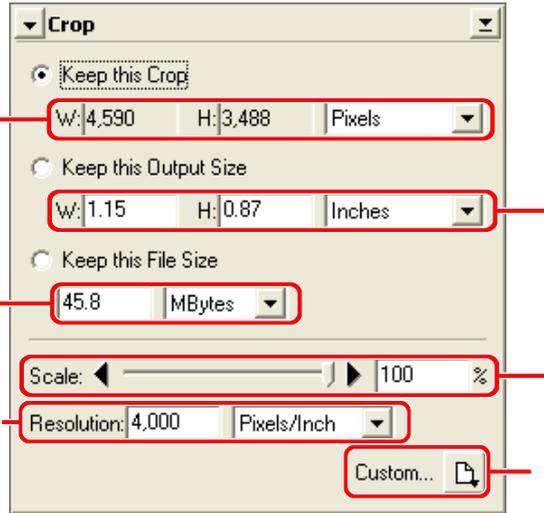
X:	(X)
Y:	(Y)
L:	가 (Luminosity), ()
R:	(Green), (Blue), (Red),
G:	가
B:	가 가
	Preferences
	Advanced Color ( 102) Sample point size
L:	
T:	
W:	
H:	()



" "



가



Keep this Crop (38)

Keep this Output Size (38)

Keep this File Size (39)

Crop () size	
Output size	() Keep this crop (H) 가 (W) Keep this file size
File size	JPECC () 10KB) 가
Scale	
Output resolution	(90 ppi).

Custom	가 Add Resolution 가 Delete Resolution Inkjet Printer ... 360 dpi Dye Sublimation Printer ... 300 dpi 400 dpi Printer ... 400 dpi
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가 가 (, ppi)
(, dpi) 가
360ppi 가

150 300 (Ipi)

(ppi)

가 72ppi() 96ppi()

Keep this Crop()

Keep this crop

가

가

1. Keep this crop

2.

가

3.

(H)

(W)

Scale

4.

Custom...

Keep this Output Size()

Keep this output size

가

(W)

(H)

1. Keep this output size

2.

(W)

(H)

3.

Custom...

4.

Scale

 Keep This Output Size()

Keep this output size 가

가



Keep this File Size()

Keep this file size가

가

1. Keep this file size

2.

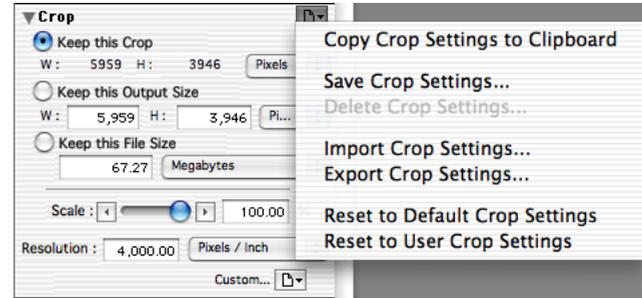
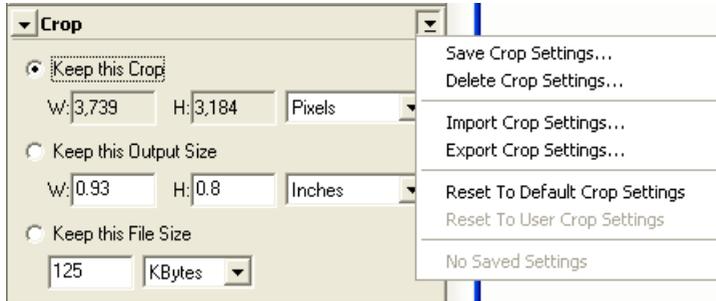
3.

 File Size()

(JPEG 10 KB .)

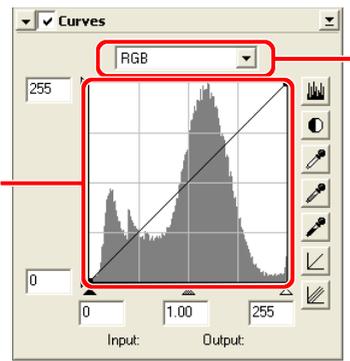


가



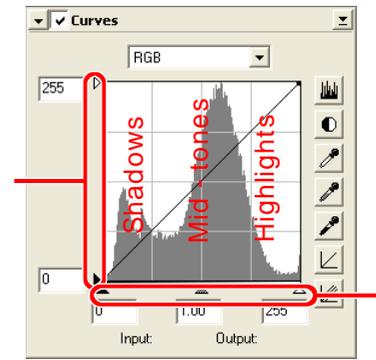
Copy Crop Settings to Clipboard ()		Edit	Paste
Save Crop Settings		가	
Delete Crop Settings	Save Crop Settings		
Import Crop Settings	Export Crop Settings		
Export Crop Settings			".ncc"
Reset to Default Crop Settings			
Reset to User Crop Settings		(17)	Set User Settings

(RGB , ,)



가

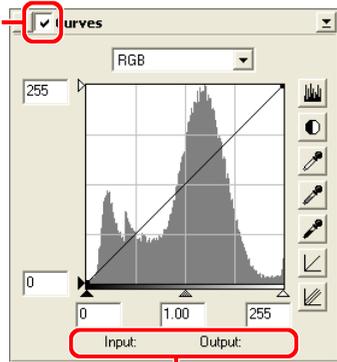
Black Point(,),
 White Point()
 가 (0)
 가 (0,)



(8 bit, 가 0 255 가)
 16 bit 가
 2/14 bit

가 가 , 가 /

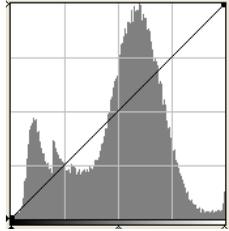
Apply



/

1-

가 가



가

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Apply

가 가

16 bit

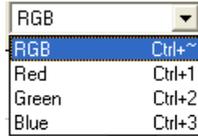
16

8

16

가





. RGB

가

가

가



- Ctrl ~ () / ⌘ ()
(RGB)
- Ctrl 1 () / ⌘ 1 ()
(RGB)
- Ctrl 2 () / ⌘ 2 ()
(RGB)
- Ctrl 3 () / ⌘ 3 ()
(RGB)

White Point, Black Point

Black Point

White Point

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Black Point

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White Point

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White Point

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Point



White Point Black Point

White Point Black Point

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- White Point Black Point
- White Point Black Point,

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Preferences
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Ctrl()

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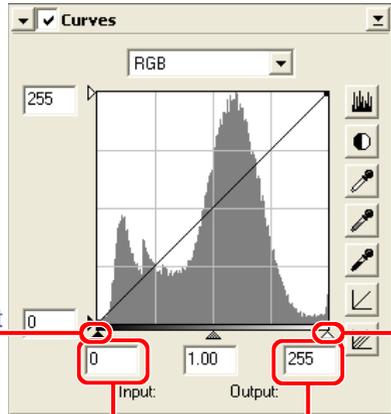
.



White Point Black Point

White Point Black Point

가 . 가



Black - point

White - point

Black - point White - point

White Point Black Point

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Black Point

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White Point

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White Point Black Point

White Point Black Point

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(Black Point)

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Black Point

Black Point

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White Point

White Point

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 White Point Black Point

White Point Black Point

Point Black Point

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  Ctrl() White

()

Ctrl() ()

White Point



가

. White Point

(

가

"Information"

).

White Point

White Point

Black Point



(Black Point)

Black Point



White Point Black Point

White Point Black Point

가

가

, Black Point 0

가

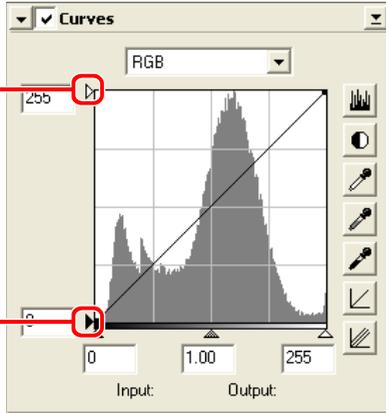
Black Point

가

가

White Point Black Point

White Point Black Point



White - point

Black - point



가

-
-



White Point Black Point

Preferences

Advanced Color

(101)



4- Gray Point

Point(midpoint)

Gray
128
Gray Point

Gray Point

가

Gray Point
Gray Point

Gamma

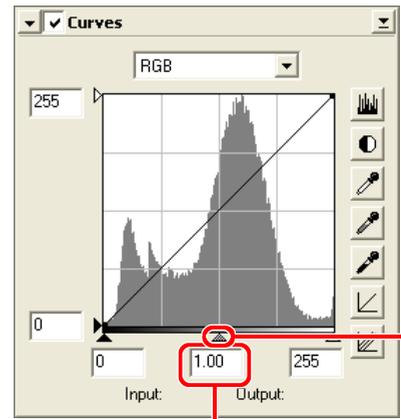
가 , 가 () 0 가 1 가

Gray Point
가 /

Gray Point
가

1 / 가 0.45
3.00

Gray Point



Gray - point

Gamma

가

Gray Point



Gray Point

Gray Point

Gray Point

Gray Point

Gray Point

Gray Point

가

Gray Point



(가

).

Gray Point

Gray Point

Preferences

Gray Point

Gray Point

Advanced Color(101)

Target



가 ()
()

5-

()

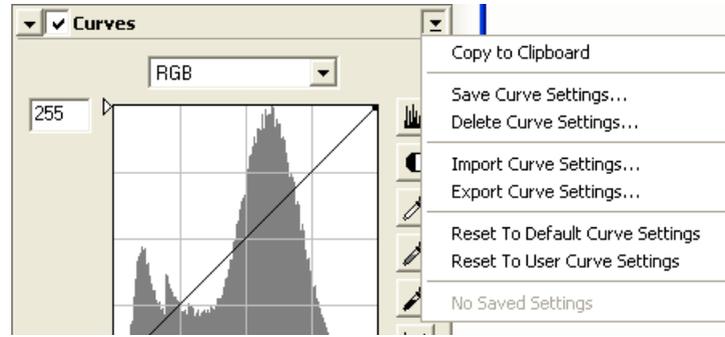
가

가

() 가

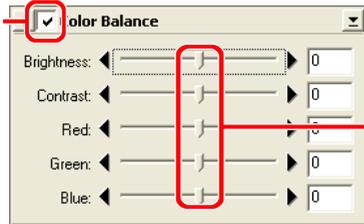


가



Copy to Clipboard		Edit	Paste
Save Curve Settings		가	
Delete Curve Settings	Save Curve Settings		
Import Curve Settings	Export Curve Settings		
Export Curve Settings			.ncv
Reset to Default Curve Settings			
Reset to User Curve Settings	(17)	Set User Settings	

Apply



가

()



Apply

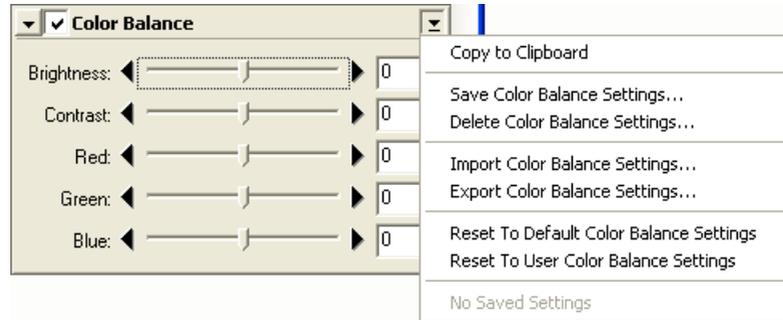
가

가

Brightness	- 100 +100 " + " " - "
Contrast	" + " 가 " - " () - 100 +100 ()
Color balance (Red, Green, Blue)	가 RGB " + " " - " - 100 +100



가



Copy to Clipboard	Paste		Edit
Save Color Balance Settings		가	
Delete Color Balance Settings	Save Color Balance Settings		
Import Color Balance Settings	Export Color Balance Settings		
Export Color Balance Settings		.nca	
Reset to Default Color Balance Settings		± 0	
Reset to User Color Balance Settings		(17)	Set User Settings

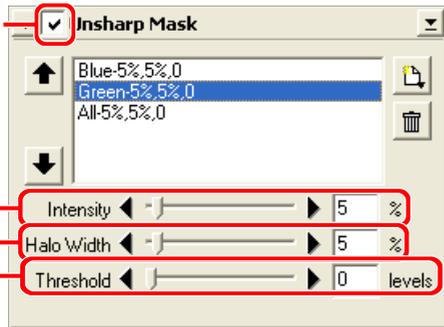
Unsharp Mask ()

가

Unsharp Mask() 가

. Unsharp Mask
가 ()
가

Apply



Intensity

Halo width

Threshold

Unsharp Mask

Unsharp Mask()
가

Apply

Apply

Unsharp Mask

가
가

Unsharp Mask

가

Unsharp Mask

가 (multiple mask)

