



RAW Image Processing, Viewing and Editing Software

# **Digital Photo Professional**

Ver. 4.7 Instruction Manual

#### Content of this Instruction Manual

- DPP stands for Digital Photo Professional.
- In this manual, the screens used in the basic operation instructions are from Windows 8.1.
- ▶ indicates the selection procedure of the menu.
- Square brackets are used to indicate items such as menu names, button names and window names that appear on the computer screen.
- Text inside < > indicates a key on the keyboard.
- p.\*\* indicates a reference page. Click to move to the relevant page.
- Advanced indicates the function for advanced users who are experienced in handling image processing software.
- ? : Marks helpful information when a problem arises.

- Marks tips for using the software skillfully.
  - I Marks information that should be read before use.
- Tarks additional information you may find helpful.
- Switching Between Pages
  - Click on arrows on the bottom right of the screen.
    - 🜔 : next page
    - : previous page
    - I return to a page you had previously displayed
  - Click on the chapter headings on the right side of the screen to switch to the contents page of that chapter. Also, click the item you want to read about on the table of contents to move to the relevant page.



Introduction

Large Numbers of RAW Images

Remote Shooting

Specifying Preferences



# **Main Features of DPP**

Following are the main tasks you can perform with images you have downloaded to your computer.

\* **JPEG/TIFF** indicates processing that can be performed with JPEG or TIFF images as well as RAW images.

#### View and organize images \_\_\_\_\_\_

#### Adjust an image

- Various image adjustments while maintaining the original image JPEG/TIFF
- Freely apply a Picture Style
- View your image before and after adjustment in the same window JPEG/TIFF
- Trim and adjust the angle of an image

(trimming) JPEG/TIFF

- Resize an image \_\_\_\_\_\_\_
- Correction of lens aberration
- Digital Lens Optimizer
- Automatic/manual dust erasure processing

JPEG/TIFF

- Convert from a RAW image to a JPEG or TIFF image and save
  - Process large numbers of RAW images in batches
  - Transfer the image to image editing software
- Print an image 
   JPEG/TIFF
- Link with EOS Utility for remote shooting JPEG/TIFF
- Color management compatibility
  - CMYK simulation for commercial printing



Contents

Downloading Images

> Viewing Images

Sorting Images

Editing Images

Printing Images

Processing Large Numbers of RAW Images

> Remote Shooting

Specifying Preferences



Contents

## **System Requirements**

OS (operating system) Windows 10, Windows 8.1, Windows 7*		
Model	PC with one of the above OS preinstalled (Upgraded machines not supported)	
CPU	Core 2 Duo 2.0 GHz or higher (recommended Core i series or later)	
RAM (memory)	2.0 GB or more of RAM (4.0 GB or more recommended)	
Hard disk drive	Installation: Min. 300 MB of available space Operation: Min. 600 MB of available space	
Display	Resolution: XGA (1024 x 720) or more (1600 x 1200 or more recommended) Colors: 16-bit color (65536 colors) or more	

May also be installed on a 32-bit version PC, but with restrictions on operation. On 32-bit OSs, (32bit) is displayed on the [About Digital Photo Professional 4] in [Help]. For information on restrictions, see descriptions indicated with <u>32bit</u> in this manual.

\* With Microsoft .NET Framework 4.5 installed

## **Supported Cameras**

EOS-1D X Mark II, EOS-1D X, EOS-1D C, EOS-1D Mark IV, EOS-1Ds Mark III, EOS-1D Mark III, EOS-1D Mark II N, EOS-1Ds Mark II, EOS-1D Mark II, EOS-1D, EOS-1Ds, EOS 5DS/EOS 5DS R, EOS 5D Mark IV, EOS 5D Mark III, EOS 5D Mark II, EOS 5D, EOS 6D Mark II, EOS 6D, EOS 7D Mark II, EOS 7D, EOS 80D, EOS 70D, EOS 60D/ EOS 60Da, EOS 50D, EOS 40D, EOS 30D, EOS 20D/EOS 20Da, EOS 77D, EOS 760D, EOS 800D, EOS 750D, EOS 700D, EOS 200D, EOS 100D, EOS 1300D, EOS 1200D, EOS 650D, EOS 600D, EOS 550D, EOS 500D, EOS 450D, EOS 1000D, EOS 1100D, EOS 400D, EOS 350D, EOS M6, EOS M5, EOS M3, EOS M2, EOS M, EOS M10, EOS M100, PowerShot G3 X<sup>\*1</sup>, PowerShot G1 X Mark II<sup>\*1</sup>, PowerShot G7 X<sup>\*1</sup>, PowerShot G9 X<sup>\*1</sup>, PowerShot SX60 HS<sup>\*1</sup>, PowerShot G5 X<sup>\*1</sup>, PowerShot G7 X Mark II<sup>\*1</sup>, PowerShot G16<sup>\*1</sup>, PowerShot S120<sup>\*1</sup>. PowerShot G1 X<sup>\*1</sup>. PowerShot G15<sup>\*1</sup>. PowerShot S110<sup>\*1</sup>. PowerShot S100<sup>\*1</sup>, PowerShot G9 X Mark II<sup>\*1</sup>, PowerShot G1 X Mark III<sup>\*1</sup>, PowerShot G9<sup>\*1\*2</sup>, PowerShot G10<sup>\*1\*2</sup>, PowerShot G11<sup>\*1\*2</sup>, PowerShot G12<sup>\*1\*2</sup>, PowerShot S90<sup>\*1\*2</sup>, PowerShot S95<sup>\*1\*2</sup>, PowerShot SX1 IS<sup>\*1\*2</sup>, and PowerShot SX50 HS<sup>\*1\*2</sup>

- \*1 For RAW images, functions that are not in the camera (such as the Auto Lighting Optimizer) and functions such as the Digital Lens Optimizer cannot be used. However, Picture Styles, even if not in the camera, can be used with the exception of some functionality.
- \*2 The following functions are unavailable.
  - Basic Adjustment tool palette:
    - White balance [Fine-tune]
    - A portion of [Gamma adjustment]
    - Automatic gradation and luminance adjustment Midpoint adjustment
    - Input white points range expansion
  - Dust Delete/Copy Stamp tool palette
  - Compositing tool
  - HDR tool



Index

# **Supported Images**

#### Image data

	Extension		
	RAW images	Images in the Canon RAW format shot on supported cameras	.CR2 .TIF
Still photos	JPEG images	Exif 2.2, 2.21 or 2.3-compatible JPEG images	.JPG/ .JPEG
	TIFF images	Exif-compatible TIFF images	.TIF/ .TIFF
Movies		Movies shot with supported cameras	.MOV .MP4

Introduction

Contents

Downloading Images

> Viewing Images

Sorting Images

Editing Images

Printing Images

Processing Large Numbers of RAW Images

> Remote Shooting

Specifying Preferences



## Contents

Introduction	2
Main Features of DPP	2
System Requirements	3
Supported Cameras	
Supported Images	4
1 Downloading Images	8
Starting up DPP	
Downloading Images to Your Computer	10
Downloading Images Using the Software "EOS	
Utility"	
Downloading Images Using Your Card Reader	10
2 Viewing Images	11
Viewing Images in the Main Window (Thumbnail	
Layout)	12
Changing the Thumbnail Display	13
Enlarging and Viewing an Image in the Preview	4 7
Window	17
Enlarging and Viewing a Specific Area	18
Advanced Checking the Image in Detail	19
Displaying the Main Window (Multi-layout)	19
Checking an Image Using the Preview Control	20
Panel	20
Checking an Image in Multi-Function Preview	
Checking an Image in Second Windows	
Opening and Closing Window Panels (Panes)	26
Changing the Display Method and Order of Palettes	27
Changing the Display Method (Dock/Float) of	21
Palettes	27
Rearranging Palettes	
Exiting DPP	
	20

3	Organizing and Sorting Images	Contents
	Sorting Images in the Main Window	Downloading Images
	Displaying a RAW Image and JPEG Image as a Single Image	Viewing Images
	Organizing Images	Sorting Images
	Moving Images	Editing Images
4	Registration)39Editing Images40RAW Images42	Printing Images
	RAW Images	Processing Large Numbers of RAW Images
	When RAW Development is to be Done42Advantages of a RAW Image42Editing JPEG and TIFF Images43	Remote Shooting
	Tool Palettes	Specifying Preferences
	Adjusting Brightness       45         Changing the Picture Style       46	Reference/ Index
	Advanced       Using a Picture Style File       48         Adjusting Color Tone by Changing White       48         Balance       48	00
	Adjusting Color Tone Using Click White Balance	5

Introduction

Advanced Adjusting White Balance with Color	
Temperature	<b>50</b>
Advanced Tuning White Balance	<b>50</b>
Adjusting Contrast	51
Advanced Adjusting Brightness of Shadows/	
Highlights	51
Changing Color Tone and Color Saturation	<b>52</b>
Advanced Adjusting Dynamic Range	53
Adjusting Gradation and Luminance	
Automatically	54
Using the Auto Lighting Optimizer	55
Adjusting Image Sharpness	56
JPEG/TIFF Editing with the Tone Adjustment Tool	
Palette	58
Adjusting Brightness and Contrast	58
Adjusting Color Tone Using Click White	
Balance	59
Advanced Adjusting Tone Curve	60
Advanced Adjusting Dynamic Range	62
Using the Auto Lighting Optimizer	62
<u>JPEG/TIFF</u> Editing with the Color Adjustment Tool	~ ~
Palette	63
Advanced Editing with the Color Adjustment Tool	~~
Palette	63
JPEG/TIFF Editing with the Detailed Adjustment	~ ~
Tool Palette	65
Reducing Noise	65
Adjusting Image Sharpness	66
Reducing Color Moiré in an Image	66
JPEG/TIFF Editing with the Trimming/Angle	67
Adjustment Tool Palette	67

Editing with the Lens Correction Tool Palette	
Correcting Lens Aberration	Contents
Making Corrections71	Contento
Shooting Distance Information Slider	
Correcting Multiple Images at a Time	Downloading Images
Digital Lens Optimizer	inages
Using the Digital Lens Optimizer	Viewing
Adjusting Image Sharpness	Images
[JPEG/TIFF] Editing with the Dust Delete/Copy Stamp	
Tool Palette	Sorting
Performing Automatic Dust Erasure Processing 78	Images
Automatic Dust Erasure Processing in the Main	
Window	Editing Images
Manually Erasing Dust (Repair Function)	
Erasing Unwanted Parts of an Image (Copy	Printing
Stamp Function) 82	Images
Setting Work Color Space	
Using the Soft-Proof Colors Function	Processing Large Numbers
JPEG/TIFF Saving Editing Results	of RAW Images
Saving Editing Contents to an Image	
Saving as a separate image	Remote Shooting
JPEG/TIFF Re-Editing an Image	
JPEG/TIFF Utilizing Adjustment Contents (Recipe) 88	Specifying
Copying a Recipe and Applying to Another	Preferences
Image	
Saving a Recipe as a File	Reference/
Loading and Applying Recipes	Index
JPEG/TIFF Adjusting by Comparing Multiple	
Images	
JPEG/TIFF Editing Efficiently	
Editing in the Edit Image Window	$\mathbf{e}$
	6

#### Introduction

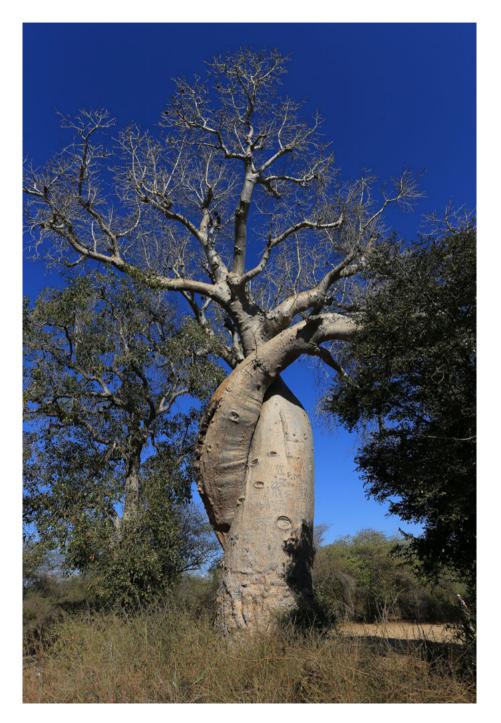
	Changing the Thumbnail Display Position to Horizontal	. 93
	Gathering and Editing Images in the Collection	
	Window	. 94
	[JPEG/TIFF] Compositing Images	
	Compositing Methods	. 99
	JPEG/TIFF Creating HDR (High Dynamic Range)	100
	Images         Advanced       Using the Dual Pixel RAW Optimizer	100
	Advanced Using the Dual Pixel RAW Optimizer	103
	Sharpness and Resolution Using the Depth	
	Information Contained within the Dual Pixel	
	RAW File	103
	Reposition the Viewpoint or Foreground Bokeh	
	for a More Pleasing Result	104
	Reduces the Appearance of Ghosting in	105
	Images	105
	Advanced Transferring a RAW Image to Photoshop	107
	Advanced Customizing the Main Window Toolbar	108
5	Printing Images	109
U	Printing an Image	110
	Printing with Shooting Information	111
	Printing a Thumbnail List (Contact Sheet	
	Printing)	112
	Plug-in printing	113
6	Processing Large Numbers of RAW Images	114
	Batch Apply White Balance to Images (Personal	115
	White Balance) Registering Personal White Balance	115 115
	Applying Personal White Balance	

Batch Save as JPEG or TIFF Images (Batch	
Processing) 117 Batch Transfer Images to Image Editing	Contents
Software	Downloading Images
7 Remote Shooting	Viewing Images
Registering Click White Balance in the Camera 125 8 Specifying Preferences	Sorting Images
Specifying Preferences	Editing Images
Color Management	Printing Images
Properties Display Settings	Processing Large Numbers of RAW Images
Deleting the Software (Uninstalling) 136 Image Frame Information in the Main Window and Edit Image Window 137	Remote Shooting
Glossary	Specifying Preferences
Trademarks 144	Reference/ Index
<ul> <li>Sections with JPEG/TIFF and JPEG/TIFF in "4 Editing Images" support not only RAW image editing but also JPEG/TIFF image editing.</li> <li>JPEG/TIFF : All the functions explained in the section support JPEG/TIFF image editing.</li> <li>JPEG/TIFF : Certain functions explained in the section support JPEG/TIFF image editing.</li> </ul>	

\*

Introduction

# **1** Downloading Images

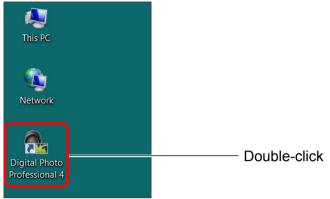


Starting up DPP	Contents
Downloading Images Using the Software "EOS Utility" 10 Downloading Images Using Your Card Reader 10	Downloading Images
	Viewing Images
	Sorting Images
	Editing Images
	Printing Images
	Processing Large Numbers of RAW Images
	Remote Shooting
	Specifying Preferences
	Reference/ Index

Introduction

## Starting up DPP

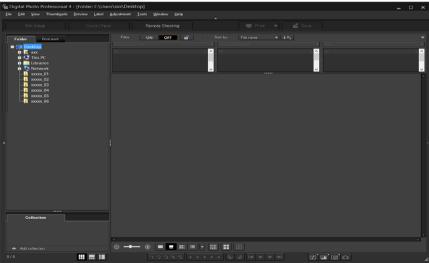
Double-click the desktop icon.