Unsharp Mask

Unsharp Mask
가

Unsharp Mask
Luminosity

Adpbe Photoshop Lab

Unsharp Mask

Unsharp Mask

Unsharp Mask
(mask)

Nikon Color Management (78)

Unsharp Mask

Nikon Color Management(CMS)가
CMS가

Unsharp Mask

가

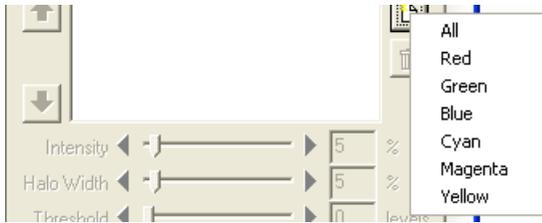


Unsharp Mask ()

1 -

. Mask

All



2 - Intensity, Halo With, Threshold

Intensity	가 () 가
Halo Width	가
Threshold	가 . Threshold가 0 Threshold 0 가 가 가 가

Step 3

Unsharp Mask

Unsharp Mask

"Unsharp Mask"

"Apply"

Step 4 Create Additional Masks

가 (mask)

1 - 3

Unsharp Mask

Unsharp Mask

가

(mask)

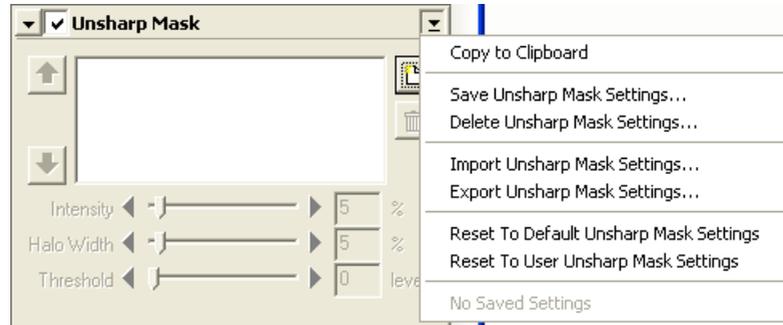


Unsharp Mask

Unsharp Mask

Unsharp Mask

가



	Unsharp Mask	Edit	Paste
Copy to Clipboard	Unsharp Mask	Unsharp Mask	
Save Unsharp Mask Settings	가	Unsharp Mask	
Delete Unsharp Mask Settings	Save Unsharp Mask Settings		
Import Unsharp Mask Settings	Export Unsharp Mask Settings		
Export Unsharp Mask Settings	.num		
Reset to Default Unsharp Mask Settings	Unsharp Mask		
Reset to User Unsharp Mask Settings	(17)	Set User Settings	

LCH

LCD 3가
Lightness(), Chroma(), Hue(),
가
가
가
가
가
가, White/Black/
Gray Point 가

(Hue) 가
가
가
가
LCH

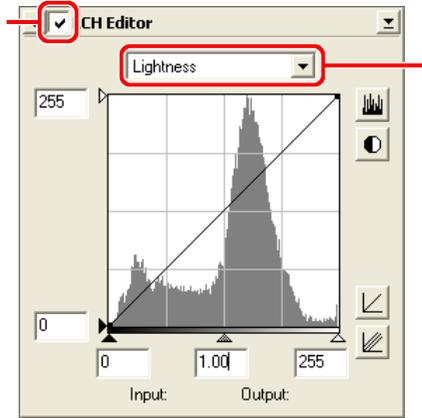
LCH Editor
LCH Editor

Apply

Apply LCH

가

Apply



Nikon Color Management (78)

LCH Nikon Color management System(CMS)
CMS가 LCH
LCH
RGB CMS
Scanner RGB

Lightness Editor

가

가

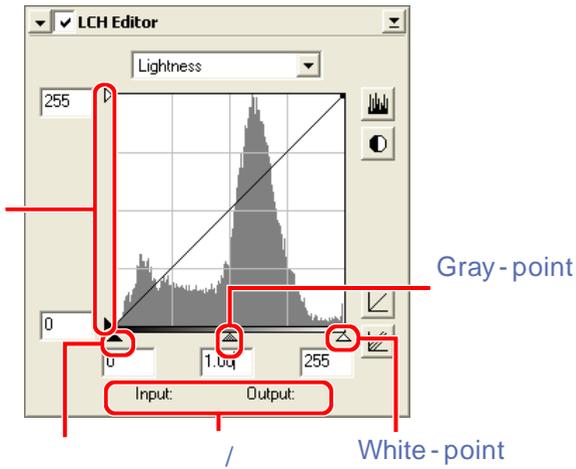
가

가

()

. Gray Point

가



- Ctrl shift 1() / ⌘ Option 1()
- Ctrl shift 2() / ⌘ Option 2 ()
- Ctrl shift 3() / ⌘ Option 3()

	(0 - 255)
	/
Black - point	
Gray - point	()
White - point	
Input/output	가
	LCH
	0.5 % 가
	Preferences Advanced Color(👁️101)

가

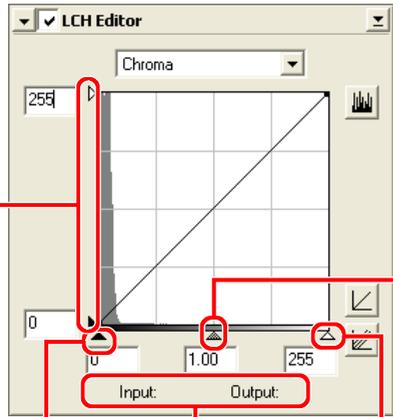
가

Gray Point

가
가

가

가



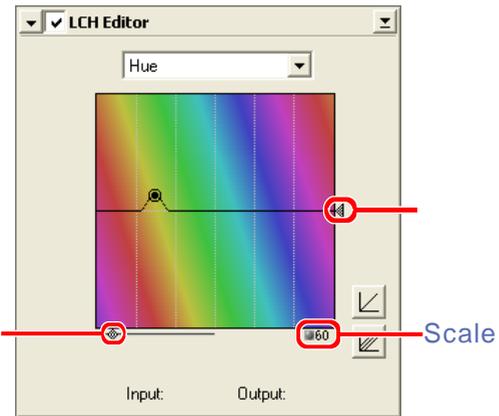
Gray - point

Black - point

White - point

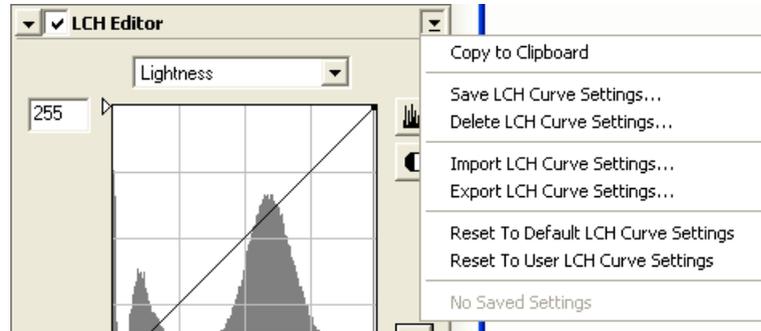
	/
Black - point	
Gray - point	()
White - point	
/	가
/	/
	LCH

가



가

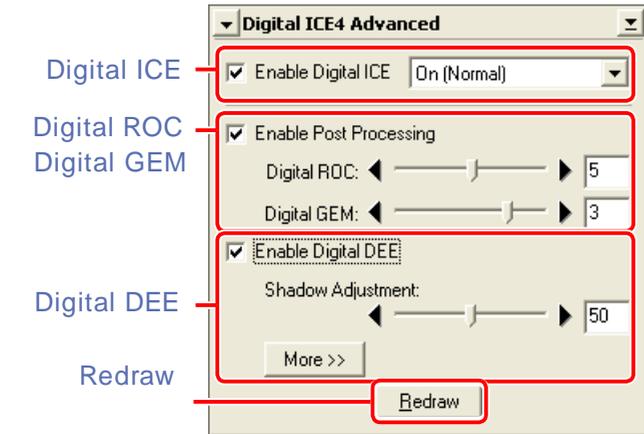
	가
Scale	60 120/180 360 가 가 가 가 가
	LCH



	LCH	Edit
Copy to Clipboard	Paste	LCH
Save LCH Curve Settings	LCH 가	LCH
Delete LCH Curve Settings	Save LCH Curve Settings	
Import LCH Curve Settings	Export LCH Curve Settings	
Export LCH Curve Settings	"nlv"	
Reset to Default LCH Curve Settings	LCH	
Reset to User LCH Curve Settings	(17)	Set User Settings

Digital ICE⁴ Advanced

Digital ICE⁴ advanced (Digital DEE(9000 ED, 5000ED, 50ED), Digital ICE, Digital ROC, Digital GEM)



Digital ICE⁴ advanced
Digital ICE⁴ advanced

Digital ICE, Digital ROC, Digital GEM, Digital DEE
가 :

Digital ICE	가	62
Digital ROC		63
Digital GEM		64
Digital DEE	/ (9000 ED, 5000 ED, 50 ED)	65



FH - G1(), FH - 8G1()
Digital ICE⁴ advanced
Digital ICE⁴ advanced



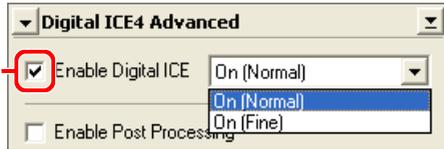
Digital ICE -

Digital ICE(Image Correction Enhancement)

가

Digital ICE , Enable Digital ICE
 Digital ICE On(normal, fine)

Enable Digital ICE



On(Normal)	가
On(Fine)	가

가 Digital ICE가

가 Digital ICE

가 Digital ICE



Digital ICE

Preview

(Digital ROC, Digital GEM, Digital DEE Redraw
 .)

Digital ICE Natural, Processed

가 가 Digital ICE
 가 가

Digital ICE

8000 ED, 4000 ED, 50ED
 Digital ICE . 9000 ED, 5000 ED, 50 ED
 Kodachrome

. 5000 ED, 50 ED

가

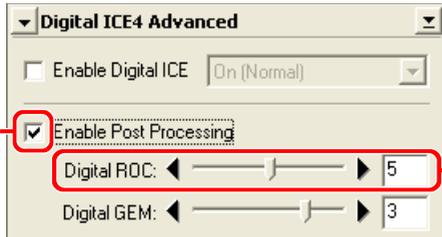
Digital ROC -

Digital ROC(Reconstruction of Color)

Digital ROC

Enable Post Processing
0(Digital ROC) 10()

5



Enable Post Processing

Digital ROC

Digital ROC

Redraw

Redraw



Digital ROC가

Enable post processing



Digital ROC



Digital ROC

Digital ROC

Digital ROC



FH - 816 FH - 8G1(9000 ED, 8000 ED)

FH - G1(5000 ED, 4000 ED, 50 ED, 40 ED)

Digital ROC

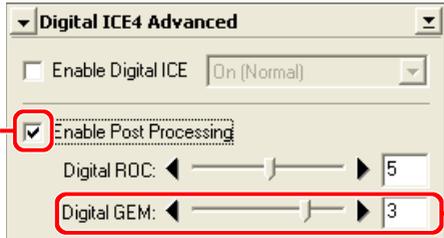


Digital GEM-

Digital GEM(Grain Equalization Management)

Digital GEM Enable post processing
0(Digital GEM) 4()

3



Enable Post Processing

Digital GEM

Digital GEM

Redraw

Redraw



Digital GEM가

Enable post processing



Digital GEM

Digital GEM

Digital GEM



FH - 816 FH - 8G1(9000 ED, 8000 ED)

FH - G1 (5000 ED, 4000 ED, 50 ED, 40 ED)

Digital GEM



Digital DEE(Dynamic Exposure Extender)

Digital DEE 9000 ED, 5000 ED, 50 ED
 가 (40/4000/8000 ED 가)

Enable Digital DEE

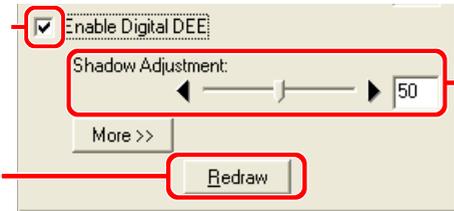
Shadow Adjustment

1 100

가

50

Enable Digital DEE



Shadow Adjustment

Redraw

Digital DEE 가

Digital DEE

Digital DEE

Redraw

Redraw



Digital DEE

Digital DEE

Digital DEE



FH - 816

FH - 8G1(9000 ED,8000 ED)
 4000 ED, 50 ED, 40 ED)

FH - G1(5000 ED,
 Digital DEE

Digital DEE가

, Enable Digital DEE

(9000ED)