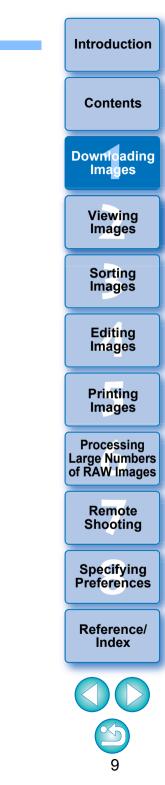
→ DPP starts up and the main window (thumbnail layout) appears.



#### Main window (thumbnail layout)



If you drop a DPP-supported image file onto the icon on the desktop, you can start up DPP and display the folder where the image file is saved.



# **Downloading Images to Your Computer**

Download the images saved on the memory card inserted in the camera.

#### Downloading Images Using the Software "EOS Utility"

You can download images with "EOS Utility", communication software for the camera.

For detailed instructions on downloading images, refer to the "EOS Utility Instruction Manual" (PDF electronic manual).

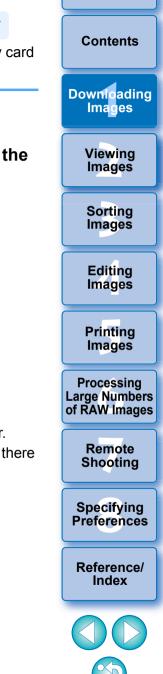
#### **Downloading Images Using Your Card Reader**

You can also download images to the computer using a third-party card reader.

- Load the memory card into the card reader.Start up DPP beforehand.
- Open [My Computer] ▶ [EOS\_DIGITAL] and drag the [DCIM] folder to the [Desktop].



- → The [DCIM] folder is copied to your computer.
- All images are saved in folder units inside the [DCIM] folder.
- Copying images to your computer will take some time when there is a large number of images saved on the memory card.



10

Introduction

# **2** Viewing Images



Viewing Images in the Main Window (Thumbnail Layout)	Contents
AdvancedUsing the Thumbnails Control Panel14AdvancedUsing the Thumbnail Display Filter/Sort15Function15	Downloading Images
AdvancedDisplaying the Histogram Palette	Viewing Images
AdvancedDisplaying the Navigator Palette18AdvancedChecking the Image in Detail19Displaying the Main Window (Multi-layout)19	Sorting Images
Checking an Image Using the Preview Control Panel 20 Changing the Magnification	Editing Images
Comparing with a Pinned (Fixed) Image	Printing Images
Displaying AF Points	Processing Large Numbers of RAW Images
Comparing Pre- and Post-Editing Images (Single- Image Display)	Remote Shooting
comparison) Arrange vertically/horizontally (two- screen display) / Split vertically/horizontally (split- image display)	Specifying Preferences
Displaying Image Properties	Reference/ Index
Opening and Closing Window Panels (Panes)	
Exiting DPP 28	11

Introduction

# Viewing Images in the Main Window (Thumbnail Layout)

Images downloaded to your computer are displayed as a thumbnails list in the main window (thumbnail layout). You can double-click an image to open the preview window (p.17) and display the image at large size.

# Main window Toolbar

Check marks (p.32, p.33) Ratings (p.32, p.33)

Forward/Reverse

 For information on icons displayed on the frame of a thumbnail, see "Image Frame Information in the Main Window and Edit Image Window" (p.137). **32bit** On 32-bit OSs, up to only 1000 images can be displayed per folder. Starting with the 1001st image, images are handled in the same way as non-supported images. Try to maintain 1000 images or less per folder.

- If you double-click on the movie file, the movie playback application specified with the computer's OS settings will start up and play back the movie. In this case, edited movies will not be played back. You can also change the movie playback application to EOS MOVIE Utility with Preferences (p.128). For detailed instructions on EOS MOVIE Utility, refer to the EOS MOVIE Utility Instruction Manual.
  - When aspect ratio information is attached to an image shot with any supported camera other than the EOS 5D Mark II, the image is displayed as a cropped image (p.67).
  - In the main window, in addition to this view (thumbnail layout), you can select multi-layout. Multi-layout allows you to check the image in detail (p.19).



#### Changing the Thumbnail Display

You can change the size of the thumbnail images displayed in the main window and select the information displayed for thumbnails.

#### Select the [Thumbnails] menu ▶ desired item.

Th	umb <u>n</u> ails		
	Open preview screen	Ctrl+O	
~	Thumbnail <u>c</u> ontrol panel	Ctrl+Alt+N	
	<u>P</u> in	Alt+O	
	Apply display <u>filter</u>		
	Sort	•	
	Group RAW and JPG version	ons	
	<u>H</u> ide file name		
◆ Default			
	With shooting info		
	List view		
1	Size <u>1</u> (84×84)	Ctrl+1	
	Size <u>2</u> (126×126)	Ctrl+2	
٠	Size <u>3</u> (168×168)	Ctrl+3	
	Size <u>4</u> (252×252)	Ctrl+4	
	Size <u>5</u> (384×384)	Ctrl+5	
	Size <u>6</u> (512×512)	Ctrl+6	
(	<u>A</u> F points	Ctrl+J	

→ The display changes to the selected item.

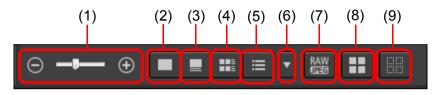
 To display thumbnails with shooting information attached, select the [Tools] menu ▶ [Settings for thumbnails with shooting info].

Introduction Contents Downloading Images Viewing Images Sorting Images Editing Images Printing Images Processing Large Numbers of RAW Images Remote Shooting Specifying Preferences **Reference**/ Index

#### Advanced Using the Thumbnails Control Panel

The thumbnails control panel integrates various settings for viewing thumbnails. By using this panel, you can view and specify the settings for thumbnails efficiently.

#### Thumbnails control panel functions



- (1)  $\bigcirc$  ----  $\oplus$  Change the size of thumbnails
- (2) Display thumbnails without file names
- (3) Display standard thumbnails
- (4) III Display thumbnails with information
- (5) 😑 Display thumbnails in list
- (6) Specify properties display settings (p.133)
- (7) Example Display a RAW image and JPEG image as a single image Display a RAW image and JPEG image that were shot together as a single image. When this setting is specified, viewing and editing of images are as follows.
  - Image displayed: Only the RAW image is displayed in all windows.
  - Edited image: The content which has been edited with any of DPP's functions (the tool palette etc.) will be applied to the RAW image only. However, if you have used the following functions, the adjustments will be applied to both the RAW image and the JPEG image.
    - Deleting an image (p.38)
    - Moving or copying an image (p.38)
    - Checkmarking (p.32 to p.33)
    - Rating (p.32 to p.33)
    - Rotating an image (p.12)

- (8) ESelect all thumbnails
- (9) Cancel all thumbnail selections

- The thumbnails control panel is displayed in the main window by default. If it is not displayed, such as when screen settings have been changed, you can display it by selecting [Thumbnail control panel] in the [Thumbnails] menu.
- In multi-layout (vertical thumbnails, p.19), only the thumbnail view settings (Default thumbnail display/Show thumbnails without file names) are possible.

Contents Downloading Images Viewing Images Sorting Images Editing Images Printing Images Processing Large Numbers of **RAW** Images Remote Shooting Specifying Preferences **Reference**/ Index

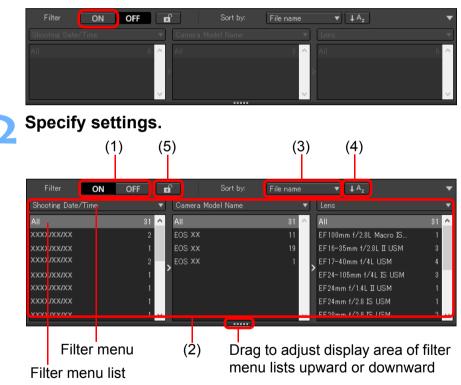
Introduction

#### Introduction

#### Advanced Using the Thumbnail Display Filter/Sort Function

This function allows you to display only thumbnails that match the selected filtering option or to specify an option for sorting thumbnails.

# Set the [Filter] button on the [Filter/Sort pane] in the main window to [ON].



- You can drag the bottom edge of the [Filter/Sort pane] to adjust the display area of the filter menu lists upward or downward.
- (1) Thumbnail display filter ON/OFF

By setting to [ON], only thumbnails matching the filtering option set with (2) the filtering options menu are displayed.

(2) Filtering options menu

Select a filtering option for the thumbnail display filter.

- After selecting a filtering item in the list box that appears by clicking
   [▼] at the right on the filter menu, options appear in the filter menu list. Select an option.
- You can select multiple options in the filter menu list. (Hold down the <Shift> key and left-click with the mouse for consecutive selection. Hold down the <Ctrl> key and left-click with the mouse to select individually.)
- The filter menus/filter menu lists are prioritized from left to right. You can specify filtering options from left to right to narrow down filtering.
- (3) Sorting options

Select an option for sorting thumbnails. If files were added, a "\*" is temporarily displayed after the option name. [Custom] is displayed if you sorted thumbnails in a chosen way.

(4) Sort order selection

Select the order (ascending/descending) for sorting thumbnails.

(5) Filter lock button

When the filter lock button is clicked, filter settings will be kept and applied when you switch to a different folder or the next time DPP is started up. When the filter lock button is not clicked, filter settings automatically change to [OFF] when you switch to a different folder or the next time DPP is started up.

- In addition to thumbnail display, this function can also be used in multi-layout.
  - You can open/close the panel by clicking the [▼] button at the upper right of the [Filter/Sort pane].

Filter ON	OFF	Sort by:	File name 🔹 🕇	'z
Shooting Date/Time	•	Camera Model Name	▼ Lens	
All	81 🔨	All	31 🔨 All	31
xxxx/xx/xx	2	EOS XX	11 EF100mm f/	2.8L Macro IS 1
xxxx/xx/xx	1	EOS XX	19 EF16-35mm	f/2.8L II USM 3
XXXX/XX/XX	2 🗸	EOS XX	1 🧹 🛛 EF17-40mm	f/4LUSM 4

Downloading

Images

Contents



Sorting Images

Editing Images

Printing Images

Processing Large Numbers of RAW Images

Remote Shooting

Specifying Preferences

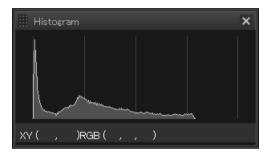


# Advanced Displaying the Histogram Palette

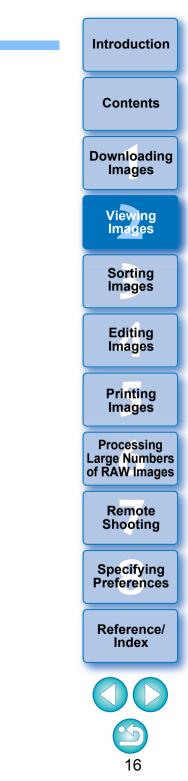
The histogram palette shows a histogram of the selected image. You can quickly check a histogram without opening a tool palette.

#### Select the [View] menu ▶ [Histogram palette].

→ The histogram palette appears.



- You can select any of the following four histograms from the menu that appears when you right-click with the mouse.
   [Brightness only], [RGB separately], [YRGB separately], [RGB together]
- You can click the [ m] ] button at the bottom right of the main window to show/hide the [Histogram] palette.



# **Enlarging and Viewing an Image in the Preview Window**



- Double-click

- The preview window appears.
- Up to 36 windows can be displayed at the same time for the preview window.
  - (32bit On 32-bit OSs, up to 4 windows can be displayed at the same time.)



Tool palette



- Click the [X] in the upper right of the preview window to close the preview window.
- By selecting the [Preview] menu ► [AF points] in the preview window, you can display the AF points selected in the camera at the time of shooting. However, AF points are not displayed for images whose image size has been changed and then been converted and saved (p.85), images for which you selected an effect other than [Shot settings] as correction of fisheye lens distortion aberration, or images which have had settings specified during RAW processing on the camera for distortion correction or chromatic aberration correction.
- Introduction Contents **Downloading** Images Viewing Images Sorting Images Editing Images Printing Images Processing Large Numbers of RAW Images Remote Shooting Specifying Preferences **Reference**/ Index

#### Enlarging and Viewing a Specific Area

Click the area you want to enlarge.