Digital DEE

가 169 MB 가

. 169 MB

2000 dpi 100 %

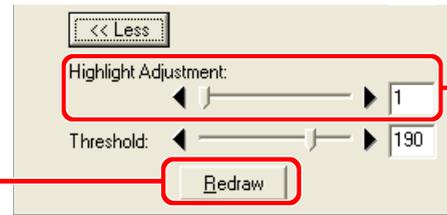
6 x 9

Digital DEE

Enable Digital DEE

More

More



Highlight Adjustment

Redraw

Highlight Adjustment

1 100

가

가

가

가

1

Digital DEE

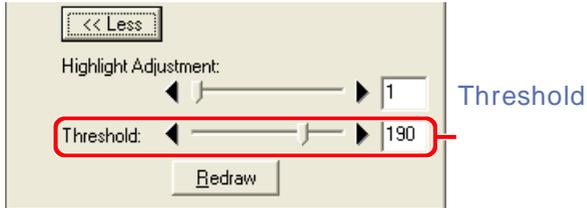
Redraw

Redraw



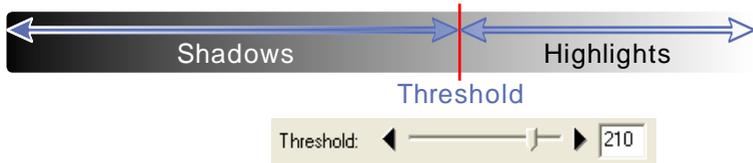
Digital DEE





Threshold
Shadow Adjustment 가 Highlight Adjustment 가

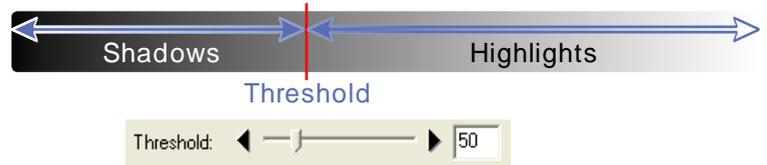
Shadow Adjustment highlight adjustment



가

Threshold

Shadow Adjustment highlight adjustment



가

threshold

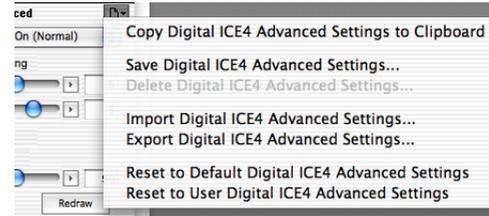
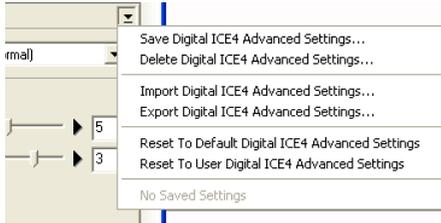
가

Threshold

40	,	가	Threshold() 20	R, G, B
20	40	.	가	Threshold 가
20	40	.	가	R, G
			Threshold	, 가
			()	R, G

w: 5959
H: 3946
File Size: 67.3 MB
AnalogGain: Neutral
Digital ROC: Neutral
Digital GEM: Neutral
Digital ICE: Off
Digital DEE: Neutral
SIEnhancer: Neutral
MultiSample: 1x
Bit Depth: 8

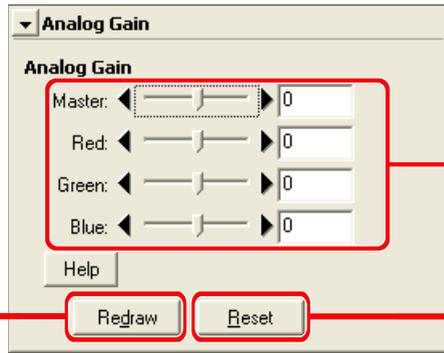
R 128 G 153 B 122



Copy Digital ICE4 Advanced Settings to Clipboard (Macintosh)	Digital ICE4 Advanced . Edit Paste Digital ICE4 Advanced
Save Digital ICE4 Advanced Settings	Digital ICE4 Advanced 가 Digital ICE4 Advanced
Delete Digital ICE4 Advanced Settings	Save Digital ICE4 Advanced Settings
Import Digital ICE4 Advanced Settings	Export Digital ICE4 Advanced Settings
Export Digital ICE4 Advanced Settings	. Digital ICE4 Advanced .nla"
Reset to Default Digital ICE4 Advanced Settings	Digital ICE4 Advanced
Reset to User Digital ICE4 Advanced Settings	(17) Set User Setting

Analog gain()

Exposure Value(EVs)



Analog gain

Redraw

Reset

Master	- 2.00	+2.00
Red, Green, Blue	- 2.00	+2.00
Redraw		
Reset	± 0	

가

Exposure values ()

Exposure values() (CCD)
 +1EV CCD 2
 - 1EV
 EVs "steps"

가

가

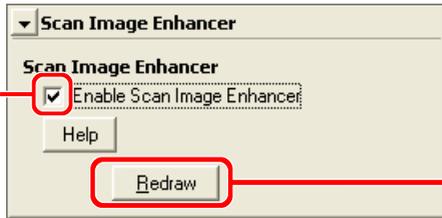


가

9000 ED, 5000 ED, 50 ED

Enable Scan Image Enhancer

Enable Scan
Image
Enhancer



Redraw

가

Redraw



가



가



가

가

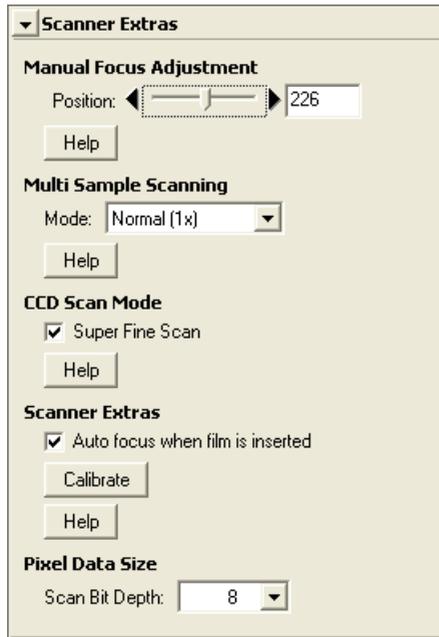


가

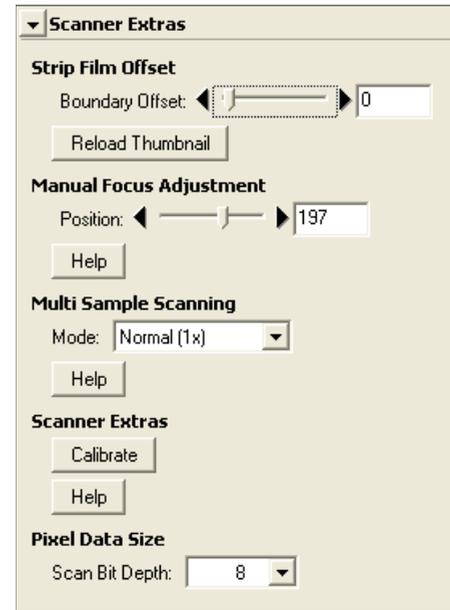
,

/

.



9000ED FH - 835S
"Scanner Extras"



5000ED SA - 21
"Scanner Extras"



가

.



(SA - 21, SA - 30, FH - 869S, FH - 869G)	Strip film offset	
	Manual focus adjustmen	
	Perform Autofocus When Film is Inserted	MA - 21/MA - 20(S)(5000 ED, 4000 ED, 50 ED, 40 ED) 가 9000 ED, 8000 ED 가 (FH - 869S, FH - 869G, FH - 869 GR)
	Calibration	
	Pixel data size	()
5000 ED, 4000 ED 50 ED 40 ED (IA - 20(S))	Crop Choices	APS(IX - 240)
9000 ED, 8000 ED 5000 ED, 4000 ED	multi - sample scanning	() 가
9000 ED, 8000 ED	CCD scan mode	3 1 Super Fine Scan
5000 ED, 4000 ED (SF - 210/SF - 200(S))	slide feeder scan	Scan

SA - 21,
 FH - 869S,
 SA - 30, FH - 869G

Strip Film Offset

Boundary Offset:  0

, Boundary Offset

()

가 가

Boundary offset()

Reload Thumbnail

(가)

Preview

Manual focus adjustment()

Manual Focus Adjustment

Position:  197

Position

Preview



5000 ED, 4000 ED, 50 ED, 40 ED

5000 ED	4000 ED
0 - 144	- 144 - 144

(9000 ED, 8000 ED)

	*	
6×4.5	0-69	-69-69
6×6	0-93	-93-93
6×7	0-114	-114-114
6×8	0-127	-127-127
6×9	0-137	-137-137

*



Perform Autofocus When Film is Inserted

()

5000 ED, 4000 ED,
50 ED, 40 ED MA - 21/MA - 20(S) 가

Scanner Extras
 Auto focus when film is inserted

9000 ED, 8000 ED가
가
(FH - 869S, FH - 869G, FH - 869GR 가
)

Scanner Extras
 Auto focus when film is inserted

Calibration()

가
가 .

Scanner Extras
Calibrate
Help

MA - 21/MA - 21(S)가
IA - 20
. SA - 21, SA - 30 9000 ED, 8000 ED
가
.

LED
가 LED
LED
Nikon Scan

Pixel Data Size()

Scan Bit Depth()

Pixel Data Size

Scan Bit Depth: 8

가

- 9000 ED, 5000 ED: 16 bits, 8 bits
- 50 ED, 8000 ED, 4000 ED: 14 bits, 8 bits
- 40 ED: 12 bits, 8 bits



8

256

(가 가

RGB , 1670

24

).

- 9000ED, 5000ED, : 16 bits (65,536)
- 50 ED, 8000ED, 4000ED: 14 bits (16,348)¹
- 40 ED: 12 bits (4,096)¹

가

가

¹14 bits 12 bits

16 bits

IX 240

IA - 20(S) APS(IX - 240)

가 5000 ED, 4000 ED, 50 ED,
40 ED

IX240 Crop Choices

Classic

Wide

Panorama

Classic	"classic" APS (3:2)	-	35 mm
Wide	wide APS	-	16:9
Panorama	Panorama APS	-	3:1



Multi-Sample Scanning()

(9000 ED, 8000 ED, 5000 ED, 4000 ED 가)

Multi Sample Scanning

Mode: Normal (1x) ▾

()

, Mode()

Normal (1 x)	1	
Good (2 x)	2	가 1 bits
Fine (4 x)	4	가 2 bits
More Fine (8 x)	8	가 3 bits
Super Fine (8 x)	16	가 4 bits

가 .

CCD Scan Mode

9000 ED, 8000 ED

CCD Scan Mode

Super Fine Scan

Help

CCD

가 3 가 가 Super Fine Scan

Super Fine Scan 가 .

Slide Feeder Scan()

5000 ED, 4000 ED

Slide Feeder Scan

Feed Images: 1

SF - 210/SF - 200(S)

Feed Images

Scan

(99).

Preferences

Preferences

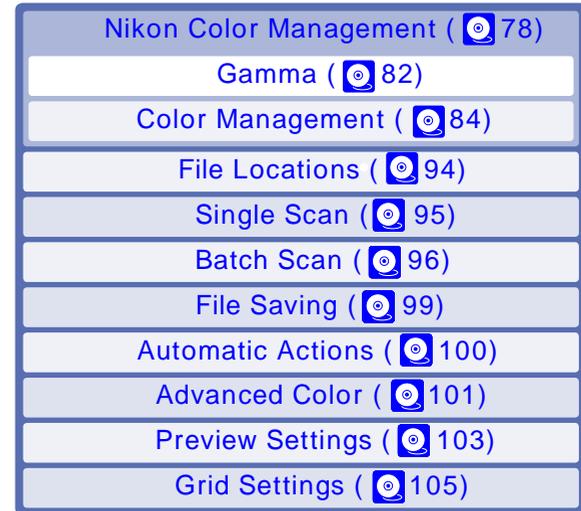
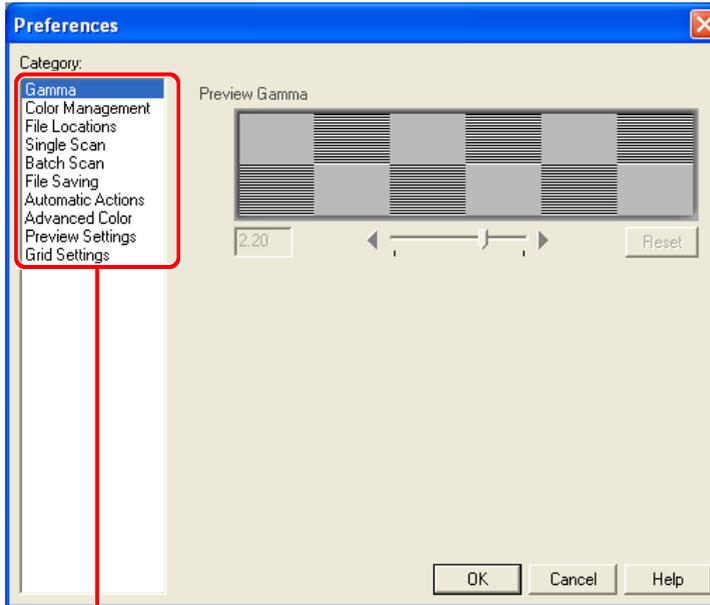
Preferences

Preferences

Prefs



Prefs



* Gamma, Color Management
Nikon Color Management



Preferences

Preferences

(Mac OS X

Preferences

).



가

가

가
"ICC
가

/

(, 가)

RGB CMYK

CMYK

RGB

가

가



Adobe Photoshop

Adobe Photoshop

Adobe Photoshop LE



CMS가

Color Management Management System

Use Nikon Color

RGB

CMS가

Calibrated

Calibrated

RGB

Preferences

Gamma

가

CMS가

Scan

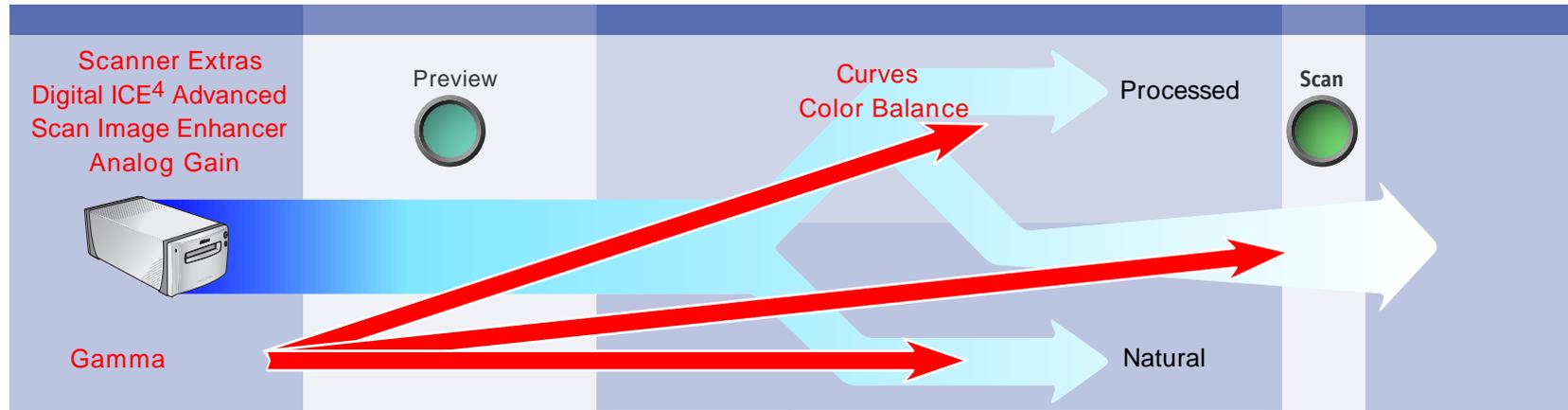
가

(

LCH

CMS가

).

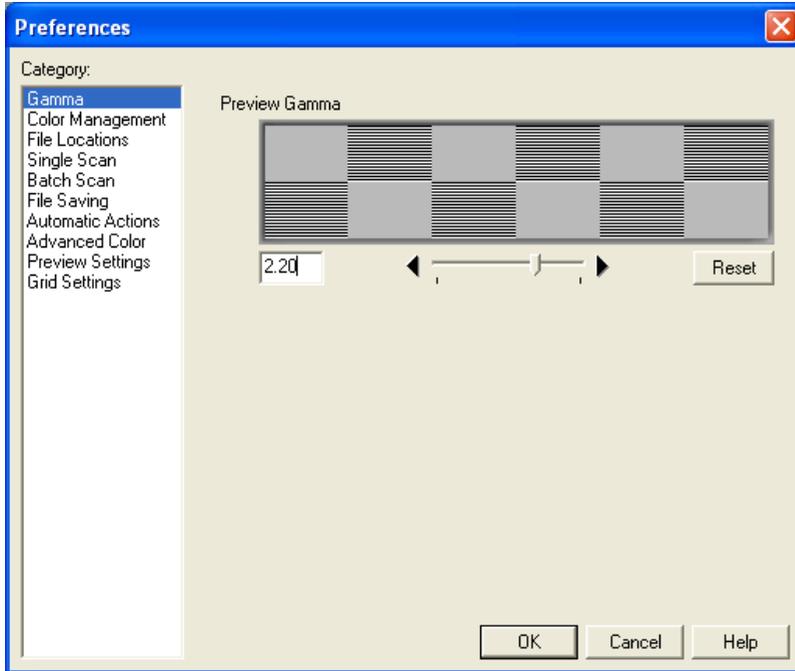


Gamma ()

Color Mangement(84)

Use Nikon Color Management System

가



PreviewGamma()

Scan

가

가

2.2

1.8
가

가

640 x 480

가

Reset



TWAIN

Use preview gamma

Main Scan Gamma

- Use preview gamma
- Use application gamma
- Use custom gamma

Use application gamma

Use application gamma

Use custom gamma

가 가

가

가

가

가

가

가

가 TWAIN (,)

Use application gamma 가
2.2

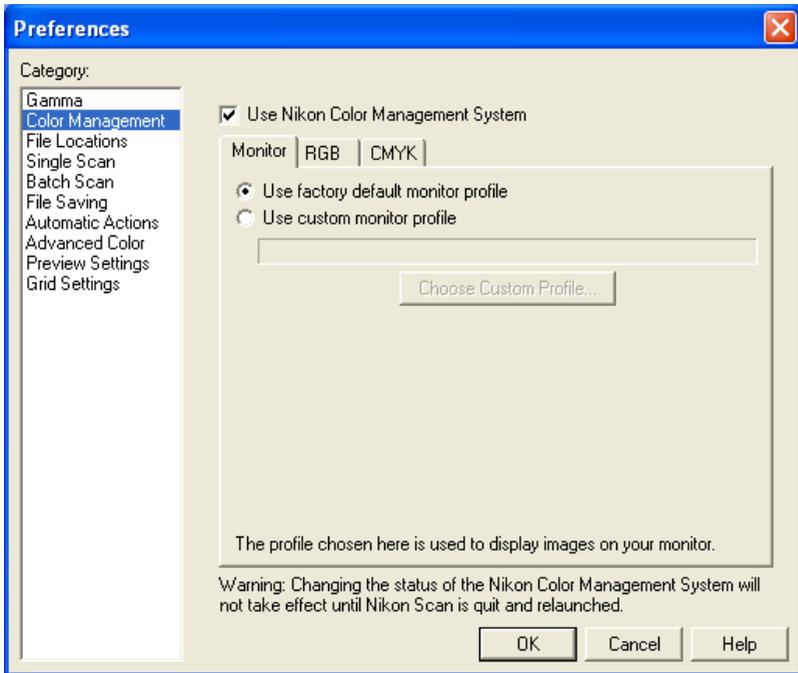
가

Use application gamma

(1.8)가



Color Management



Use Nikon Color Management System

가

CMS가
" CMS가

" (79)

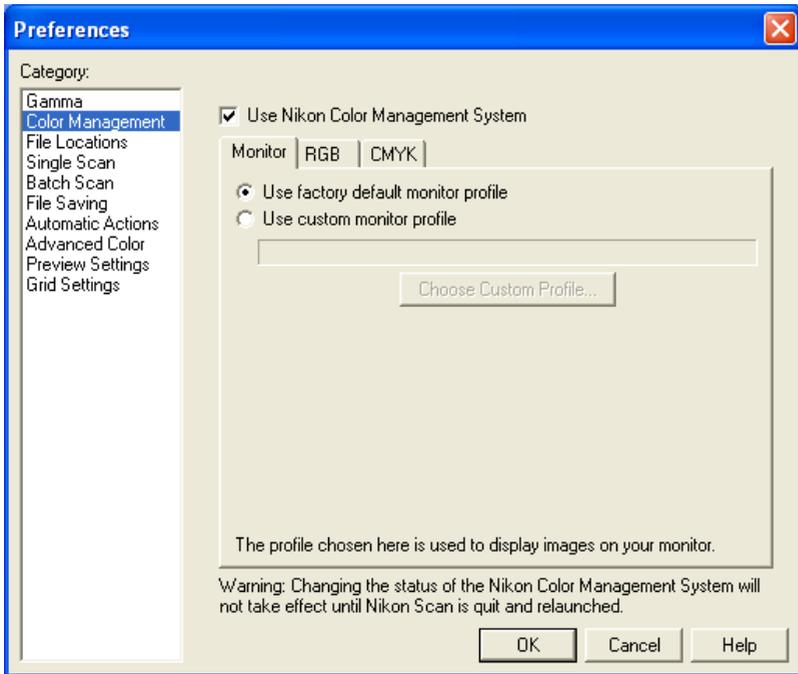
CMS가

Gamma
가
가

(82)

가

가



Use factory default monitor profile ()

.()

Use factory default

monitor profile

(2.2)

("NkMonitor_Win.icm")

sRGB

(1.8)

("NkMonitor_Mac.icm")

D50

Apple 17"

Use custom monitor profile

Choose

Custom Profile

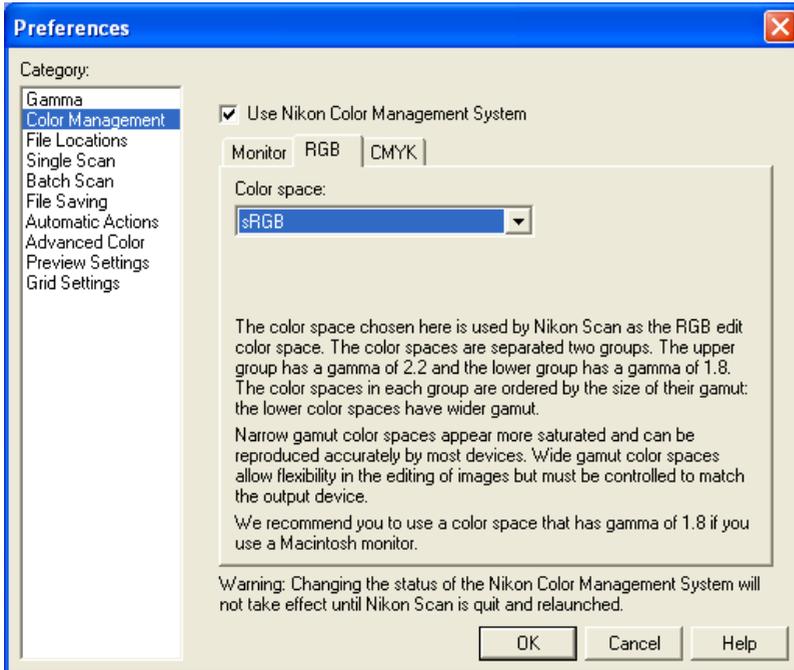
Open File

가

Use custom

monitor profile

Color Space



gamut()

;

1.8 ,

2.2 CMS 2.2

8 RGB 가 (sRGB, Bruce RGB,

NTSC [1953], Adobe RGB[1988], CIE RGB, Wide Gamut

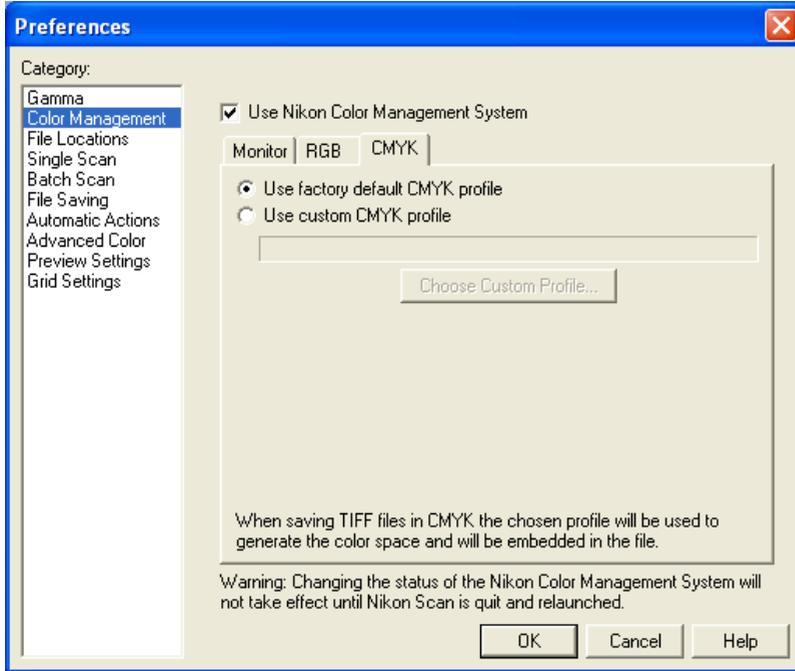
RGB, Wide Gamut RGB, Scanner RGB),

1.8 3

가 (Apple RGB, ColorMatch RGB, Apple RGB).