- → The area you clicked is enlarged to 100% (actual pixel size).
- Click again to revert to the full view.
- To change the display area drag on the image.

#### Advanced Displaying the Navigator Palette

The navigator palette shows the enlargement area of a selected image.

#### Select the [View] menu ▶ [Navigator palette].

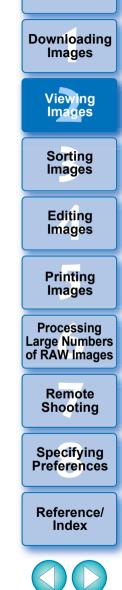
→ The navigator palette appears.



 When an image is enlarged in the preview or other window, the enlargement display area is indicated in the navigator palette. The area to be enlarged can be changed by dragging the enlargement display area on the image.



- Change the enlargement display area by dragging
- You can click the [
  ] button at the bottom right of the main window to show/hide the [Navigator] palette.



Introduction

Contents

To display an image in an enlargement ratio other than 100%

Select any enlargement ratio from the [Preview] menu.

<b>-</b>	While in the preview window, you can select the [Preview] menu >
	[Preview control panel] to use various preview functions. For details,
	see "Checking an Image Using the Preview Control Panel" (p.20).

#### Advanced Checking the Image in Detail

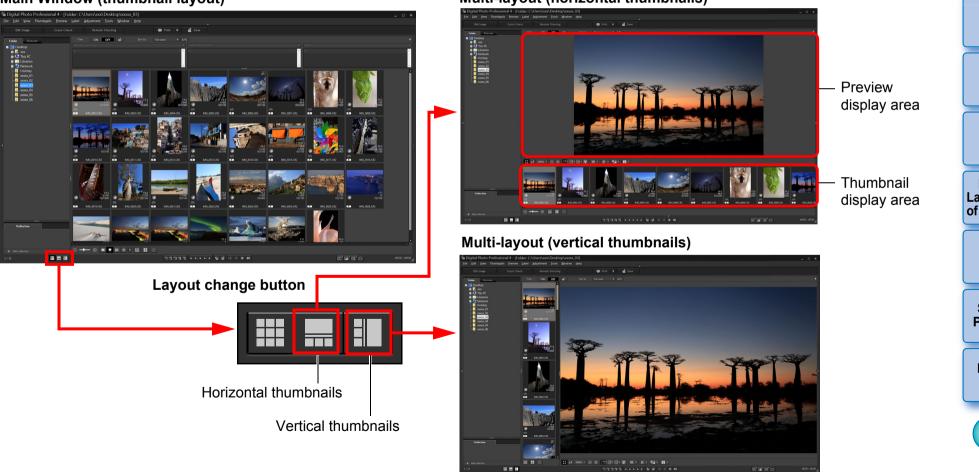
#### **Displaying the Main Window (Multi-layout)**

By switching the main window to "multi-layout", you can use the preview control panel to check the image in detail.

#### Click a change layout button at the bottom of the main window (thumbnail layout).

- → The main window (multi-layout) appears.
- In the main window (multi-layout), you can select from two layouts, with horizontal thumbnails or vertical thumbnails.
- Click the area you want to enlarge in the image displayed in the preview display area to display the image at actual pixel size (100%). Click the
  image again to revert to full display.

#### Main Window (thumbnail layout)



#### Multi-layout (horizontal thumbnails)



Sorting Images

Introduction

Contents

Downloading

Images



Printing Images

Processing Large Numbers of RAW Images

Remote Shooting

Specifying Preferences



#### **Checking an Image Using the Preview Control Panel**

With Preview control panel, you can check the image in detail. You can use this panel in the main window (multi-layout) and edit image window. If the preview control panel is not displayed, you can display it by selecting [Preview control panel] from the [Preview] menu. By default, the []] button and []] button are selected.

#### **Changing the Magnification**



<sup>×1</sup> 

Display the image at actual pixel size (100%).

- Click the []] button to display the image at the set magnification displayed. If the [] ) button is used to enlarge/reduce the image, the magnification set for this button also changes accordingly\*.
   \*Excluding actual pixel size (100%)

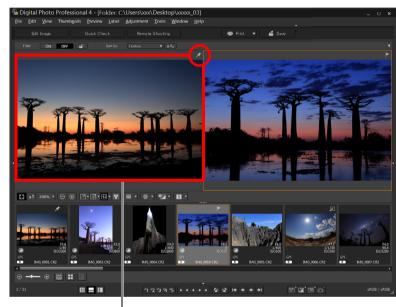
Revert the zoomed image back to fit-to-window view.

#### Comparing with a Pinned (Fixed) Image

You can split the window into two sections, and compare the images on the left and right by "pinning" an image in the left section then scrolling images in the right section. It improves efficiency of image selection.

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#### Select an image and click the [11] button.



Pinned (fixed) image

- The window divides into left and right, and the selected image is pinned.
- When you pin an image and perform scrolling, the image on the left (pinned image) remains and only the image on the right is scrolled, which is convenient for image selection.
- To pin another image, select the image, then select [Pin] from the menu that appears when you right-click with the mouse.
- After pinning an image, you can click the [1] button to switch between top-bottom and left-right split screens.

Contents

Downloading Images

> Viewing Images

Sorting Images

Editing Images

Printing Images

Processing Large Numbers of RAW Images

> Remote Shooting

Specifying Preferences



#### **Displaying Multiple Images at the Same Time**

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#### Select multiple images, and click the [17] button.

- → The selected image is displayed.
- You can display up to 8 images.

**1** 32bit On 32-bit OSs, this function is not available. (The [ ] button is not displayed.)

#### **Displaying Grid Lines**

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- Click the [] button beside the [] button, and set the spacing between grid lines on the menu that appears.
  - To set the spacing, enter values (8 to 256, in pixels), or move the slider.
  - After specifying settings, click the [Close] button and close the window.

#### Select an image and click the [

→ The image with grid lines is displayed.

settings specified during RAW processing on the camera for distortion correction or chromatic aberration correction.

Displaying AF Points	
	Contents
Click the [] button beside the []] button, and select the item to display on the image on the menu	Downloading Images
<ul> <li>that appears.</li> <li>Select [Show only AF points in focus] or [Show all AF points].</li> </ul>	Viewing Images
Select an image and click the [ ] button. An image with the AF points selected in step 1 is displayed.	Sorting Images
	Editing Images
	Printing Images
	Processing Large Numbers of RAW Images
	Remote Shooting
	Specifying Preferences
	Reference/ Index
AF points are not displayed for images whose image size has been changed and then been converted and saved (p.85), images for which you selected an effect other than [Shot settings] as correction of fisheye lens distortion aberration, or images which have had	

Introduction

Contents

Downloading

Images

Viewing Images

Sorting

Images

#### Displaying Areas Beyond the Set Range with Warning Indicators (Highlight/Shadow Warning)

You can set up warning indicators for both highlighted and shadowed parts, which is effective for checking the clipped highlights and shadows and preventing excessive adjustment of an image. Where the area on the image has exceeded the set range, you can display the highlighted part in red and the shadowed part in blue.

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Click the [] button beside the [] button, and specify settings on the menu that appears.

Highlight/shadow warnin	g display settin 🗙
Show shadow warnings	
Threshold:(0–64)	32
Warning color	
🖌 Show highlight warnings	
Threshold:(192–255)	254
Warning color	
	Close

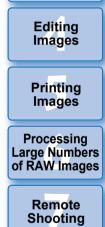
- Checkmark the [Show highlight warnings] and [Show shadow warnings] checkboxes and enter the warning values.
   You can also select different warning colors from the dialog that
  - appears when you click the [\_\_\_] button.
- After specifying settings, click the [Close] button and close the window.

#### Select an image and click the [97] button.

→ On the opened image, if there is an area that exceeds the value entered in step 1, the highlighted part of that area is displayed in red and the shadowed part is displayed in blue. If you selected different warning colors, the parts are displayed in the specified colors.

# Comparing Pre- and Post-Editing Images (Single-Image Display)

- Select an image that is being edited and click the [1] button.
- By clicking the button, the display switches between the image before editing and the current image (being edited).



Specifying Preferences

Reference/ Index

#### Comparing Pre- and Post-Editing Images (before/after comparison) Arrange vertically/ horizontally (two-screen display) / Split vertically/horizontally (split-image display)

You can display before and after versions of an adjusted image in the same window and check the adjustment results.

This function allows you to adjust an image while comparing the original image and image being edited.

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Select an image that is being edited and click the [III] button.



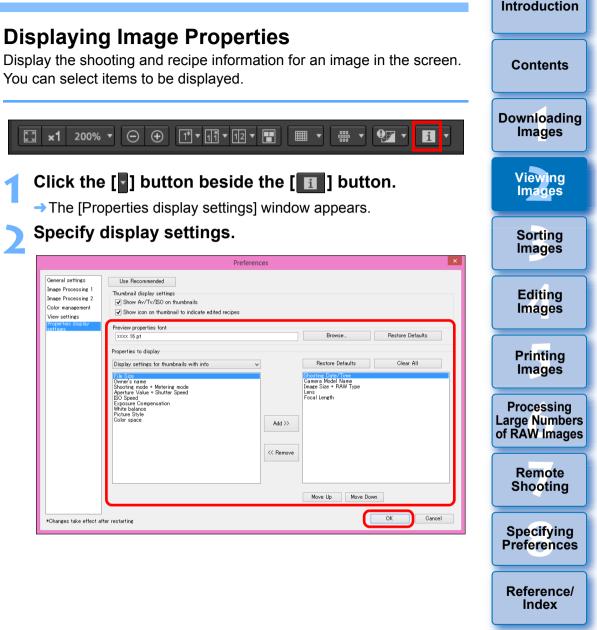
- → The image is displayed in two-screen display (Arrange vertically).
- The image before editing is on the left, and the currently edited is on the right.

#### Change the image display.

 The display switches in the following order by clicking the [III] button.

Arrange vertically (two-screen: left/right)  $\rightarrow$  Arrange horizontally (two-screen: top/bottom)  $\rightarrow$  Split vertically (split-image: left/right)

→ Split horizontally (split-image: top/bottom)





Contents

Downloading

Images

Viewing

Images

Sorting

Images

Editing

Images

Printing Images

- 1 Select [Display settings for preview properties] from the [Properties to display] pulldown menu.
- Specify display items with the [Add >>] button and [<< Remove] button. Items that can be selected appear in the list box at left, and actually displayed items appear in the list box at right. You can also change the display order with the [Move Up] button and [Move Down] button.

After specifying settings, click the [OK] button.

 With the [Preview properties font] option, you can specify the font used for information displayed in the preview window.

#### Select an image and click the [1] button.

- The image and properties selected in step 2 are displayed in the screen.
- If the recipe contents of an image being edited are displayed in before/after comparison (two-screen display/split-image display), edited items are displayed in red.

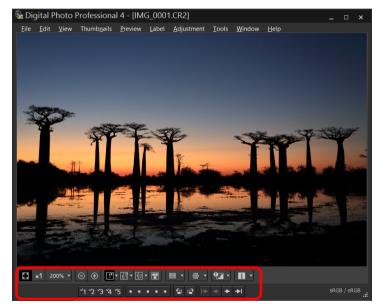
#### **Checking an Image in Multi-Function Preview**

The preview window shows the coordinates of the mouse cursor and the work color space. By switching to multi-function preview, you can also check image details in the same way as the main window (multi-layout).

Select the [Tools] menu ▶ [Preview screen display settings], and then [Multi-function preview] from the dialog that appears.

#### Open the preview window (p.17).

A multi-function preview with various functions at the bottom of the screen is displayed.



 For how to use the displayed functions, see "Viewing an Image in the Main Window (Thumbnail Layout)" (p.12) and "Checking an Image Using the Preview Control Panel" (p.20 to p.24).



Remote Shooting

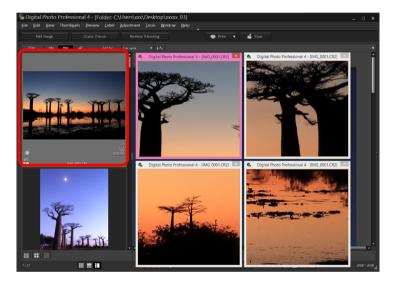
Specifying Preferences



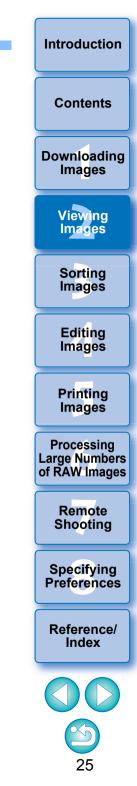
#### Checking an Image in Second Windows

Second windows are preview windows that you can open additionally for thumbnails and image previews. You can display up to 4 second windows for an single image to check the focus in all parts of the image, etc.

Select an image, and then select [Show second screen] from the menu that appears when you rightclick with the mouse.



- → A second window is displayed.
- To display an additional second window, repeat the operation.
- You can change the size of second windows as desired.
- Click the displayed image to switch between actual pixel size (100% view) and fit-to-window view.
- When you magnify an image in the second window, the rightclicked position on the image will be the center for the magnification.



# **Opening and Closing Window Panels (Panes)**

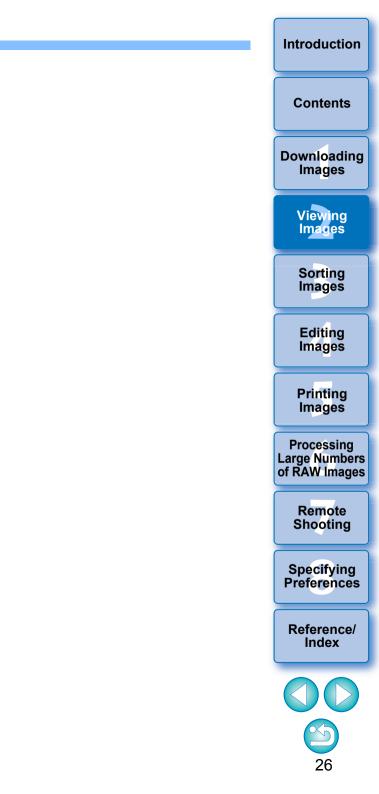
Panels (panes) at the top, bottom, left, and right of each window can be closed to suit the tasks being performed. You can use DPP in an optimal layout.