CMYK

CMYK



Use factory default CMYK profile

CMYK

Use factory default CMYK profile

Use custom profile

Choose

Custom Profile

가 ;

Use custom CMYK Profile

CMYK

CMYK

CMYK 가

CMYK CMS가

CMYK (CMS).



RGB

Windows Profiles (Gamma 2.2)

sRGB

RGB

RGB

(sRGB)

sRGB

가

gamut

5.0

RGB

가

sRGB

Bruce RGB

Adobe RGB

G

G

ColorMatch

RGB gamut

SWOP CMYK

Bruce Fraser가

5.0

"NkBruce.icm"

RGB

NTSC(1953)

1953 National Television Standards Committee (NTSC)

TV

5.0

RGB

"NTSC(1953)"

Adobe RGB (1988)

5.0

sRGB

gamut 가

CMYK

가

DTP

5.0

"Adobe RGB(1988)"

CIE RGB

CIE

gamut 가

(C)

5.0

RGB

"CIE RGB"

Wide Gamut RGB

Adobe

5.0

RGB

"Wide Gamut RGB"



Wide Gamut RGB ()

Wide Gamut RGB

Wide Gamut RGB

Wide Gamut RGB

Wide Gamut RGB

gamut

가 (

가

gamut

RGB

).

Wide Gamut RGB

Wide Gamut RGB

RGB "Wide Gamut RGB"

Scanner RGB

CMS가

CMS가

LCH

CMS

ICC



(1.8)

Apple RGB

DTP

Adobe

4.0

RGB

5.0

"Apple RGB"

ColorMatch RGB

RGB

Radius PressView

Apple RGB

gamut 가

5.0

RGB

"Color Match RGB"

Apple RGB ()

Apple RGB

gamut

Apple RGB

가 , ,

Apple RGB

가

Apple RGB

5.0

"NKApple_COS.icm"

RGB



Gamut()

Gamut()

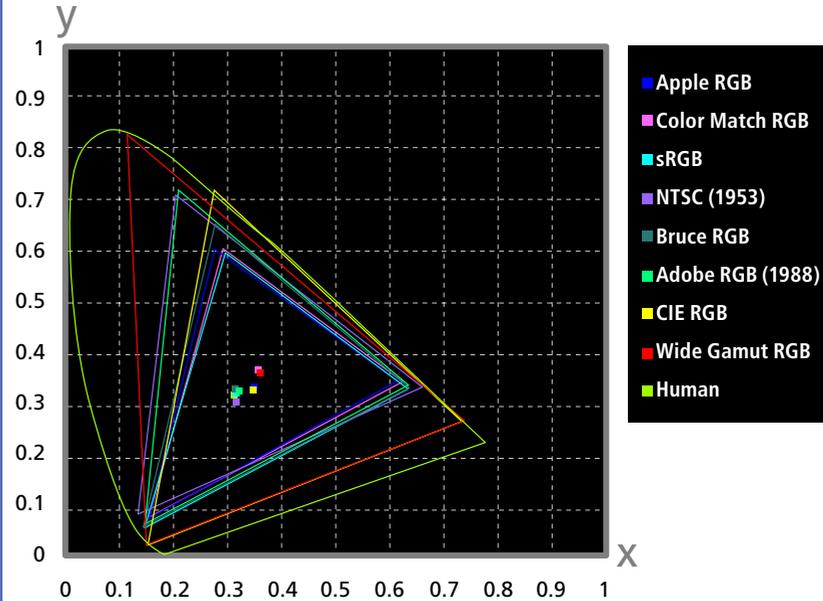
. Gamut()
Commission Internationale de l'Eclairage(CIE)

CIE
가
(CIE X, Y, Z)

가 380 - 780nm
(380nm)
(780nm)

CMS RGB

가 , ,
()



CMS가

					(x, y)						
					R		G		B		
sRGB	6500K (D ₆₅)	x	0.3127159	2.2	HDTV (CCIR 709)	x	0.64	x	0.3	x	0.15
		y	0.3290015			y	0.33	y	0.6	y	0.06
NTSC (1953)	Std Illuminant C	x	0.3101	2.2	NTSC (1953)	x	0.67	x	0.21	x	0.14
		y	0.3162			y	0.33	y	0.71	y	0.08
Bruce RGB	6500K (D ₆₅)	x	0.3127159	2.2	Bruce RGB	x	0.64	x	0.28	x	0.15
		y	0.3290015			y	0.33	y	0.65	y	0.06
Adobe RGB (1988)	6500K (D ₆₅)	x	0.3127159	2.2	Adobe RGB (1988)	x	0.64	x	0.21	x	0.15
		y	0.3290015			y	0.33	y	0.71	y	0.06
CIE RGB	Std Illuminant E	x	0.3333333	2.2	CIE RGB	x	0.735	x	0.274	x	0.167
		y	0.3333333			y	0.265	y	0.717	y	0.009
Wide Gamut RGB	5000K (D ₅₀)	x	0.3457029	2.2	700/525/450nm	x	0.7347	x	0.1152	x	0.1566
		y	0.3585386			y	0.2653	y	0.8264	y	0.0177
Apple RGB	6500K (D ₆₅)	x	0.3127159	1.8	Trinitron	x	0.625	x	0.28	x	0.155
		y	0.3290015			y	0.34	y	0.595	y	0.07
ColorMatch RGB	5000K (D ₅₀)	x	0.3457029	1.8	P22-EBU	x	0.63	x	0.295	x	0.155
		y	0.3585386			y	0.34	y	0.605	y	0.077
Apple RGB (Compensated)	6500K (D ₆₅)	x	0.3127159	1.8	Custom	x	0.65	x	0.265	x	0.14
		y	0.3290015			y	0.341	y	0.717	y	0.0454
	6500K (D ₆₅)	x	0.3127159	2.2	HDTV (CCIR 709)	x	0.64	x	0.3	x	0.15
		y	0.3290015			y	0.33	y	0.6	y	0.06
	5000K (D ₅₀)	x	0.34570291	1.8	Trinitron	x	0.625	x	0.28	x	0.155
		y	0.3585386			y	0.34	y	0.595	y	0.07





가 TWAIN Acquire

RGB

RGB

(
). RGB
 , Program\Common Files\Nikon\Profiles(
 : :Nikon MAID:Profiles(
 ;

RGB

sRGB	NKsRGB.icm
Bruce RGB	NKBruce.icm
NTSC (1953)	NKNTSC.icm
Adobe RGB (1998)	NKAdobe.icm
CIE RGB	NKCIE.icm
Wide Gamut RGB	NKWide.icm
Apple RGB	NKApple.icm
Color Match RGB	NKMatch.icm
Apple RGB (compensated)	NKApple_CPS.icm

* "Scanner RGB"

5.0

가 RGB

CMYK

CMYK

5.0

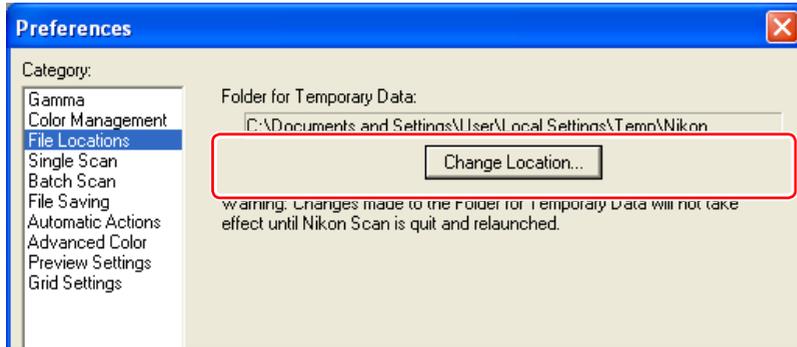
가 CMYK



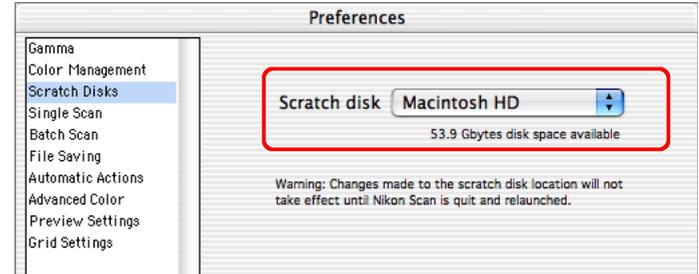
"File Locations" () "Scratch Disks" ()
 () , 가

Date
 Location

Folder for Temporary
 Change



Scratch Disk
 가



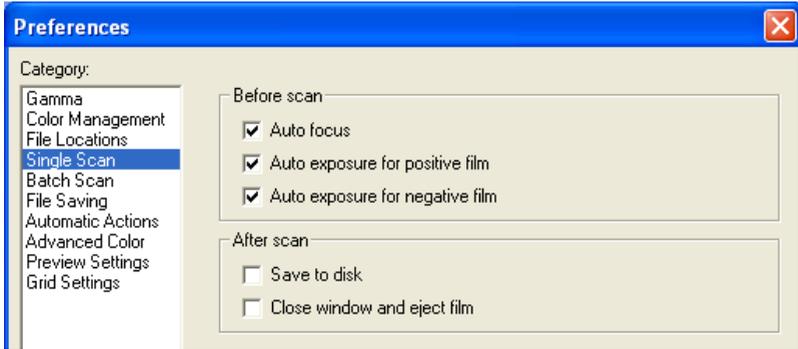
"File Locations" / "Scratch Disks"

"File Locations" "Scratch Disks"

가



Single Scan ()



Before Scan ()

Auto focus	() 가
Auto exposure for positive film	(),
Auto exposure for negative film	(), 가

After Scan ()

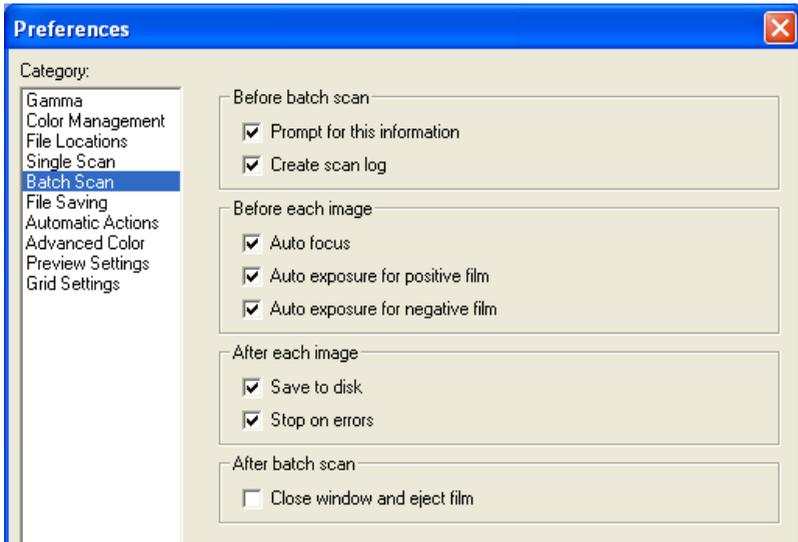
	Scan 가
Save to disk	Scan : , , File Saving 가 TWAIN
Close window and eject film	(8000 ED/9000 ED), SA - 21, IA - 20(S), SA - 30, SF - 210/SF - 200(S) (5000 ED/4000 ED)

"Before Scan"

"Scanner Extras" Perform auto focus when film is inserted 가 MA - 20/21(S) (5000ED, 4000ED, 50 ED, 40 ED) FH - 869S, FH - 869G 가 9000 ED 8000 ED

"Before Scan" 가
Auto Focus
9000 ED, 8000 ED ;





Before Each Image

"Scanner Extras" Perform auto focus when film
 is inserted MA - 20/21(S)(5000 ED, 4000 ED,
 50 ED, 40 ED) FH - 869S, FH - 869G
 가 9000 ED 8000 ED

"Before Scan" 가
 Auto Focus
 9000 ED, 8000 ED ;

Before Batch Scan

Prompt for this information	() 가
Create scan log	() "After each image" Log Save to disk

Before each image

Auto focus	() 가
Auto exposure for positive film	(),
Auto exposure for negative film	(), 가

After each image

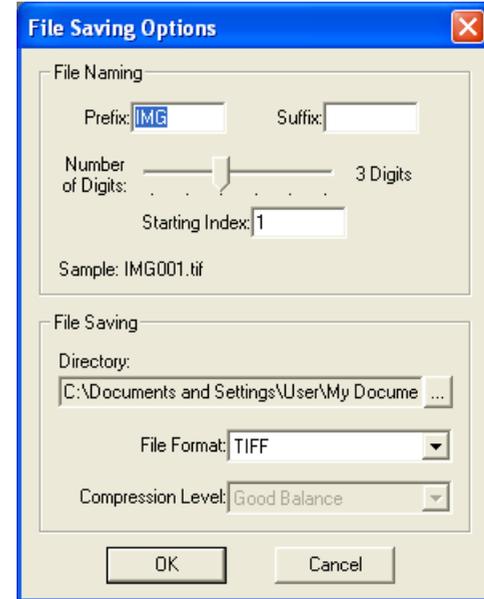
	Scan 가
Save to disk	Scan File Saving 가 ; TWAIN
Stop on errors	() 가 가 가