#### Click the [ ] for a panel to open or close.

Example: main window (thumbnail layout)



• When a panel is closed, you can point to [ ] with the mouse to temporarily open the panel.



# Changing the Display Method and Order of Palettes

For any palette (tool palette, navigator palette, histogram palette, quick check palette, and camera control palette), you can change how the palette is displayed (docked/floating), or the display order of multiple docked palettes.

#### Changing the Display Method (Dock/Float) of Palettes

Right-click on the palette's title bar (where its name is shown) and click [Dock/float] in the dialog that appears.

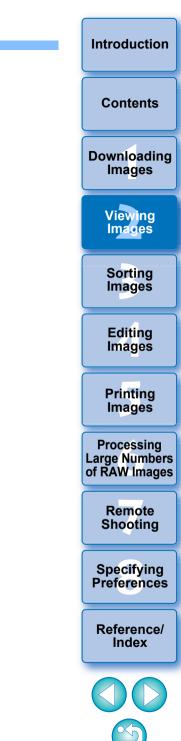
- → A docked palette is then displayed floating, and a floating palette is then displayed docked.
- To revert to the original display method, repeat the same operation again.

#### **Rearranging Palettes**

When multiple palettes are docked, you can rearrange their order from top to bottom.

Right-click on the palette's title bar (where its name is shown) and click [Move one up] or [Move one down] in the dialog that appears.

→ The order of the palettes is changed.



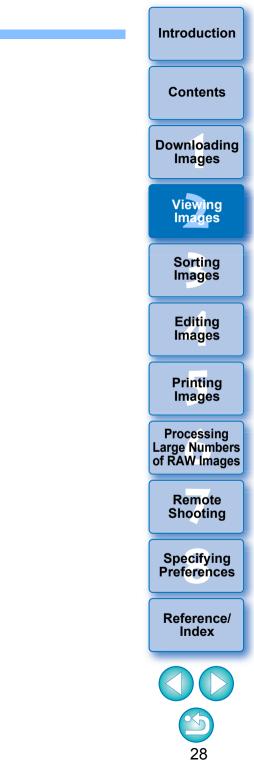
# **Exiting DPP**

#### In the main window, select the [File] menu ▶ [Exit].

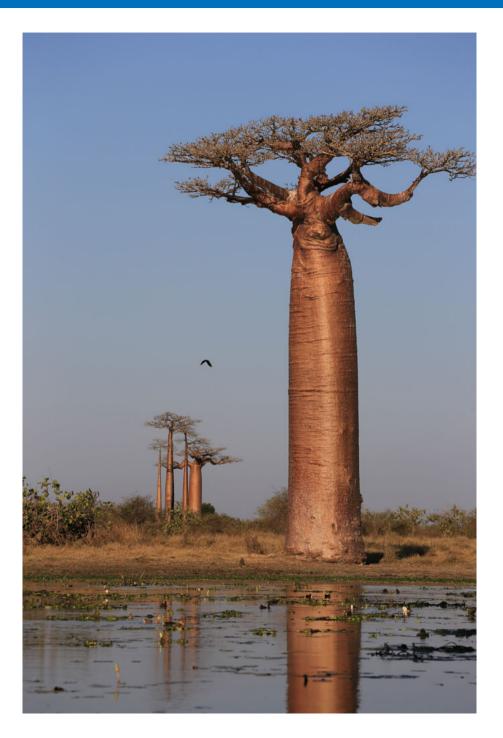
e					
Close window	v	Ctrl+W			
Save		Ctrl+S			
Save As	Ctrl+Shift+S				
Convert and	save	Ctrl+D Ctrl+B			
Batch proces	S				
Print		Ctrl+P			
Print with det	tailed setting	. Ctrl+Alt+P			
Plug-in printi	ng		×		
Add to colled	ction	Ctrl+G			
Remove from	n collection	Ctrl+Shift+G			
Clear collecti	on				
Select collect	tion		►		
Delete collec	tion		٠		
Bookmark					
Remove boo	kmark				
Move to Recy	/cle Bin	Del			
Exit		Alt+F4			

→ DPP exits.

A confirmation dialog box for saving the images appears when you try to exit DPP without saving the adjusted image. Click the [Yes to all] button to save the adjustment contents (recipe) to all the images adjusted.



# **3** Organizing and Sorting Images



Efficiently Checking/Sorting Images 30	Orintente
Sorting Images 32	Contents
Attaching Check Marks 32	
Setting Ratings 32	Downloading Images
Sorting Images in the Main Window	
Attaching Check Marks in the Main Window	Viewing
Setting Ratings in the Main Window	Images
Arranging Images in the Main Window	Sorting
Arranging by Type 34	Images
Arranging Freely	4
Displaying a RAW Image and JPEG Image as a Single	Editing Images
Image	
Checking Image Information	Printing
Organizing Images 38	Images
Deleting an Unwanted Image 38	Processing
Moving Images 38	Large Numbers of RAW Images
Moving Images in Folders	
Registering Frequent-Use Folders (Bookmark	Remote Shooting
Registration) 39	
Deleting Bookmarks 39	Specifying Preferences

Reference/ Index

29

Introduction

# **Efficiently Checking/Sorting Images**

You can enlarge images displayed as thumbnails in the main window and efficiently check each image. You can sort images into groups.

#### Select multiple images to check in the main window.

#### Display the quick check window.

Click the [Quick check] button.

🗟 Di	gital I	Photo	Profession	al 4 - [Fo	lder: C:	\Users\xxx\	Deskto	p/xxxxx	_03]
<u>F</u> ile	<u>E</u> dit	<u>V</u> iew	Thumb <u>n</u> ails	<u>P</u> review	<u>L</u> abel	<u>A</u> djustment	<u>T</u> ools	<u>W</u> indow	<u>H</u> elp
	Edit	Image		Quick Cheo	ok	Remote	Shootinį	3	
F	older	Book	mark		Filter	r ON	OFF		Sort by:
	Des	ktop			Shootine				
→ The	e qui	ck ch	eck windo	w appe	ars.				

Click the [ ] or [ ] button to switch between images to be checked.

#### Quick check window



- All the images displayed in the main window can be checked in the quick check window.
- If you click the [I] button, the first image is displayed, and if you click the [I] button, the last image is displayed.
- Click the [5] button to return to the main window.



Introduction

Contents

#### Introduction

#### Click the area you want to enlarge.



- → The area you clicked is displayed at 100% (actual pixel size).
- To change the display position, drag on the image.
- If you click the [50%] button, you can display the image at 50%.
- Click again to revert to the full view.
- To exit, click the [5] button.

- Convenient functions of the quick check window
- To check only selected images

You can use the quick check window to check only selected images by selecting the desired images from those displayed in the main window and then performing step 1.

- Switching between images using the keyboard You can also switch between images by pressing the <→> or <←> key.
- Switching between screens using the keyboard You can also switch between full screen display/normal screen

display by pressing the <Alt> + <Enter> keys.

Operations using the menu

Each operation can also be performed with the menu which appears when you right-click with the mouse on an image.



- In addition to 100% and 50%, you can display images at 12.5%, 25%, 200%, 300%, and 400%. Click the [ ] button beside the [ 50%] button on the screen, and select a magnification from the menu that appears.
- → If you click the [ some ] button (the selected magnification appears on the button), the image appears at the selected magnification. However, after the quick check window is closed, the image returns to its original 50% view.
- When [AF Point] is checkmarked, you can display the AF points selected in the camera at the time of shooting. However, AF points are not displayed for images which have had their image size changed and then been converted and saved (p.85), which have had settings specified during RAW processing on the camera for distortion correction and chromatic aberration correction, which are composited, or which are created as HDR (High Dynamic Range) images.

Contents

Downloading Images

Viewing

Images

#### **Sorting Images**

You can sort images by attaching check marks or setting ratings (indicated with  $[\star]$  marks) for each subject or theme.

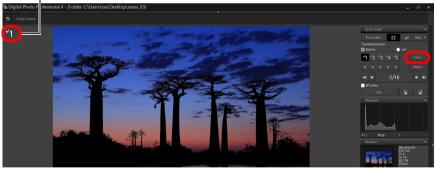
#### **Attaching Check Marks**

Display the image you want to attach a check mark to, and then click any one of [ ] to [ ].



→ The selected check mark appears in the upper left of the window.

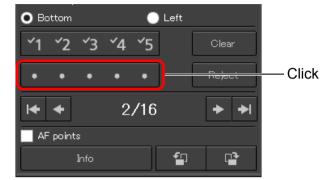
#### Check mark



Click the [Clear] button to remove the check mark.

#### **Setting Ratings**

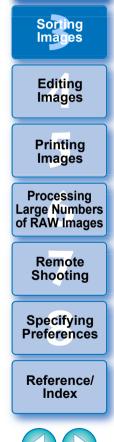
Display the image you want to rate, and then click any one of the  $[\bullet]$ .



- → The rating is set and an icon corresponding to the selected [☆] appears in the upper left of the window.
   (Window shown with a rating of three [☆])
- To set [Reject], click the [Reject] button. Click the [Reject] button again to cancel.

#### Rating icon







- The values of check marks attached to images in versions before DPP 4 are not maintained.
- You can also attach check marks from the menu that appears by right-clicking with the mouse on an image in the main window.

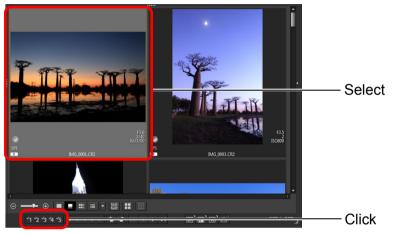
As the file structure of the image data is changed when a rating is set to an image, it may not be possible to check the image information in third-party software.

#### Sorting Images in the Main Window

You can also sort images in the main window by attaching check marks or setting ratings (indicated with  $[]{}$ marks) for each subject or theme.

#### Attaching Check Marks in the Main Window

Select the images you want to attach a check mark to, and then click any of [ ] to [ ].



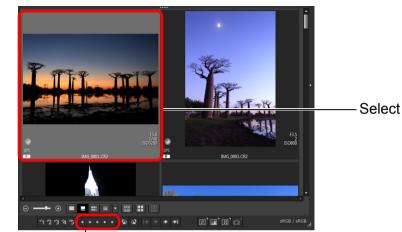
The selected check mark appears in the upper left of the image frame.



Click the check mark again to remove the check marks.

#### Setting Ratings in the Main Window

Select the images you want to rate, and then click any of the  $[\bullet]$ .



Click (changes to [☆] after clicking [ ♀ ])

→ The rating is set and an icon corresponding to the selected [☆] appears in the image frame.

(Sample window shown with a rating of three [] as an example)



	Contents
	Downloading Images
	Viewing Images
	Sorting Images
	Editing Images
	Printing Images
)	Processing Large Numbers of RAW Images
	Remote Shooting
	Specifying Preferences
	Reference/ Index
;	00

33

Introduction

- To cancel the rating, click the same [<sup>A</sup>/<sub>A</sub>] as when the setting was made.
- Set [Reject] with the [Label] menu or the quick check window (p.30).

#### 🔆 To select multiple images in the main window

Click on desired images while holding down the <Ctrl> key. To select multiple consecutive images, click on the first image, and then click on the last image while holding down the <Shift> key.

- The [Label] menu can also be used to attach check marks and set ratings.
  - You can display and change the rating settings set in DPP with other EOS software and with any supported EOS camera (for the EOS 7D, version 2.0.0 or later firmware) except the EOS-1D Mark IV, EOS-1Ds Mark III, EOS-1D Mark III, EOS-1D Mark II N, EOS-1Ds Mark II, EOS-1D Mark II, EOS-1D, EOS-1Ds, EOS 5D Mark II, EOS 5D, EOS 50D, EOS 40D, EOS 30D, EOS 20D/ EOS 20Da, EOS 550D, EOS 500D, EOS 450D, EOS 1000D, EOS 400D, and EOS 350D.
    - EOS Utility version 2.9 or later: Ratings set in DPP are displayed. However, [Reject] is not displayed and you cannot change rating settings.
    - With any supported camera (for the EOS 7D, version 2.0.0 or later firmware) except the EOS-1D Mark IV, EOS-1Ds Mark III, EOS-1D Mark III, EOS-1D Mark II N, EOS-1Ds Mark II, EOS-1D Mark II, EOS-1D, EOS-1Ds, EOS 5D Mark II, EOS 5D, EOS 50D, EOS 40D, EOS 30D, EOS 20D/EOS 20Da, EOS 550D, EOS 500D, EOS 450D, EOS 1000D, EOS 400D, and EOS 350D:

Ratings set in DPP are displayed in the playback screen. You can also change rating settings. However, you cannot display or change settings for [Reject].

Reversely, you can also display and change in DPP the rating settings set for images on any supported EOS camera (for the EOS 7D, version 2.0.0 or later firmware) except the EOS-1D Mark IV, EOS-1Ds Mark III, EOS-1D Mark III, EOS-1D Mark II, EOS-1D Mark II, EOS-1D Mark II, EOS-1Ds Mark II, EOS-1D Mark II, EOS-1D, EOS-1Ds, EOS 5D Mark II, EOS 5D, EOS 50D, EOS 40D, EOS 30D, EOS 20D/ EOS 20Da, EOS 550D, EOS 500D, EOS 450D, EOS 1000D, EOS 400D, and EOS 350D.

#### Arranging Images in the Main Window

You can arrange images in the order of the types of check marks you have attached to images, or in the order of date and time at which the images were shot. You can also freely arrange images by moving them individually.

### Arranging by Type

#### Select the [Thumbnails] menu ▶ [Sort] ▶ desired item.

The images are arranged in the order according to the selected item.

Main sort items	Description
File name: ascending order	Images are sorted by file name in alphanumeric order (0 to $9 \rightarrow A$ to Z).
Extension: ascending order	Images are sorted in the following order: RAW images $\rightarrow$ JPEG images $\rightarrow$ TIFF images $\rightarrow$ MOV movies $\rightarrow$ MP4 movies.
Shooting Date/Time: ascending order	Images are sorted by shooting date and time from the earliest.
Check mark: ascending order	Images with check marks take priority and are sorted in number order.
Rating: ascending order	Sorted in order of fewest [1].
Camera Model Name: ascending order	Sorted in order of least digit used in the camera model name. (Ex.: EOS-1D X $\rightarrow$ EOS 6D)
Lens: ascending order	Sorted in order of shooting lens with shortest focal length.
ISO speed: ascending order	Sorted in order of lowest speed.
Shutter speed: ascending order	Sorted in order of fastest shutter speed.
Aperture value: ascending order	Sorted in order of lowest aperture value.
Focal length: ascending order	Sorted in order of shooting lens with shortest set focal length.

- \* You can also arrange images by [Image Size], [RAW Type], and [Recipe editing status].
- \* Descending order sorts all items in the reverse of ascending order.

Contents

Downloading Images

> Viewing Images



Editing Images

Printing Images

Processing Large Numbers of RAW Images

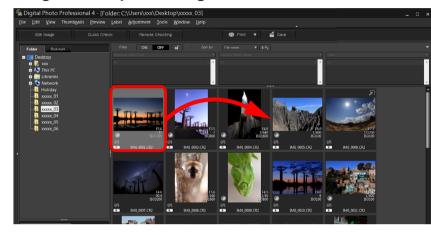
> Remote Shooting

Specifying Preferences



#### **Arranging Freely**

Drag and drop the image to the desired location.



- → The image moves to the desired location.
- You can also select multiple images (p.34) and move them.
- The order of rearranged images is temporarily registered as [Custom] in the [Filter/Sort pane] and maintained until you exit DPP or select another folder in the folder area.
- Select the [Thumbnails] menu ▶ [Sort] ▶ [File name] and [Ascending] to revert to the order before the images were rearranged.

#### Maintaining the order of rearranged images

You can maintain the order of rearranged images even if you exit DPP or select another folder in the folder area.

- Maintain order without changing image file names
  - You can use the [View Settings] tab sheet in [Preferences] to maintain the order of images without changing the image file names (p.132).
- Maintain order and change image file names

You can use the rename function to maintain the order of images and change the image file names all at once in the order they were rearranged (p.120).

#### Displaying a RAW Image and JPEG Image as a Single Image

You can display and handle a RAW image and JPEG image shot simultaneously as a single image. In particular, you can halve the number of images displayed in the main window and you can streamline the checking of a large number of images shot simultaneously.

# Select the [Thumbnails] menu ▶ [Group RAW and JPG versions].

→ The main window display updates and the simultaneously shot RAW image and JPEG image are displayed as a single image with the [R+J] mark (p.137).

# RAW images with the extension ".CR2" can be displayed as a single image

Images that can be displayed as a single image are images shot with a camera that shoots RAW images with the extension ".CR2" and JPEG images simultaneously. Images that have been simultaneously shot with a camera that shoots RAW images with the extension ".CRW" or ".TIF" cannot be displayed as a single image.

#### 🤄 When a single image is displayed

#### Image displayed

The RAW image is displayed in all windows.

#### Edited image

The content which has been adjusted with any of DPP's functions (the tool palette etc.) will be applied to the RAW image only. However, if you have used the following functions, the adjustments will be applied to both the RAW image and the JPEG image.

- Deleting an image (p.38)
- Moving or copying an image (p.38)
- Checkmarking (p.32, p.33)
- Rating (p.32, p.33)
- Rotating an image (p.12)

Contents

Introduction

Downloading Images

Viewing Images



Editing Images

Printing Images

Processing Large Numbers of RAW Images

> Remote Shooting

Specifying Preferences



#### Images added to the [Collection] window

When you add a RAW image and JPEG image displayed as a single image to the [Collection] window, the single image is marked with the [R+J] mark. However, because the RAW and JPEG images are actually added individually, the number of images shown on the [Collection] tab sheet increases by 2.

#### **Checking Image Information**

- Select the image for which you want to check the image information.
- Select the [View] menu ▶ [Info].
  - → The image information window appears.
- Select a tab sheet and check information.

#### Image information window

[Exif Information] tab sheet			[XMP/IPTC Information] tab sheet		[Recipes] tab sheet			
IMG_	0001.CR2		IMG_0001.CR2 ×		IMG_000	01.CR2 ×		
Exif Information XMP	/IPTC Information Recipes		Exif Information XMP/IPTC Information Recipes	E	xif Information XMP/IPT	O Information Recipes		
Item	Value		Description	в	em .	Value ^		
File Name	IMG 0001.CR2		[Document Title]	E	rightness adjustment	0.00		
File Size	24 5MB		XXXXXXXXXXXX		ihite balance	(Auto)		
				P	icture Style	(Landscape)		
Camera Model	Canon EOS XXX		[Creator]		Pontrast	0.0		
Firmware	Firmware Version X.X.X		X000000000		hadow	0.0		
Shooting Date/Time	20000/2002000 2000000		[Creator's job Title]		liehlieht iolor tone	0.0		
Owner's Name			XXXXXXXXXXX		iolor tone iolor saturation	0.0		
Shooting Mode	Aperture-Priority AE				inear	Off		
Ty(Shutter Speed)	1/40		[Description]	Ē	Black point	0.00		
			XXXXXXXXXXXXX	N	lidpoint	0.00		
Av(Aperture Value)	5.6		The state way 1		rhite point	0.00		
Metering Mode	Evaluative Metering		[Description Writer]		harpness	Strength: 4.0 Finer		
Exposure Compensa	. 0		^^^^		suto Lighting Optimizer	Standard		
ISO Speed	3200		[Keywords]		GB tone curves leduce luminance noise	Original 9.0		
Auto ISO Speed	ON		XXXXXXXXXXX		leduce iuminance noise leduce chrominance noise	9.0		
					olor adjustment	Off		
Lens	EF17-40mm f/4L USM		[Copyright Status]		lue	0.0		
Focal Length	34.0mm		X000000000	s	aturation	+100.0		
Image Size	XXXX <sub>X</sub> XXXX		[Copyright Notice]	F	led	Off		
Aspect ratio	3:2		XXXXXXXXXXXX		range	Off		
Image Quality	RAW		AAAAAAAAA		ellow	Off Off		
Flash	Off		[Copyright info URL]		ireen Iqua	Off		
FE lock	OFF		3000000000		llue	Off		
					urple	Off		
White Balance Mode	Auto			- N	lagenta	Off		
AF Mode	Manual focusing				ens correction	On		
Picture Style	Landscape				ligital Lens Optimizer	Off		
Sharpness	4				eripheral illumination	40.0 100.0 B0.0 B0.0		
<				<	en mani anerration	>		

36

Introduction

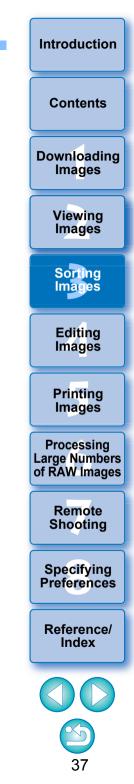
- Shooting information is displayed in the [Exif Information] tab sheet, while IPTC\* information appended to the image after shooting is displayed in the [XMP/IPTC Information] tab sheet. IPTC\* information provides additional comments on images, such as captions, credits and the shooting location. The information is sorted into 5 different categories and can be viewed by selecting [Description], [IPTC Contact], [IPTC Image], [IPTC Content] or [IPTC Status] from the list box in the [XMP/ IPTC Information] tab sheet.
  - \* International Press Telecommunications Council (IPTC)
- The contents of the [Exif Information] tab sheet will vary depending on the camera model.
- Recipe contents applied to an image are displayed in the [Recipes] tab sheet.

Convenient uses in the main window

#### Switching displays

If a different image is selected in the main window when the image information window is displayed, the image information for that image will be displayed.

 Difference with the thumbnail with shooting information Detailed shooting information for each image is displayed in the image information window. However, if you want to only check the main shooting information, you can check it for each image in [Thumbnails] menu > [With shooting info] (p.13).



## **Organizing Images**

This section explains how to delete unwanted images, move or copy images, etc., to organize your images.

## **Deleting an Unwanted Image**

Be aware that you cannot recover deleted images.

#### Select the [File] menu ▶ [Move to Recycle Bin].

Close window	Ctrl+W	
Save	Ctrl+S	
Save As	Ctrl+Shift+S	
Convert and save	Ctrl+D	
Batch process	Ctrl+B	
Print	Ctrl+P	
Print with detailed setting	. Ctrl+Alt+P	
Plug-in printing		۲
Add to collection	Ctrl+G	
Remove from collection	Ctrl+Shift+G	
Clear collection		
Select collection		►
Delete collection		۲
Bookmark		
Remove bookmark		
Move to Recycle Bin	Del	
Fxit	Alt+F4	

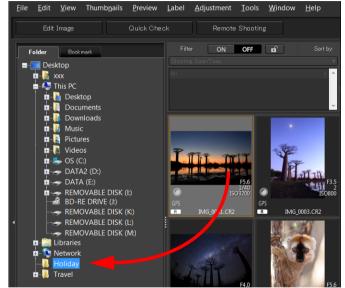
- → The image is moved to the [Recycle Bin] and is deleted from DPP.
- The images are deleted completely from your computer when the [Empty Recycle Bin] operation is performed on the [Recycle Bin] on the desktop.

## **Moving Images**

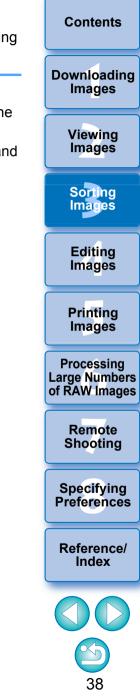
You can move or copy images to a separate folder and sort by shooting date or themes.

#### Drag the image to be moved or copied.

- **To move:** Drag the image and release when the image is in the destination folder.
- **To copy:** Drag the image while holding down the <Ctrl> key and release when the image is in the destination folder.



→ The images are moved or copied to the destination folder.



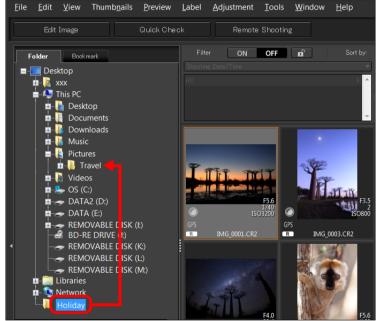
Introduction

### **Moving Images in Folders**

You can move or copy folders that contain images, and sort the images by folders.

#### Drag the folder to be moved or copied.

- **To move:** Drag the folder and release when the folder is in the destination folder.
- **To copy:** Drag the folder while holding down the <Ctrl> key and release when the folder is in the destination folder.

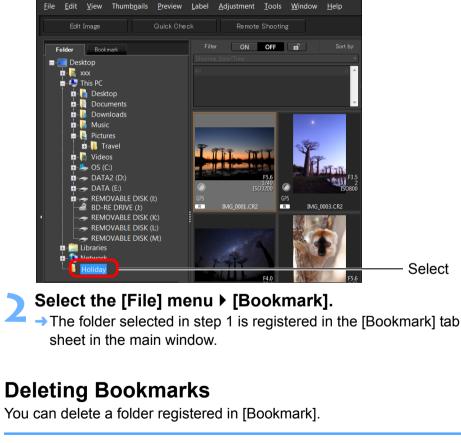


→ The folders are moved or copied to the destination folder.

## Registering Frequent-Use Folders (Bookmark Registration)

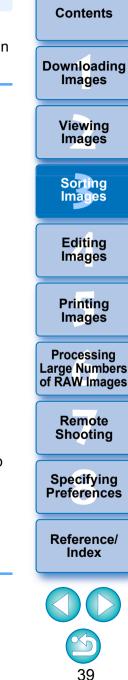
You can register frequently used folders in bookmarks. Registered folders are displayed in the [Bookmark] tab sheet in the main window.

# Select the folder for which a bookmark is to be registered.



## Select the [File] menu ▶ [Remove bookmark].

→ The selected folder is deleted from bookmarks.