After batch scan

Close window and eject film	(8000 ED/9000 ED), SA - 21, IA - 20(S), SA - 30, SF - 210/SF - 200(S) (5000 ED/4000 ED)
-----------------------------	---

File saving options

Save to Disk가
"File Saving Option" 가



"File saving options"

Prefix, 1 - 6
 Suffix 가
 File naming Prefix,
 Suffix

Prefix	65	가
Suffix	65	가
Number of Digits		
Starting Index	1	
Sample		

File Saving

...	가
File Format	NEF, TIFF, TIFF(CMYK), JPEG, BMP() PICT()
Compression Level	

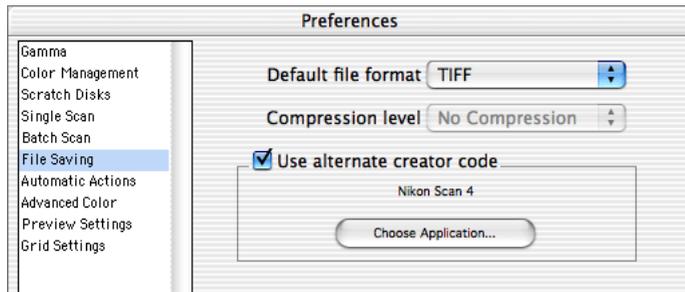
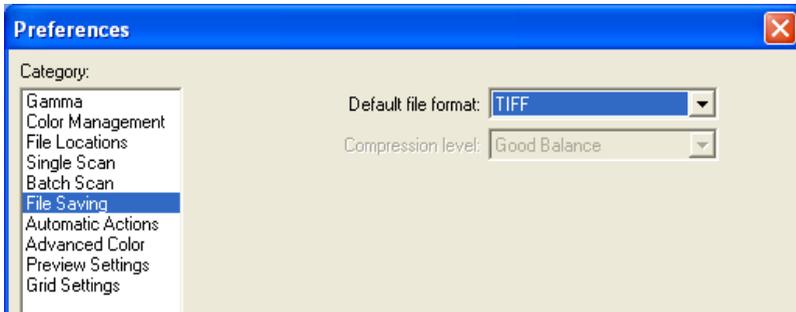


255
 " ?? " / " : " ; " * " < " > " , " |"
 8
 : " ?? " / " : " ; " * " ? " < " > " " |"
 31 (" : ")



File Saving

가

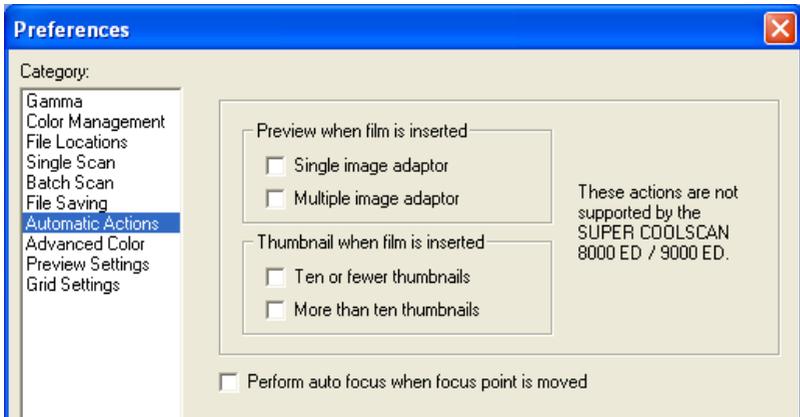


Default file format	NEF, TIFF, TIFF(CMYK), JPEG, BMP(), PICT() 가 "Last used"
Compression level	
Use alternate creator code ()	Choose Application

Automatic Actions ()

Automatic Actions

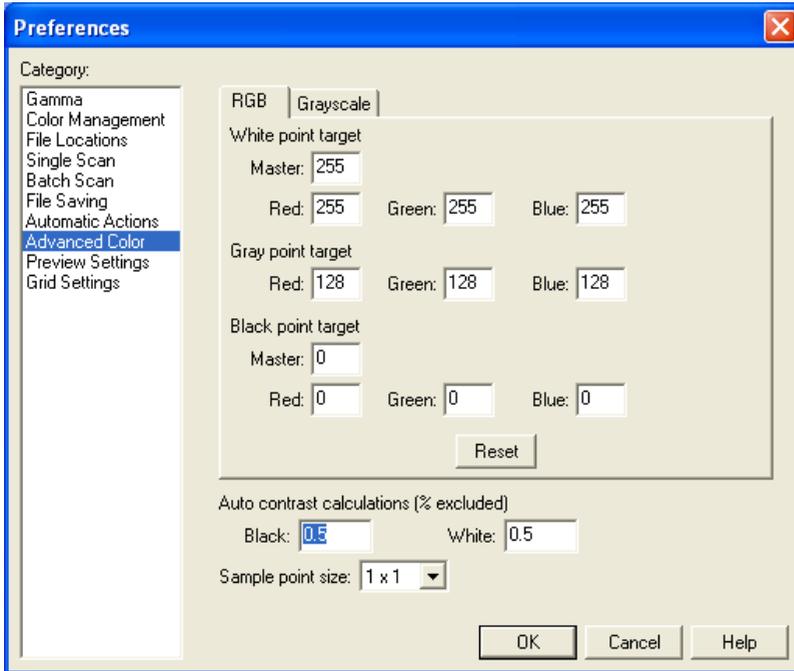
가



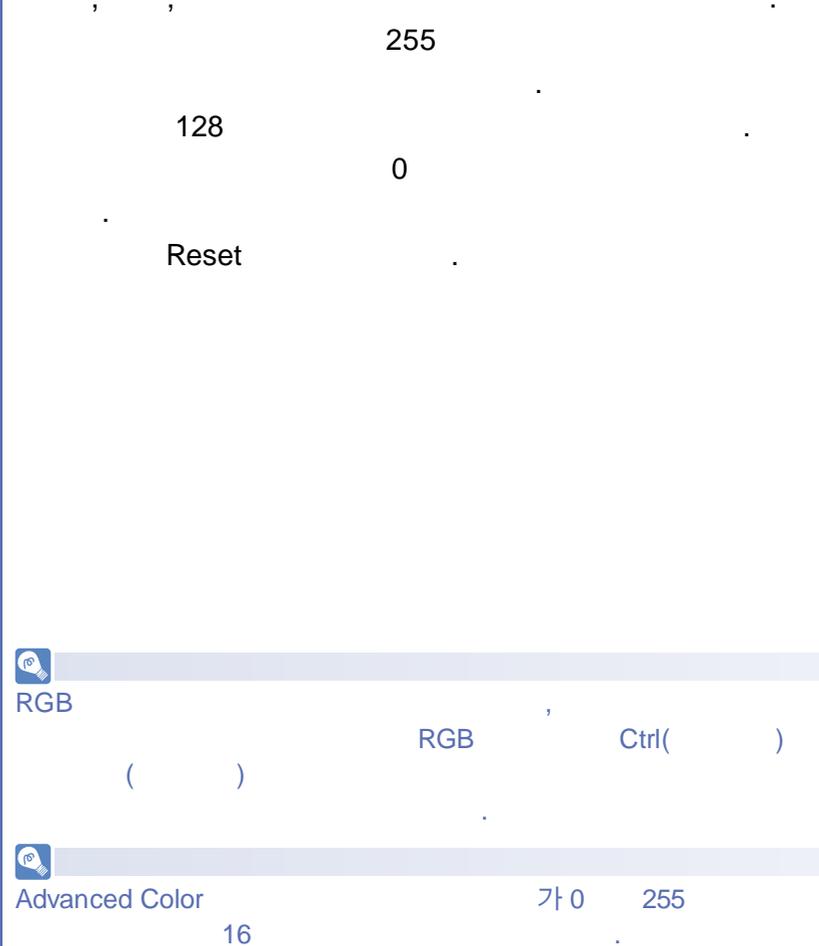
<p>Preview when film is inserted</p>	<p>Single Image Adaptor가 가 MA - 21/MA - 20(S) SF - 210/SF - 200(S)</p> <p>Multi Image Adaptor가 가 (가).</p> <p>9000 ED/ 8000 ED</p>
<p>Thumbnail when film is inserted</p>	<p>Ten or fewer thumbnails APS 10 가 가</p> <p>More than ten thumbnails SA - 30 IA - 20(S)</p> <p>9000 ED/ 8000 ED</p>
<p>Perform auto focus when focus point is moved</p>	

Advanced Color

Advanced Color



White Point, Gray Point, Black Point,
White -, Gray -, Black Point Target
RGB



Auto Contrast Calculations ()

Auto Contrast Calculations

"LCH Editor"

"Curves"

가

0.5%

가

0.5%

(0

가

).

Sample Point Size()

1 × 1, 3 × 3, 5 × 5

가 3 × 3

5 × 5

:

가

Digital DEE

Digital DEE

Threshold

5 × 5

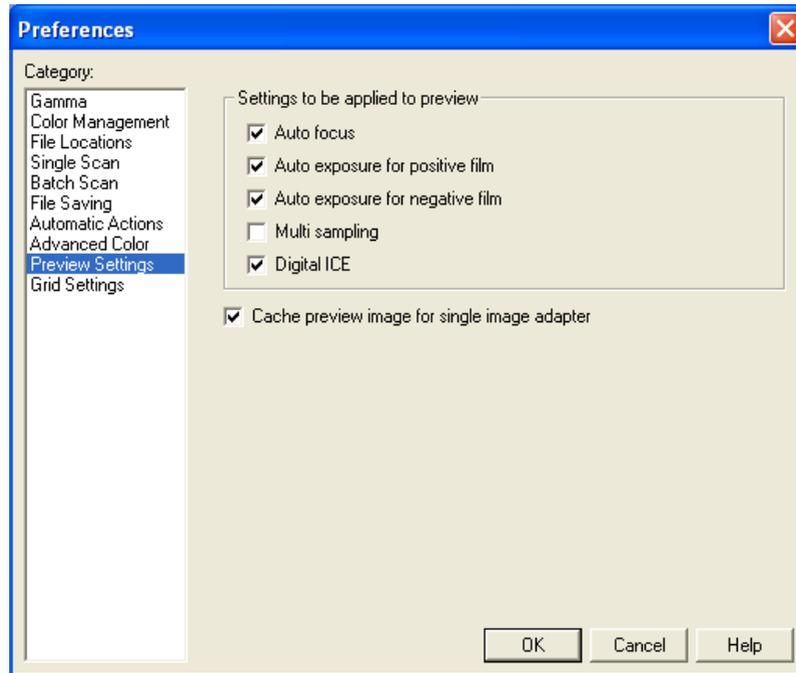
; Digital DEE

Threshold

가



Preview



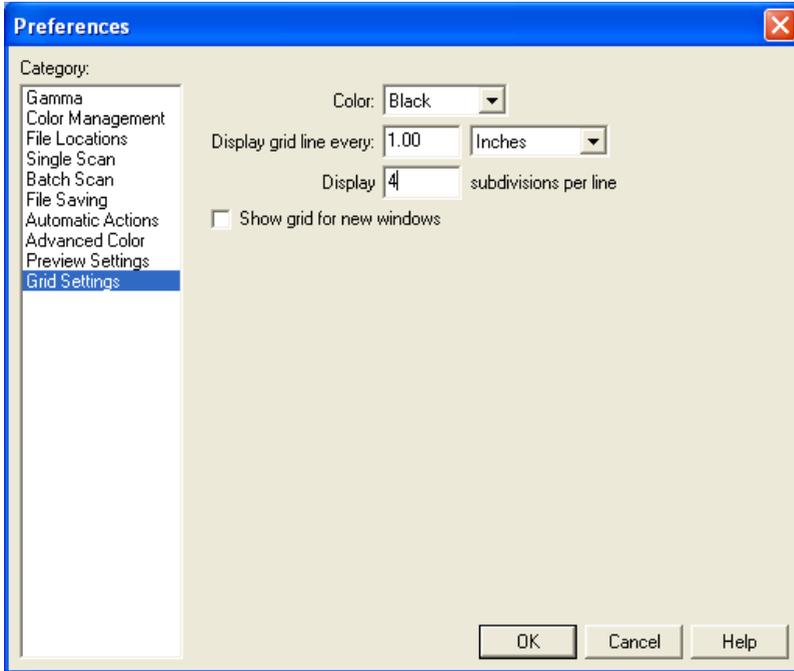
Auto focus	(), Preview
Auto exposure for positive film	(),
Auto exposure for negative film	(), 가
Multi sampling	(9000 ED, 8000 ED, 5000 ED, 4000 ED) Normal(1 x) 가
Digital ICE	Digital ICE ⁴ Advanced Enable digital ICE 가
Cache preview image for single image adapter	MA - 21/MA - 20(S) MA - 21/MA - 20(S)가