# **4** Editing Images

RAW Images	42
RAW Images	42
RAW Development	42
When RAW Development is to be Done	42
Advantages of a RAW Image	42
Editing JPEG and TIFF Images	43
Tool Palettes	44
JPEG/TIFF Editing with the Basic Adjustment Tool	
Palette	45
Adjusting Brightness	45
Changing the Picture Style	46
Advanced Using a Picture Style File	48
Adjusting Color Tone by Changing White Balance	48
Adjusting Color Tone Using Click White Balance	49
Advanced Adjusting White Balance with Color	
Temperature	50
Advanced Tuning White Balance	50
Adjusting Contrast	51
Advanced Adjusting Brightness of Shadows/	
Highlights	51
Changing Color Tone and Color Saturation	52
Adjusting Monochrome	52
Advanced Adjusting Dynamic Range	53
Adjusting Gradation and Luminance Automatically	54
Using the Auto Lighting Optimizer	55
Adjusting Image Sharpness	56
Detailed Setting of Image Sharpness	57

JPEG/TIFF Editing with the Tone Adjustment Tool	Contents
Palette 58	
Adjusting Brightness and Contrast 58	
Adjusting Color Tone Using Click White Balance 59	Downloading Images
Advanced Adjusting Tone Curve 60	
Example of a Tone Curve Operation	Viewing
Advanced Adjusting Dynamic Range 62	Images
Using the Auto Lighting Optimizer 62	Sorting
[JPEG/TIFF] Editing with the Color Adjustment Tool	Images
Palette	
Advanced Editing with the Color Adjustment Tool	Editing Ima <mark>ge</mark> s
Palette 63	
Adjusting a Specific Color Gamut	Printing
Adjusting Hue and Saturation for an	Images
Entire Image 64	Processing
Adjusting in Monochrome 64	Large Numbers of RAW Images
[JPEG/TIFF] Editing with the Detailed Adjustment	
Tool Palette	Remote Shooting
Reducing Noise65	Shooting
Adjusting Image Sharpness	Specifying
Reducing Color Moiré in an Image	Preferences
(JPEG/TIFF) Editing with the Trimming/Angle	
Adjustment Tool Palette	Reference/ Index
Editing with the Lens Correction Tool Palette	
Correcting Lens Aberration	
Making Corrections	
Effects of Distortion Correction for Fisheye	
Lenses	40

Introduction

Correcting Multiple Images at a Time       74         Digital Lens Optimizer       74         Using the Digital Lens Optimizer       75         Adjusting Image Sharpness       77         JPEG/TIFF       Editing with the Dust Delete/Copy Stamp         Tool Palette       78         Performing Automatic Dust Erasure Processing       78         Automatic Dust Erasure Processing in the Main       79         Window       79         Manually Erasing Dust (Repair Function)       80         Erasing Unwanted Parts of an Image (Copy Stamp         Function)       82         Setting Work Color Space       83         Using the Soft-Proof Colors Function       84         Saving Editing Contents to an Image       85         Saving as a separate image       85         Saving as a separate image       87         JPEG/TIFF       Utilizing Adjustment Contents (Recipe)       88         Copying a Recipe and Applying to Another Image       89
Using the Digital Lens Optimizer
Adjusting Image Sharpness       77         JPEG/TIFF       Editing with the Dust Delete/Copy Stamp         Tool Palette       78         Performing Automatic Dust Erasure Processing       78         Automatic Dust Erasure Processing in the Main       78         Window       79         Manually Erasing Dust (Repair Function)       80         Erasing Unwanted Parts of an Image (Copy Stamp         Function)       82         Setting Work Color Space       83         Using the Soft-Proof Colors Function       84         Setting Editing Contents to an Image       85         Saving as a separate image       85         JPEG/TIFF       Re-Editing an Image       87         JPEG/TIFF       Utilizing Adjustment Contents (Recipe)       88
JPEG/TIFFEditing with the Dust Delete/Copy StampTool Palette78Performing Automatic Dust Erasure Processing78Automatic Dust Erasure Processing in the Main78Window79Manually Erasing Dust (Repair Function)80Erasing Unwanted Parts of an Image (Copy StampFunction)82Setting Work Color Space83Using the Soft-Proof Colors Function84JPEG/TIFFSaving Editing ResultsSaving as a separate image85JPEG/TIFFRe-Editing an Image.Utilizing Adjustment Contents (Recipe)86
Tool Palette78Performing Automatic Dust Erasure Processing78Automatic Dust Erasure Processing in the Main79Window79Manually Erasing Dust (Repair Function)80Erasing Unwanted Parts of an Image (Copy Stamp Function)82Setting Work Color Space83Using the Soft-Proof Colors Function84JPEG/TIFFSaving Editing Results85Saving Editing Contents to an Image85Saving as a separate image85JPEG/TIFFRe-Editing an Image87JPEG/TIFFUtilizing Adjustment Contents (Recipe)88
Performing Automatic Dust Erasure Processing78Automatic Dust Erasure Processing in the Main79Window79Manually Erasing Dust (Repair Function)80Erasing Unwanted Parts of an Image (Copy Stamp Function)82Setting Work Color Space83Using the Soft-Proof Colors Function84JPEG/TIFFSaving Editing Results85Saving Editing Contents to an Image85Saving as a separate image85JPEG/TIFFRe-Editing an Image87JPEG/TIFFUtilizing Adjustment Contents (Recipe)88
Automatic Dust Erasure Processing in the Main       79         Window       79         Manually Erasing Dust (Repair Function)       80         Erasing Unwanted Parts of an Image (Copy Stamp Function)       82         Setting Work Color Space       83         Using the Soft-Proof Colors Function       84         JPEG/TIFF       Saving Editing Results       85         Saving Editing Contents to an Image       85         JPEG/TIFF       Re-Editing an Image       87         JPEG/TIFF       Utilizing Adjustment Contents (Recipe)       88
Window79Manually Erasing Dust (Repair Function)80Erasing Unwanted Parts of an Image (Copy Stamp Function)82Setting Work Color Space83Using the Soft-Proof Colors Function84JPEG/TIFFSaving Editing Results85Saving Editing Contents to an Image85Saving as a separate image85JPEG/TIFFRe-Editing an Image87JPEG/TIFFUtilizing Adjustment Contents (Recipe)88
Manually Erasing Dust (Repair Function)       80         Erasing Unwanted Parts of an Image (Copy Stamp Function)       82         Setting Work Color Space       83         Using the Soft-Proof Colors Function       84         JPEG/TIFF       Saving Editing Results       85         Saving Editing Contents to an Image       85         JPEG/TIFF       Re-Editing an Image       87         JPEG/TIFF       Utilizing Adjustment Contents (Recipe)       88
Erasing Unwanted Parts of an Image (Copy Stamp Function)
Function)
Setting Work Color Space83Using the Soft-Proof Colors Function84JPEG/TIFFSaving Editing Results85Saving Editing Contents to an Image85Saving as a separate image85JPEG/TIFFRe-Editing an Image87JPEG/TIFFUtilizing Adjustment Contents (Recipe)88
Using the Soft-Proof Colors Function
JPEG/TIFF       Saving Editing Results.       85         Saving Editing Contents to an Image       85         Saving as a separate image       85         JPEG/TIFF       Re-Editing an Image       87         JPEG/TIFF       Utilizing Adjustment Contents (Recipe)       88
Saving Editing Contents to an Image
Saving as a separate image
JPEG/TIFFRe-Editing an Image87JPEG/TIFFUtilizing Adjustment Contents (Recipe)88
JPEG/TIFF Utilizing Adjustment Contents (Recipe) 88
Copying a Recipe and Applying to Another Image 89
Saving a Recipe as a File
Loading and Applying Recipes
<b>JPEG/TIFF</b> Adjusting by Comparing Multiple
Images 91
JPEG/TIFF Editing Efficiently
Editing in the Edit Image Window
-

Changing the Thumbnail Display Position to	
Horizontal	Contents
Window	Downloading
JPEG/TIFF Compositing Images	Images
Compositing Methods	Viewing
JPEG/TIFF Creating HDR (High Dynamic Range)	Viewing Images
Images 100	
Advanced Using the Dual Pixel RAW Optimizer 103	Sorting Images
Microadjustment of the Position of Maximum Sharpness	Junger
and Resolution Using the Depth Information Contained	Editing
within the Dual Pixel RAW File	Images
Reposition the Viewpoint or Foreground Bokeh for	
a More Pleasing Result 104 Reduces the Appearance of Ghosting in Images 105	Printing Images
Advanced Transferring a RAW Image to	Processing Large Numbers
Photoshop 107	of RAW Images
Advanced Customizing the Main Window Toolbar 108	Remote
	Shooting
	Specifying
	Preferences
Sections with JPEG/TIFF and JPEG/TIFF in "4 Editing Images" support not only RAW image editing but also JPEG/TIFF image editing.	Reference/ Index
g-	00
<b>JPEG/TIFF</b> : All the functions explained in the section support	VV
JPEG/TIFF image editing. JPEG/TIFF : Certain functions explained in the section support	
JPEG/TIFF image editing.	41

## **RAW Images**

## **RAW Images**

A RAW image is image data that has recorded output data of imaging sensor. As image processing is not performed inside the camera when a photo is taken and the photo has been recorded in the special form of "RAW image data + Image processing conditions information at the time of shooting", special software is needed to view or edit the image. \* "RAW" means "in a natural condition" or "not processed or refined".

## **RAW Development**

If described in terms of film, the concept of a RAW image is a shot image not yet developed (latent image).

With film, the image appears for the first time when it is developed. In the same way, for RAW images too, you cannot view them as images on your computer unless you perform subsequent image signal processing. Therefore, even though it is digital, this processing is called "development".

## When RAW Development is to be Done

DPP automatically carries out this "development" processing when RAW images are displayed in DPP. As a result, RAW images displayed in DPP are images whose development processing has been completed.

With DPP, you can view, edit and print RAW images without being particularly conscious of the development processing.

## Advantages of a RAW Image

RAW images are recorded in the format "RAW image data + Image processing conditions information at the time of shooting". When you open a RAW image in DPP, the image is automatically developed and you can view the image as an image to which image processing conditions at the time of shooting have been applied. Even if you perform various adjustments to the image you have opened (it undergoes automatic development processing each time), only the image processing conditions (development conditions) change and the "original image data itself" remains unaffected. Therefore, it is the perfect data for users who want to get creative with the images after shooting, as you do not have to worry about image deterioration. In DPP, the "Image processing conditions information" that can be adjusted is called a "Recipe" (p.88).







Contents adjusted using the tool palettes can be handled individually as a recipe file (extension ".dr4") (p.88, p.89).

In DPP, all the adjustments (image processing conditions information) made with the tool palettes can be saved in the image as data called a "recipe" (p.89), or can be saved, downloaded and applied to other images as a separate recipe file (extension ".dr4", p.90). However, a recipe file with saved RAW image adjustments cannot be applied to JPEG or TIFF images.

Contents

Introduction

Downloading Images

> Viewing Images

Sorting Images

Editing Images

Printing Images

Processing Large Numbers of RAW Images

> Remote Shooting

Specifying Preferences

Reference/ Index

## **Editing JPEG and TIFF Images**

With DPP, you can adjust JPEG and TIFF images in the same way as RAW images using the tool palettes below.

- Tone Adjustment tool palette
- Color Adjustment tool palette
- Detailed Adjustment tool palette
- Trimming/Angle Adjustment tool palette
- Dust Delete/Copy Stamp tool palette
- · Settings tool palette

Because adjustments made with these tool palettes (the recipe) only change the image processing conditions, the "original image data itself" remains unaffected. Consequently, there is none of the image deterioration that normally accompanies editing and you can readjust your image any number of times.

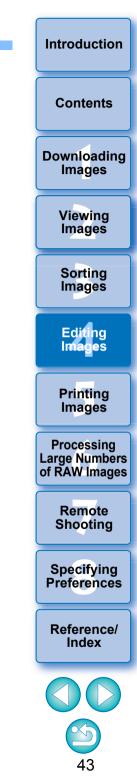


Image processing conditions information



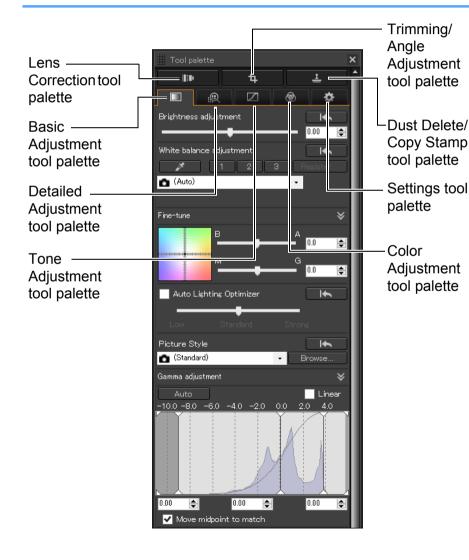
Contents adjusted using the tool palettes can be handled individually as a recipe file (extension ".dr4") (p.88, p.89).

In DPP, all the adjustments (image processing conditions information) made with the tool palettes can be saved in the image as data called a "recipe" (p.89), or can be saved, downloaded and applied to other images as a separate recipe file (extension ".dr4", p.90). However, recipe data with saved JPEG or TIFF image adjustments cannot be applied to RAW images.



## **Tool Palettes**

With DPP, you can adjust images with the tool palettes by switching between various tool palette windows according to your editing requirements. Since adjustments made with the tool palettes only change the image processing conditions, the "original image data itself" remains unaffected. As there is no image deterioration that normally accompanies editing, you can readjust your image any number of times. The various functions of the tool palettes are explained in more detail under the respective topics.



#### Introduction **Basic Adjustment tool palette** Makes basic adjustments to a RAW image (p.45). Contents Tone Adjustment tool palette Adjusts the tone curve and applies the Auto Lighting Optimizer (p.58). Downloading **Color Adjustment tool palette** Images Adjusts the hue, saturation and luminance of a specific color space. The hue and saturation for an entire image can also be adjusted (p.63). Viewing **Detailed Adjustment tool palette** Images Reduces noise and adjusts the image sharpness (p.65). Trimming/Angle Adjustment tool palette Sorting Images Crops an image and adjusts the image angle (p.67). Lens Correction tool palette Editing Images Corrects lens aberration in the image (p.70) and applies the Digital Lens Optimizer (p.75). **Dust Delete/Copy Stamp tool palette** Printing Erases dust from an image and corrects image by copying sections Images of the image (p.78). Settings tool palette Processing Large Numbers Configures the work color space (p.83). of **RAW** Images -ÌŴ-Using the different tool palettes Remote Shooting We recommend that you use the Basic Adjustment tool palette to make adjustments to RAW images. However, if you find that the Basic Specifying Adjustment tool palette does not offer a sufficient range of adjustments. Preferences or if you want to use specific functions that are only available in the Tone Adjustment tool palette (p.58), completing initial adjustments with the Basic Adjustment tool palette and then using the Tone Adjustment tool **Reference**/ palette to make just the minimum of adjustments needed is Index recommended. For noise reduction (p.65) and lens aberration correction (p.71), you

For noise reduction (p.65) and lens aberration correction (p.71), you should first complete necessary adjustments in the Basic Adjustment and Tone Adjustment tool palettes, and then adjust with the Detailed Adjustment tool palette (p.65) and Lens Correction tool palette (p.70).
You can click the []] button at the bottom right of the main window to show/hide [Tool palette].

## **DPEG/TIFE** Editing with the Basic Adjustment Tool Palette

The Basic Adjustment tool palette makes basic adjustments to RAW images. With this tool palette, you can adjust the image brightness, set Picture Style, adjust the white balance, adjust the contrast, adjust the color tone and saturation, adjust the dynamic range, apply the Auto Lighting Optimizer and adjust the image sharpness.

Note that the only adjustments you can make to JPEG/TIFF images are applying the Auto Lighting Optimizer and adjusting the image sharpness.

Select an image in the main window, etc.

## Display the Basic Adjustment tool palette.



## **Adjusting Brightness**

The brightness of an image can be adjusted. Move the slider to the right to make the image brighter and to the left to make the image darker.

Introduction

Contents

III Tool palette	Downloading Images
III     III     III     IIII     IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	Viewing Images
White balance adjustment	Sorting Images
Auto)	Editing Images
Drag the slider left or right	Printing Images
	Processing Large Numbers of RAW Images
	Remote Shooting
	Specifying Preferences
	Reference/ Index
	00
The adjustment range is –3.0 to +3.0 (in 0.01-stop increments when entering a value).	(1) 45

**Picture Style** Description **Changing the Picture Style** The Picture Style set with the camera when the Contents If the image looks different from what you visualized at the time of image was shot. shooting, you can get it closer to what you expected by changing the When a mode in the Creative Zone is selected on the Picture Style. Even if you have saved the image (p.85) with camera, the Picture Style set is displayed in (). **Downloading**  $\mathbf{\hat{D}}()$ [Monochrome] (p.52) selected, you can still change to another Picture Images When a mode in the Basic Zone is selected on the Style at any point by simply selecting a Picture Style other than camera, [Shot settings] is displayed in (), and image [Monochrome]. characteristics that are according to the selected Viewing shooting mode are applied. Images Picture Style Reverts the image to -The image looks vivid. Standard the original settings 👩 (Standard) Generally, this setting is suitable for most images. Sorting Images The color tone will be adjusted to suit the scene. Gamma adjustment Select The colors will look vivid. Especially the colors of Auto 📃 Linear Auto blue skies, greenery, and sunsets will be vivid in a -10.0 -8.0 -6.0 -4.0 -2.0 0.0 2.0 4.0 Editing Images shot of nature, outdoor, or sunset scenes. For nice skin tones. Effective for close-ups of women and children. By Portrait Printing changing the [Color tone], you can adjust the skin Images tone (p.52). For vivid blues and greens. Processing 0.00 **I** 0.00 Large Numbers Landscape Effective for making images of landscapes of **RAW** Images Move midpoint to match impressive. Suited for detailed outline and fine texture

Fine Detail

Neutral

Faithful

Monochrome

vivid.

adjustment.

adjustment.

effect] (p.52).

For black and white images.

0.00

Remote

Shooting

Specifying

Preferences

Reference/

Index

description of the subject. The colors will be slightly

Effective for base images which are to undergo

When the subject is photographed under a color

You can also adjust with [Filter effect] or [Toning

temperature of 5200K, the color is adjusted

colorimetrically to match the subject's color. Effective for base images which are to undergo

For natural colors and subdued images.

Introduction

Picture Style	Description
(Picture Style file registered in the camera)	Displayed when selecting an image shot with the Picture Style file registered in the camera. In the list, the name of the Picture Style file is displayed in ( ).
[Picture Style file applied in DPP]	The name of the Picture Style file applied in DPP is displayed in [].

	Contents
	Downloading Images
	Viewing Images
You can retain the [Color tone], [Color saturation], [Contrast], [Unsharp mask] and [Sharpness] settings, even if you change the Picture Style.	Sorting Images
<ul> <li>[Auto] is not applied to images shot with the EOS-1D Mark IV, EOS-1Ds Mark III, EOS-1D Mark III, EOS-1D Mark II N, EOS-1Ds Mark II, EOS-1D Mark II, EOS-1D, EOS-1Ds, EOS 5D Mark II, EOS 5D, EOS 7D, EOS 60D/EOS 60Da, EOS 50D, EOS 40D, EOS 30D, EOS 20D/EOS 20Da, EOS 550D, EOS 500D, EOS 450D, EOS 1000D, EOS 1100D, EOS 400D, EOS 350D, PowerShot G3 X, PowerShot G1 X Mark II, PowerShot G7 X,</li> </ul>	Editing Images
	Printing Images
PowerShot G9 X, PowerShot SX60 HS, PowerShot G5 X, PowerShot G16, PowerShot S120, PowerShot G1 X, PowerShot G15, PowerShot S110, PowerShot S100, PowerShot G9, PowerShot C10, PowerShot C11, PowerShot C12, PowerShot	Processing Large Numbers of RAW Images
<ul> <li>PowerShot G10, PowerShot G11, PowerShot G12, PowerShot S90, PowerShot S95, PowerShot SX1 IS, or PowerShot SX50 HS. When changing the Picture Style with several images selected, although you can select [Auto] if images shot with any supported camera other than the above are included, [Auto] will not be applied to the images shot with the above cameras.</li> <li>You can apply [Fine Detail] to all images shot with supported camera models except the PowerShot G3 X, PowerShot G1 X Mark II, PowerShot G7 X, PowerShot G9 X, PowerShot SX60 HS, PowerShot G5 X, PowerShot G16, PowerShot S120, PowerShot G1 X, PowerShot G15, PowerShot S110, PowerShot S100, PowerShot G9, PowerShot G10, PowerShot G11, PowerShot G12, PowerShot S90, PowerShot S95, PowerShot SX1 IS, and PowerShot SX50 HS.</li> <li>You cannot select [Auto] with multiple-exposure RAW images</li> </ul>	Remote Shooting
	Specifying Preferences
	Reference/ Index
created with the camera.	47

47

Introduction

#### Advanced **Using a Picture Style File**

A Picture Style file is a Picture Style extension file.

With DPP, you can apply to RAW images Picture Style files that you have downloaded from Canon website effective for various scenes or Picture Style files created with "Picture Style Editor". When using a Picture Style file, save it to your computer beforehand.

#### Click the [Browse] button in the [Picture Style] panel.



→ The [Open] dialog box appears.

- Select a Picture Style file saved on your computer, and click the [Open] button.
- → The Picture Style file you selected is applied to an image.
- To apply a different Picture Style file, follow the procedure from step 2 again.

## Adjusting Color Tone by Changing White Balance

If the color tone of the photographed image does not appear natural, change the white balance to make it appear natural. You can make the color tone natural by setting the light source to match the scene at the time of shooting an image of, for example, pale-colored flowers.

Tool palette	Viewing Images
Brightness adjustment Inc.	Sorting Images
White balance adjustment 1 2 3 Register Reverts the image to the original settings (Auto) Select	Editing Images
Select	Printing

- () is the white balance set on the camera when the image was shot. • When a mode in the Creative Zone is selected on the camera. the white balance set is displayed in ().
- When a mode in the Basic Zone is selected on the camera. [Shot settings] is displayed in (), and image characteristics that are according to the selected shooting mode are applied.

The color tone does not become more natural even when the white balance is changed

If the color tone of the image does not appear natural after changing the white balance, adjust the white balance using click white balance (p.49).

#### ÷Ŵ: Tune with color tone

To make further fine adjustments to color tone after adjusting the white balance, you can use [Color tone] (p.52) for tuning towards your expectations.

- You cannot register the adjustment results as personal white balance (p.115) when you have selected [15] ( )] from the list box.
  - You cannot change or adjust white balance with multipleexposure RAW images created on the camera.
- Refer to your camera's Instruction Manual for details on each white balance setting.

The Picture Style files that you can apply to the camera are files with the ".PF2" or ".PF3" extension only.

Contents

Downloading Images

Images

Processing

Large Numbers

of RAW Images

Remote

Shooting

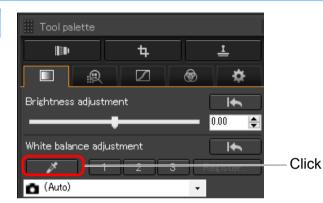
Specifying Preferences

**Reference**/

Index

## Adjusting Color Tone Using Click White Balance

You can adjust white balance using a selected part of an image as the standard for white to make the image appear natural. Using click white balance is effective when using it in parts of an image where white color tone has changed under the influence of a light source.



Click on a point that is to be the standard for white.



The coordinates of the cursor position and the RGB values (8-bit conversion)

Reverts the image to the original settings

- The color of the image is adjusted with the point you selected as the standard for white.
- If you click on another point in the image, the white balance is adjusted again.
- To finish click white balance, right-click with the mouse or click the [



When there are no white areas in your image, you can adjust the white balance by clicking on a grey point of the image in step 2. This has the same adjustment result as selecting a white area.

You cannot change or adjust white balance with multiple-exposure RAW images created on the camera.



Index

Contents

Downloading

Images

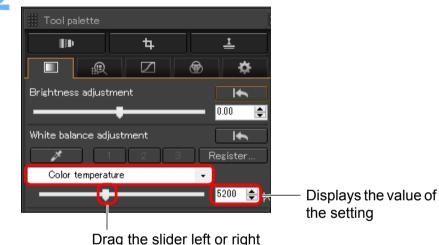
#### Advanced

### Adjusting White Balance with Color Temperature

White balance can be adjusted by setting a numerical value for color temperature.

#### Select [Color temperature] from the [White balance adjustment] list box.

#### Set the color temperature.



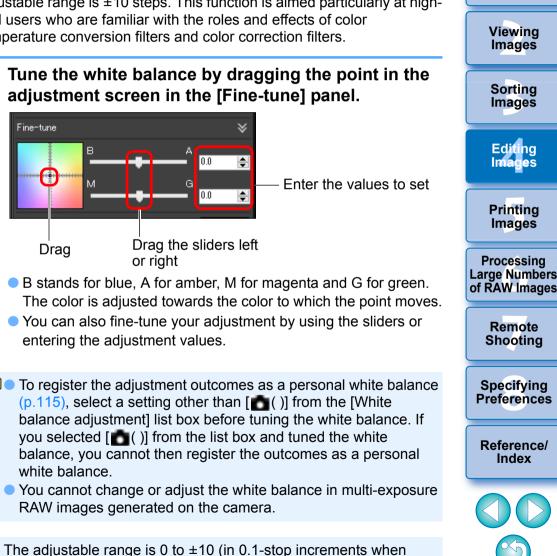
#### Advanced

Fine-tune

entering a value).

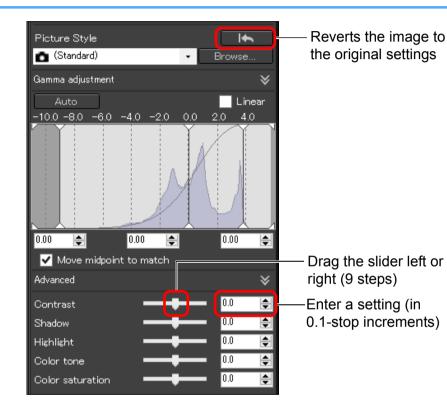
#### **Tuning White Balance**

This is a function that makes fine adjustments to the white balance. Using this function, you can achieve the same effects as third-party color temperature conversion filters and color correction filters. The adjustable range is  $\pm 10$  steps. This function is aimed particularly at highend users who are familiar with the roles and effects of color temperature conversion filters and color correction filters.



## **Adjusting Contrast**

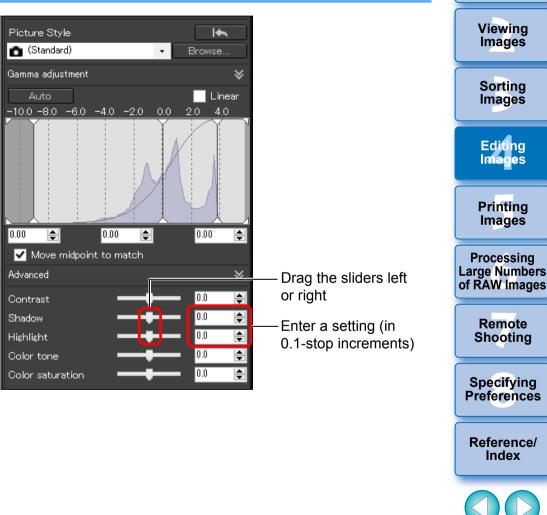
Modulation and degree of contrast can be adjusted. Move the slider to the right to make contrast stronger and to the left to make contrast weaker.



Advanced

### **Adjusting Brightness of Shadows/Highlights**

You can adjust the brightness of shadows and highlights in an image. By adjusting only shadows or highlights in an image, you can reduce the effects of clipping in shadows and highlights.



If you make a major adjustment to the highlights or shadows in an image, the image may look unnatural. In such a case, reduce the degree of adjustment.