"Perform auto focus when
 film is inserted"가
 (5000 ED, 4000 ED, 50 ED, 40 ED)
 MA - 20/21(S)
 FH - 869S, FH - 869G 가 9000 ED 8000 ED
 "Auto focus"가
 가
 . 9000 ED 8000 ED
 ;

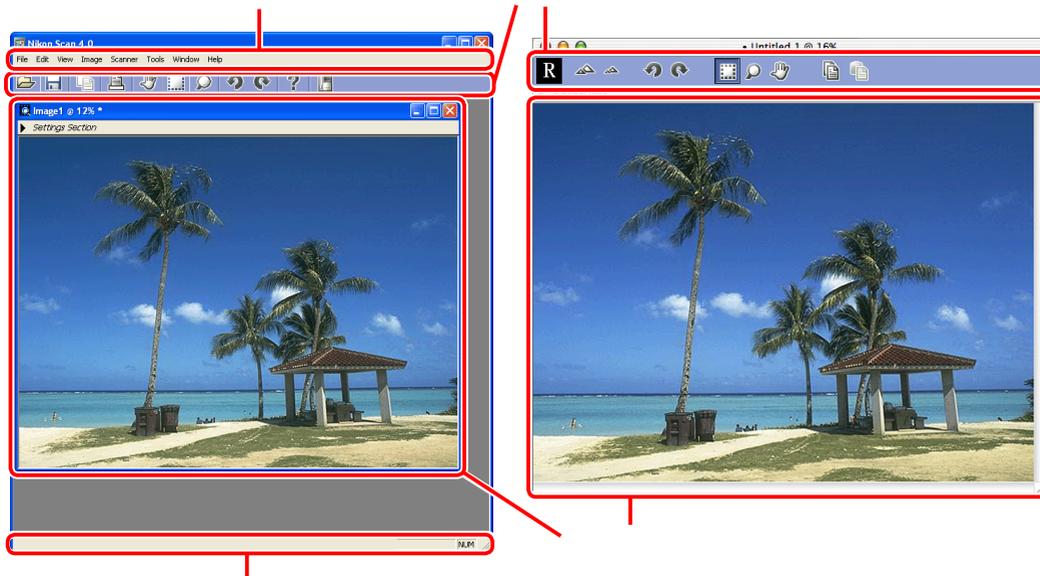


Grid settings ()

"Show grid ()"



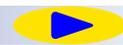
Color	
Display grid line every	
Display n subdivisions per line	
Show grid for new windows	



- The Nikon Scan Applet(107)
- (108)
- (109)
- (111)
- (112)
- (112)
- (113)
- (113)
- (114)
- (115)
- () (117)
- (118)



TWAIN



Nikon Scan Applet

TWAIN

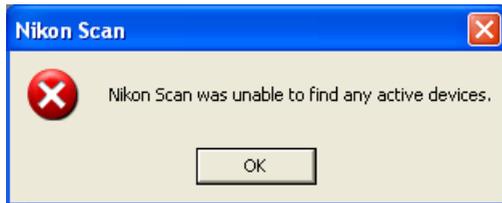
Nikon Scan applet

가

Nikon Scan Applet
Applet

"Starting Nikon Scan as a 'Stand - Alone' application(9)"

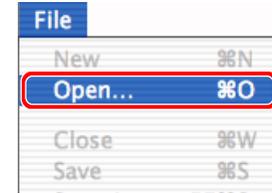
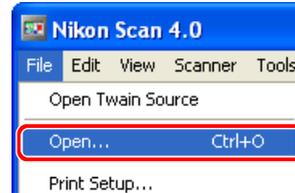
가



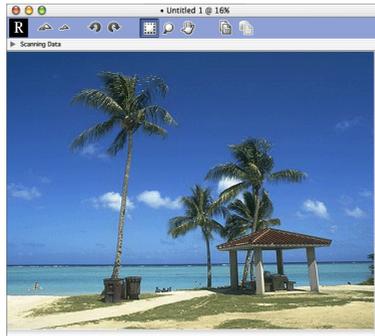
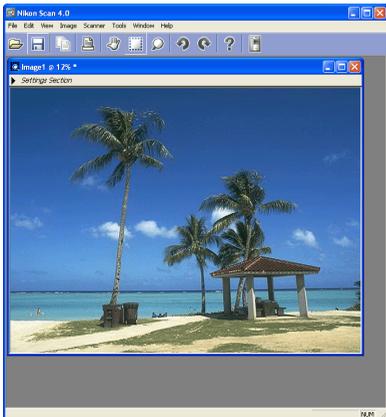
OK

File

Open



File Open .(Preferences
Save to disk)



"show grid()" . View

Showgrid .

(Nikon Scan Applet)
가

Window
가

가

NEF .

NEF . 가



Saving images ()

File
 Save As . Save As 가 .
 Save

NEF	NEF(Nikon Electronic image Format) 가 "original image" 가 Nikon Capture NEF
JPEG	JPEG JPEG 16 CMYK 가

TIFF	TIFF (12,14,16) TIFF , 8 8 TIFF TIFF 12 16
TIFF (CMYK)	TIFF 가 CMYK CMS가 ()
BMP ()	16 16 RGB CMYK,
PICT ()	PICT JPEG 16 RGB CMYK, 16





가

8

JPEG

JPEG

PICT

(

).

가

Save As

가

가

Excellent

Quality

가

가

High Compression

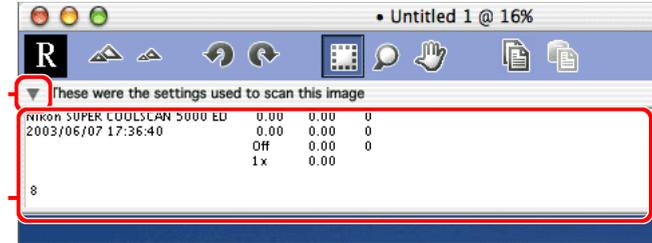
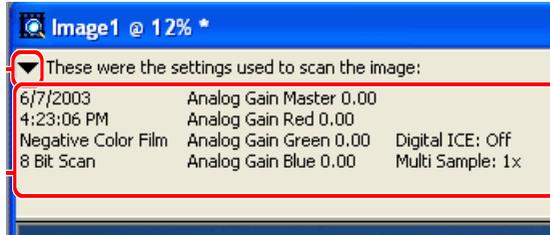
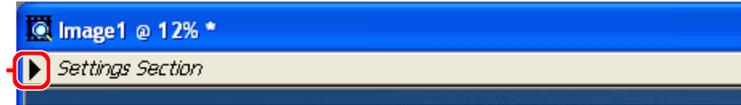


The settings section ()

Settings Section

View

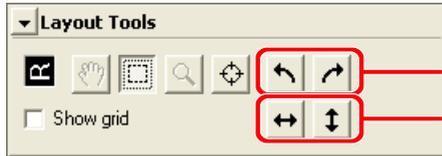
Settings Section



가

, Digital ICE⁴ Advanced,

Zoom ()



Layout Tools



Image > Transform

View

• Layout Tools

• View

Zoom Cursor



Alt()

View

Zoom In
Zoom Out

Fit to Screen
Window

Window
Actual Size
1:1

Image>Color Space

8 - bit Grayscale	8	256
16 - bit Grayscale	16	65,536
24 - bit RGB	8	가 RGB (24 RGB)
48 - bit RGB	16	가 RGB (48 RGB)

File

Print



가



()

File

Print Preview

()



Editing Images ()

Layout Tools (33)	,
Information (35)	가
Curves (41)	
Color Balance (51)	,
Unsharp Mask (53)	가
LCH Editor (56)	,



가 Scan
가



Tool bar ()

가

, View

Toolbar

가



	/
 90	
 90	
 Twain	

가

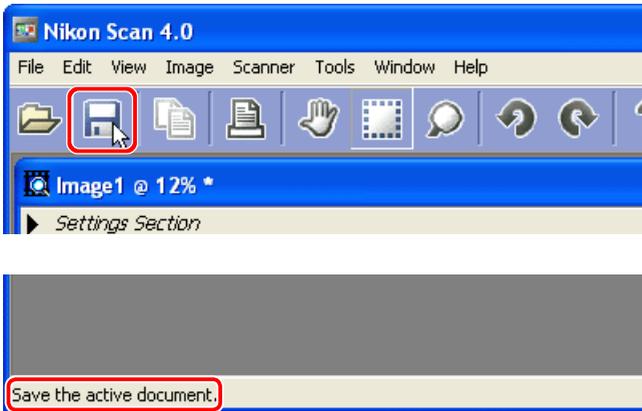
가



R	
 90	
 90	

	/

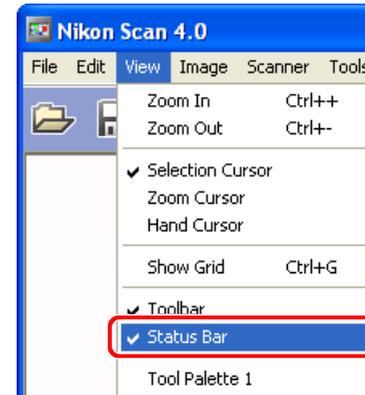
가



Save

View

Status Bar



File ()

File	
Open Twain Source	
Open...	Ctrl+O
Close	
Save	Ctrl+S
Save As...	
Print...	Ctrl+P
Print Preview	
Print Setup...	
1 Image1.tif	
Exit	

Open Twain source

Open ()

Close ()

Save ()

Save As ()

Print ()

Print preview ()

Print Setup ()

Recent files ()

Exit (가)

Edit ()

Edit	
Undo	Ctrl+Z
Cut	Ctrl+X
Copy	Ctrl+C
Copy Settings...	
Copy All Settings	
Paste	Ctrl+V
Clear	Delete
Preferences...	Ctrl+K

Undo (가)

Cut ()

Ctrl - X

Copy ()

Ctrl - C

Copy Settings

Copy All Settings

Paste

Ctrl - V

Clear

Preferences

Preferences



View ()

View	
Zoom In	Ctrl++
Zoom Out	Ctrl+-
Selection Cursor	
<input checked="" type="checkbox"/> Zoom Cursor	
Hand Cursor	
Show Grid	
Ctrl+G	
<input checked="" type="checkbox"/> Toolbar	
<input checked="" type="checkbox"/> Status Bar	
Tool Palette 1	
Progress Window	

Toolbar ()

Status bar ()

Tool Palettes

View

Progress Window

Zoom In ()

Zoom Out ()

Selection Cursor ()

Zoom Cursor ()

Hand Cursor ()

Show Grid ()

Image ()

Image	
Color Space	▶
Transform	▶
Settings	▶
Settings Section	

Color Space ()

Color Space	▶
8 bit Grayscale	
16 bit Grayscale	
<input checked="" type="checkbox"/> 24 bit RGB	
48 bit RGB	

Transform

Transform	▶
Rotate CW	
Rotate CCW	
Flip Horizontal	
Flip Vertical	
Flip Both Axes	

Settings

Settings	▶
Overall	▶
Curves	▶
Color Balance	▶
LCH Editor	▶
Unsharp Mask	▶
Reset To Default Settings	
Reset To User Settings	
Last Saved Settings	
Setting 1	

Settings Section ()



(가).

Scanner

- Film Type ▶
- Scan Color Space ▶
- Bit Depth ▶
- Transform ▶
- Settings ▶
- Eject
- Slide Feeder...

Show Processed Pane Ctrl+T

Settings

- Settings ▶
 - Overall ▶
 - User Settings ▶
 - Crop ▶
 - Curves ▶
 - Color Balance ▶
 - LCH Editor ▶
 - Digital ICE4 Advanced ▶
 - Unsharp Mask ▶
 - Reset to Factory Defaults
 - Reset to User Settings
 - Last Saved Settings
- Setting 1

Film Type ()

Film Type

- Positive
- ✓ Neg (Color)
- Neg (Mono)
- Kodachrome

Eject ()

Scan Color Space

Scan Color Space

- Grayscale
- ✓ Calibrated RGB

Slide Feeder (가)

Bit Depth ()

Bit Depth

- ✓ 8 bit
- 16 bit

Show Natural Pane/
Show Processed Pane
Natural,

Transform

Transform

- Rotate CW
- Rotate CCW
- Flip Horizontal
- Flip Vertical
- Flip Both Axes

Processed

Tools ()

Tools

- Show Nikon Browser
- Nikon SUPER COOLSCAN 5000 ED 1.00 @ USB

Show Nikon Browser
Nikon View

Scanner/Firmware Version/Port

Window ()

Window

- Fit To Screen
- Actual Size
- Cascade
- Tile
- Arrange Icons
- ✓ 1 Image1 @ 33.33% *

Fit To Screen ()

Actual Size ()
100%

Cascade

Window

Tile

Arrange Icons ()

Open Windows ()

가 Window

Help ()

Help

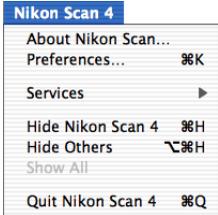
- Help Topics
- About Nikon Scan...

Help Topics

About Nikon Scan



Application Menu



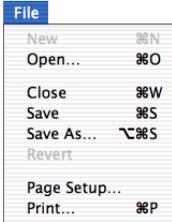
About Nikon Scan

Preferences

Preferences

Quit Nikon Scan 4

File



New

Open

File

Close

Save

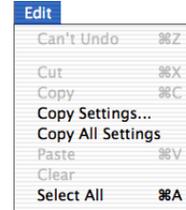
Save As

Revert

Page Setup

Print

Edit



Undo

Cut

Copy

Copy Settings

Copy All Settings

Paste

Clear

Select All

가



view

View

- Zoom In ⌘ +
- Zoom Out ⌘ -
- Hand Cursor
- ✓ Selection Cursor
- Zoom Cursor
- Focus Cursor
- Show Grid ⌘ G
- Progress Monitor
- Tool Palette 1

Progress Monitor

Tool palettes

가 View

Zoom In

Zoom Out

Hand Cursor

Selection Cursor

Zoom Cursor

Focus Cursor

Show Grid

Image

Image

- Color Space ▶
- Transform ▶
- Settings ▶
- ✓ Settings Section

Color Space

Color Space ▶

- 8 Bit Grayscale
- 16 Bit Grayscale
- ✓ 24 Bit RGB
- 48 Bit RGB

Transform

Transform ▶

- Rotate CW
- Rotate CCW
- Flip Horizontal
- Flip Vertical
- Flip Both Axes

Settings

Settings ▶

- Overall Settings ▶
- User Settings ▶
- Crop Settings ▶
- Curve Settings ▶
- Color Balance Settings ▶
- LCH Settings ▶
- Digital ICE4 Advanced Settings ▶
- Unsharp Mask Settings ▶
- Reset to Factory Defaults
- Reset to User Settings
- Last Saved Settings

Settings Section



(가),

Scanner

- Film Type ▶
- Color Space ▶
- Bit Depth ▶
- Transform Settings ▶
- Eject
- Slide Feeder...
- Show Natural Pane ⌘T

Settings

- Settings ▶
 - Overall Settings ▶
 - User Settings ▶
 - Crop Settings ▶
 - Curve Settings ▶
 - Color Balance Settings ▶
 - LCH Settings ▶
 - Digital ICE4 Advanced Settings ▶
 - Unsharp Mask Settings ▶
 - Reset to Factory Defaults
 - Reset to User Settings
 - Last Saved Settings

Film Type

Film Type ▶

- Positive
- ✓ Neg (Color)
- Neg (Mono)
- Kodachrome

Color Space

Color Space ▶

- Grayscale
- ✓ Calibrated RGB

Bit Depth

Bit Depth ▶

- ✓ 8 bit
- 16 bit

Transform

Transform ▶

- Rotate CW
- Rotate CCW
- Flip Horizontal
- Flip Vertical
- Flip Both Axes

Eject

Slide Feeder
가

Show Natural Pane /
Show Processed Pane
natural,
processed

Tools

Tools

- Show Nikon Browser
- Nikon SUPER COOLSCAN 5000 ED 1.00 @ USB

Show Nikon Browser
Nikon View

Scanner/Firmware Version/Port

Window(가),

Window

- Fit To Screen
- Actual Size
- Untitled 1

Fit To Screen

Actual Size
100%

Open windows

Window

Help

Help

- Nikon Scan 4 Help ⌘?

Nikon Scan Help



Apple menu



About Nikon Scan

File

File
New ⌘N
Open... ⌘O
Close ⌘W
Save ⌘S
Save As... ⇧⌘S
Revert
Page Setup...
Print... ⌘P
Quit ⌘Q

New

Open

Close

Save

File (continued)

Save As

Revert

Page Setup

Print

Quit

Edit

Edit
Can't Undo ⌘Z
Cut ⌘X
Copy ⌘C
Copy Settings...
Copy All Settings
Paste ⌘V
Clear
Select All ⌘A
Preferences... ⌘K

Undo

Cut

Copy

Copy Settings

Copy All Settings

Paste

Clear

Select All

가

Preferences
Preferences



View

View	
Zoom In	⌘+
Zoom Out	⌘-
Hand Cursor	
✓ Selection Cursor	
Zoom Cursor	
Focus Cursor	
Show Grid ⌘G	
Progress Monitor	
Tool Palette 1	

Show Grid

Progress Monitor

Tool palettes

가 View

Zoom In

Zoom Out

Hand Cursor

Selection Cursor

Zoom Cursor

Focus Cursor

Image

Image	
Color Space	▶
Transform	▶
Settings	▶
Settings Section	

Color Space

Color Space ▶	
8 Bit Grayscale	
16 Bit Grayscale	
✓ 24 Bit RGB	
48 Bit RGB	

Transform

Transform ▶	
Rotate CW	
Rotate CCW	
Flip Horizontal	
Flip Vertical	
Flip Both Axes	

Settings

Settings ▶	
Overall Settings	▶
User Settings	▶
Crop Settings	▶
Curve Settings	▶
Color Balance Settings	▶
LCH Settings	▶
Digital ICE4 Advanced Settings	▶
Unsharp Mask Settings	▶
Reset to Factory Defaults	
Reset to User Settings	
Last Saved Settings	

Settings Section



(가)

Scanner

- Film Type ▶
- Color Space ▶
- Bit Depth ▶
- Transform ▶
- Settings ▶

Eject

Slide Feeder...

Show Natural Pane ⌘T

Film Type

Film Type

- Positive
- ✓ Neg (Color)
- Neg (Mono)
- Kodachrome

Color Space

Color Space

- Grayscale
- ✓ Calibrated RGB

Bit Depth

Bit Depth

- ✓ 8 bit
- 16 bit

Transform

Transform

- Rotate CW
- Rotate CCW
- Flip Horizontal
- Flip Vertical
- Flip Both Axes

Settings

Settings

- Overall Settings ▶
- User Settings ▶
- Crop Settings ▶
- Curve Settings ▶
- Color Balance Settings ▶
- LCH Settings ▶
- Digital ICE4 Advanced Settings ▶
- Unsharp Mask Settings ▶
- Reset to Factory Defaults ▶
- Reset to User Settings ▶
- Last Saved Settings ▶

Eject

Slide Feeder

가

Show Natural Pane /
Show Processed Pane
Natural,

Processed

Tools

Tools

- Show Nikon Browser
- Nikon SUPER COOLSCAN 5000 ED 1.00 @ USB

Show Nikon Browser
Nikon View

Scanner/Firmware Version/Port

Window (

Window

- Fit To Screen
- Actual Size
- Untitled 1

Fit to Screen

Actual Size
100%

Open windows

Window

가

Help

Help

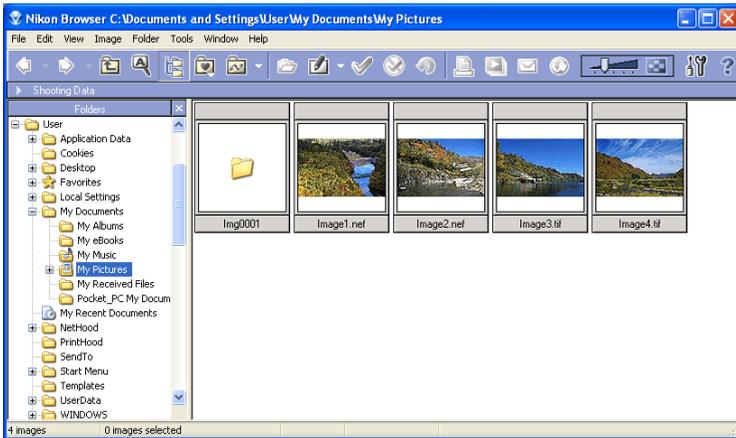
- About Balloon Help...
- Show Balloons
- Nikon Scan 4 Help ⌘?

Nikon Scan Help



Nikon View

Tools Show Nikon View
, , 가 Nikon View
Nikon Browser 가
Nikon View References Manual
Nikon View



Show Nikon Browser
가

Nikon View 6
Nikon View
Nikon View 6

Nikon Scan

Nikon Scan 가
. Nikon View BMP(), PICT ()
Nikon view TIFF JPEG . Nikon Scan



Nikon View



Nikon View 6
Nikon View References Manual





	
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	Preferences—File Saving (🔍 99)
	Preferences—Automatic Actions (🔍 100)
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	Preferences—Color Management (🔍 84)
	Preferences—File Locations/Scratch Disks (🔍 94)
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	가	
<p>“ Nikon Scan was unable to find any active devices. ” 가</p>	<ul style="list-style-type: none"> 가 USB IEEE 1394 가 가 가 (). 가 가 	<p>—</p> <p>—</p> <p>—</p> <p> 4</p> <p>—</p>
()	<ul style="list-style-type: none"> 	<p>—</p> <p>—</p>
		—
	<ul style="list-style-type: none"> 가 	<p> 15</p> <p> 15</p>
	<ul style="list-style-type: none"> Preferences Color Management Preferences Color Management CMYK Preferences Color Management RGB 가 가 가 Curves( 41), ColorBbalance( 51), LCH ( 56) 가 가 	<p> 85</p> <p> 87</p> <p> 86</p> <p>—</p> <p> 16</p> <p>—</p>

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가	Crop		 36

Bit depth	가 , color depth 가 1 , 8 가 가 24 가 가 Channel , 2 가
Black point	()
Channel	. RGB , 가 . Color space
CMS	Color Management system
CMYK	Cyan(), Magenta(), Yellow() 가 가 black()
Color management system	Nikon Capture3 ICC, Profile
Color space	(CMYK RGB) , Gamut 가 CMYK, Gamut, RGB
Compression	가 LZW "lossless" JPEG 가 "lossy" . JPEG, TIFF

Crop	
Curve	Tone curve
dpi	, 가 가 . ppi, Resolution
Firewire	IEEE 1394 Apple . IEEE 1394
Gamma	가 (γ 1 가 () 0
Gamut	(,), (,), . Gamut RGB (,) Gamut(, ,) CMYK(Cyan(), Magenta(), Yellow(), black() Gamut . CMYK, profile, RGB
Gray point	. Tone, Tone curve
Grayscale	16 65,526 . 8 256 . Bit depth
Halo width	가 , "radius" halo width 가 가 가 . Unsharp mask
Histogram	. "Curves" "LCH" Tone, Tone curve
ICC	. ICC International color Consortium 가 . ICC International Organization for Standardization (ISO) Profile



IEEE 1394	, MO Institute of Electrical Electronics Engineers가
JPEG	Joint Photographic Experts Group 가 JPEG JPEG 20:1 100:1
NEF	Nikon Electronic image Format. " .nef" NEF NEF
Noise	가
Plug - in	가
ppcm	Pixels Per CentiMeter. 가 가 . ppi, Resolution
ppi	Pixels Per Inch, 가 . ppcm, Resolution
Preferences	가
Profile	ICC Color Space, ICC
Resolution	(dpi) 96 ppi 가 72 ppi, 90ppi, 2400 dpi 가 . ppcm, ppi 96 ppi 가 300 dpi, 600 dpi, 1200 dpi,



RGB	가 100%
Scale	. 50 %
Threshold	가 Threshold 가 () 가 halo width Halo width, Unsharp Mask
Thumbnail	가
TIFF	Tagged Image File Format. TIFF "lossless" LZW 가 가 ("lossless" JPEG "lossy" TIFF Compression, JPEG
Tone	. Bit depth
Tone curve	() () 가 , Tone
TWAIN	TWAIN TWAIN TWAIN
Unsharp Mask	가 "USM" Halo Width, Threshold
USB	Universal Serial Bus. 가 "hot plug" "plug - and play"
White point	() . Tone, Tone curve



Mac OS 9

(139)

가

9000 ED/8000 ED*	1.5 GB	800 MB
5000 ED/50ED	1 GB	450 MB
4000 ED/40 ED	768 MB	450 MB

* FH - 869S 6×9 Digital DEE(9000 ED), Digital ICE, Digital ROC, Digital GEM

† IA - 20(S), SA - 30 (5000 ED /4000 ED) 40 SA - 21 6
Digital DEE(5000 ED, 50 ED), Digital ICE, Digital ROC, Digital GEM

Memory 가 Virtual Memory . 가 Off

1.

(

"Applications"

"Nikon Software:Nikon Scan 4"

.) Nikon Scan

2. Get Info( I) File

가

3. Show Memory

4.

"preffered size"