Contents

Downloading Images

Viewing

Images

Sorting

Images

Editing Images

Printing

Images

Remote

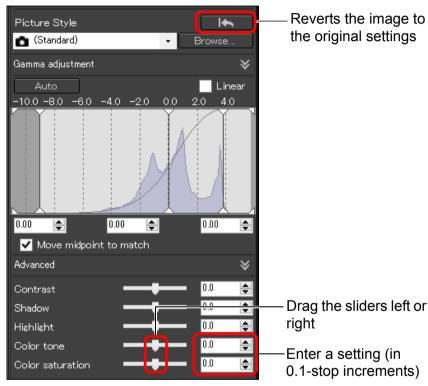
Index

## Introduction Contents Downloading Images Viewing Images Sorting Images Editing Images Printing Images Processing Large Numbers of RAW Images Remote Shooting Specifying Preferences **Reference**/ Index



## **Changing Color Tone and Color Saturation**

Tone and overall color saturation can be adjusted. If Picture Style (p.46) is set to [Monochrome]. [Color tone] and [Color saturation] switch to [Filter effect] and [Toning effect] (this page).

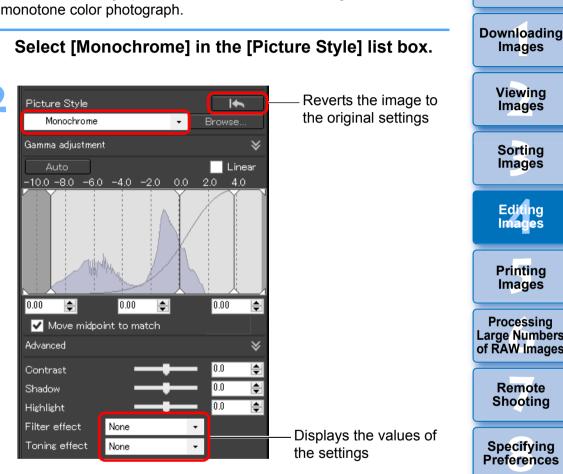


Move the slider to the right to make tones Color tone: more vellowish, and to the left to make tones more reddish.

• Color saturation: Adjusts the overall color intensity for the image. Move the slider to the right for more intense colors, and to the left for less intense colors.

## **Adjusting Monochrome**

When the Picture Style (p.46) is set to [Monochrome], you can create monochrome photographs with effects similar to filtering, or with a look of monotone color photograph.



Contents

• Filter effect: Creates a monochrome photograph where the white of clouds and the green of trees are emphasized.

Filter	Example of effect
None	General monochrome image without filter effect.
Yellow	Blue sky is reproduced more naturally and white clouds emerge clearly.
Orange	Blue sky becomes somewhat darker. The brightness of the setting sun increases further.
Red	Blue sky becomes quite dark. Autumn leaves become clear and bright.
Green	Human skin tones and lips become softer. The green leaves of trees become clear and bright.

 Toning effect: Creates a monochrome photograph to which a single color has been added. You can choose from [None], [Sepia], [Blue], [Purple] and [Green].

Increase the [Contrast] to emphasize the filter effect

#### Advanced

## **Adjusting Dynamic Range**

Dynamic range (width of gradation expression) from dark points to bright points in an image can be adjusted.

points in an image can be adjusted.	Downloading Images
Picture Style       (Standard)       Gamma adjustment	Viewing Images
Auto -100 -80 -60 -40 -20 00 20 40 Move downwards Output white points Move to the left or right	Sorting Images
Input white points Move to the left or right Mid (medium tone) point	Editing Images
0.00       ●       0.00       ●       Output black points         ✓       I/ove midpoint to match       ●       ●       ●       ●	Printing Images
Advarbed Contrast Shadow Contrast Co	Processing Large Numbers of RAW Images
Highlight 0.0 Color tone 0.0 Color saturation 0.0 Color	Remote Shooting
Move to the left or right Input black points	Specifying Preferences
<ul> <li>The horizontal axis shows the input level and the vertical axis shows the output level.</li> <li>Checkmark the [Move midpoint to match] checkbox to link the</li> </ul>	Reference/ Index
mid-point to your adjustments to the input white points and input black points.	
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troduction
Contents
ownloading Images

In

## ÷₩÷ [

#### [Linear] - A function for advanced adjustment

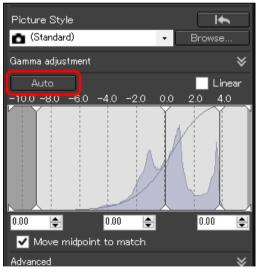
Use [Linear] when you adjust images using image editing software that has advanced editing functions. Note that when [Linear] is checkmarked, the image becomes dim.

[Contrast], [Highlight], [Shadow], and [Auto Lighting Optimizer] (p.55) will not function when [Linear] is checkmarked.

## Adjusting Gradation and Luminance Automatically

In order to give the image desirable gradations and luminance, automatic adjustments are applied for an appropriate dynamic range.

#### Click the [Auto] button.



→ In order to give the image desirable gradations and luminance, the dynamic range is automatically adjusted.

- White points, midpoint, and black points in the [Gamma adjustment] panel as well as [Highlight] and [Shadow] in the [Advanced] panel are adjusted automatically.
- Settings that are reset and those that are not with this adjustment are as follows.
  - Settings that are reset
    - · Auto Lighting Optimizer
    - · [Contrast] in the [Advanced] panel
  - Settings that are not reset
    - · Brightness adjustment
    - $\cdot$  White balance adjustment
    - · Linear\*
    - \* White points and black points are automatically adjusted.

Downloading Images Viewing Images Sorting Images Editing Images Printing Images Processing Large Numbers

Large Numbers of RAW Images

> Remote Shooting

Specifying Preferences

Reference/ Index



An image may look unnatural after automatic adjustment. In such a case, reduce the degree of shadow and highlight adjustment.

## **Using the Auto Lighting Optimizer**

If the shooting result is dark or the contrast is low, you can use the Auto Lighting Optimizer function to auto-correct the brightness and contrast, and obtain a more favorable image.

You can also change the setting of the image shot with the camera's Auto Lighting Optimizer function.

This function also can be used for JPEG/TIFF images in addition to RAW images.

\* ALO stands for Auto Lighting Optimizer.



 For the image shot with the camera's Auto Lighting Optimizer function, the checkbox is already checked.

#### Change the setting according to your preferences.



Select from three levels: Low/Standard/ Strong

- → Auto correction is applied to the image to match the setting.
- For the image shot with the camera's Auto Lighting Optimizer function, the setting at the time of shooting is applied as the default value.
- To cancel the Auto Lighting Optimizer, remove the check mark from the checkbox.
- When [Highlight tone priority] is set to [Enable] on any supported EOS camera other than the EOS-1D Mark IV, or EOS 5D Mark II, the Auto Lighting Optimizer cannot be used for RAW images.
- You cannot use the Auto Lighting Optimizer with multipleexposure RAW images created with the camera.
- When you apply Auto Lighting Optimizer to the RAW and JPEG images shot simultaneously, the correction results of the two images may differ.

Images Viewing Images Sorting Images

Printing

Images

Processing Large Numbers of RAW Images

> Remote Shooting

Specifying Preferences

Reference/ Index



Introduction

Contents

Downloading

Contents

## **Adjusting Image Sharpness**

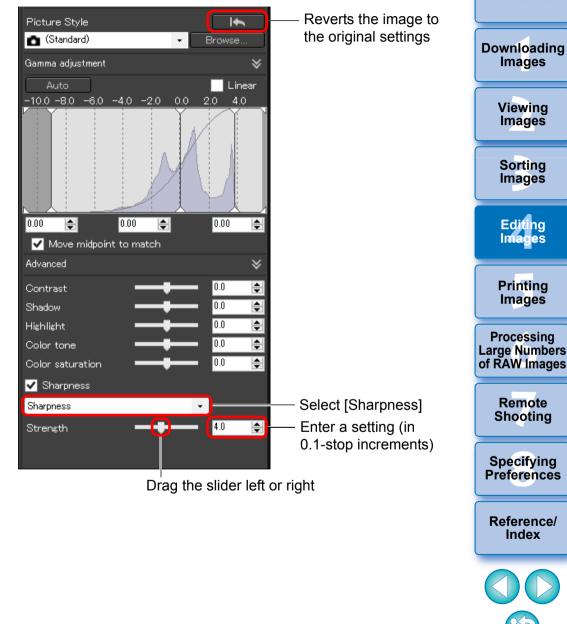
You can make the overall atmosphere of an image sharper or softer. Adjustment can be made by selecting from two modes, [Sharpness] and [Unsharp mask].

[Sharpness]: Controls the sharpness of an image by adjusting the level of emphasis for the outline of the image. The further to the right the [Sharpness] slider is moved (the larger the setting value), the more the edges are emphasized for a sharper image.

[Unsharp mask]: Adjusts the image's sharpness more finely.

- [Strength]: Shows the level of emphasis for the outline of the image. The further to the right the slider is moved (the larger the setting value), the more the image's edges are emphasized for a sharper image.
- [Fineness]: Shows the fineness of the emphasized outline. The further to the left the slider is moved (the smaller the setting), the easier it becomes to emphasize fine details.
- [Threshold]: Sets "how much contrast difference there should be compared to surroundings before emphasizing edges".

# Select [Sharpness] from the list box and adjust the setting.

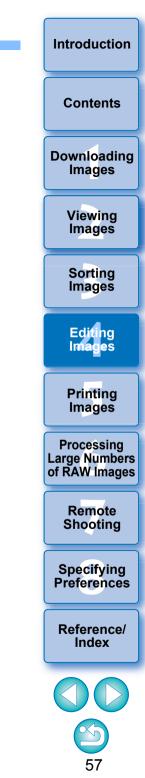


#### **Detailed Setting of Image Sharpness**

Select [Unsharp mask] from the list box and adjust the setting.



Adjust image sharpness with the window view set to [400%], [200%] or [100%]. If the view is set to [Fit to window] (full view), you may not be able to correctly check the adjustment results.

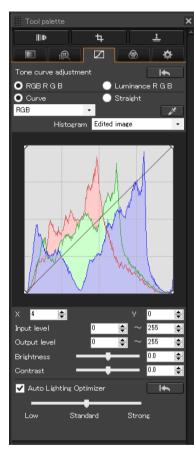


# **Editing with the Tone Adjustment Tool Palette**

With the Tone Adjustment tool palette, you can adjust images with the same functions as general image editing software.

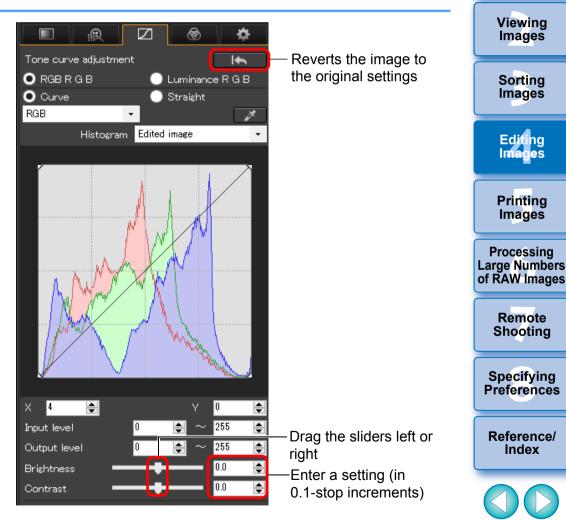
#### Select an image in the main window, etc.

#### Display the Tone Adjustment tool palette.



## **Adjusting Brightness and Contrast**

The brightness and contrast of an image can be adjusted. Since the adjustment range is broader than the same functions in the Basic Adjustment tool palette, the image color may be saturated, or the image quality may deteriorate if you adjust too much. Be especially careful when adjusting.



Contents

Downloading

Images

Contents

- **Brightness:** Move the slider to the right to make an image brighter and to the left to make an image darker.
- **Contrast:** Used to adjust modulation and degree of contrast of color. Move the slider to the right to make contrast of an image stronger and to the left to make contrast weaker.

### Adjusting Color Tone Using Click White Balance

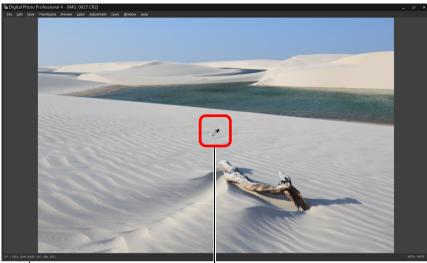
You can adjust white balance using a selected part of an image as the standard for white to make the image appear natural. Using click white balance is effective when using it in parts of an image where white color tone has changed under the influence of a light source.

one has changed under the influence of a light source.	Downloading Images
Click the [ ] button.	Viewing Images
Tone curve adjustment     Image: Curve adjustment       O RGB R G B     Luminance R G B       O Curve     Straight       RGB     Image: Curve adjustment	Sorting Images
Histogram Edited image	Editing Images
	Printing Images
	Processing Large Numbers of RAW Images
	Remote Shooting
	Specifying Preferences
Input level 0 🔿 ~ 255 🔿 Output level 0 🎝 ~ 255 🌩 Brightness - 0.0	Reference/ Index
Contrast	

The adjustment range is –100 to +100 (in 0.1-stop increments when entering a value).



#### Click on a point that is to be the standard for white.



Click The coordinates of the cursor position and the RGB values (8-bit conversion)

- → The color of the image is adjusted with the point you selected as the standard for white.
- If you click on another point in the image, the white balance is adjusted again.
- To finish click white balance, right-click with the mouse or click the [ ] button again.

#### When there are no white areas in your image 2

When there are no white areas in your image, you can adjust the white balance by clicking on a grey point of the image in step 2. This has the same adjustment result as selecting a white area.

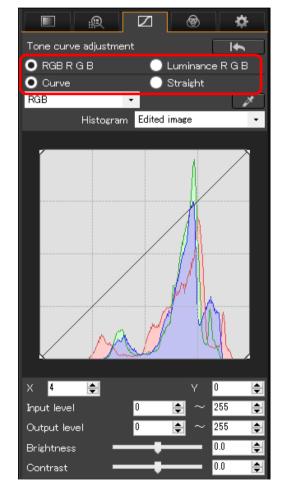
The histogram display changes according to adjustment. You can also display the histogram before making any adjustments.

#### Advanced

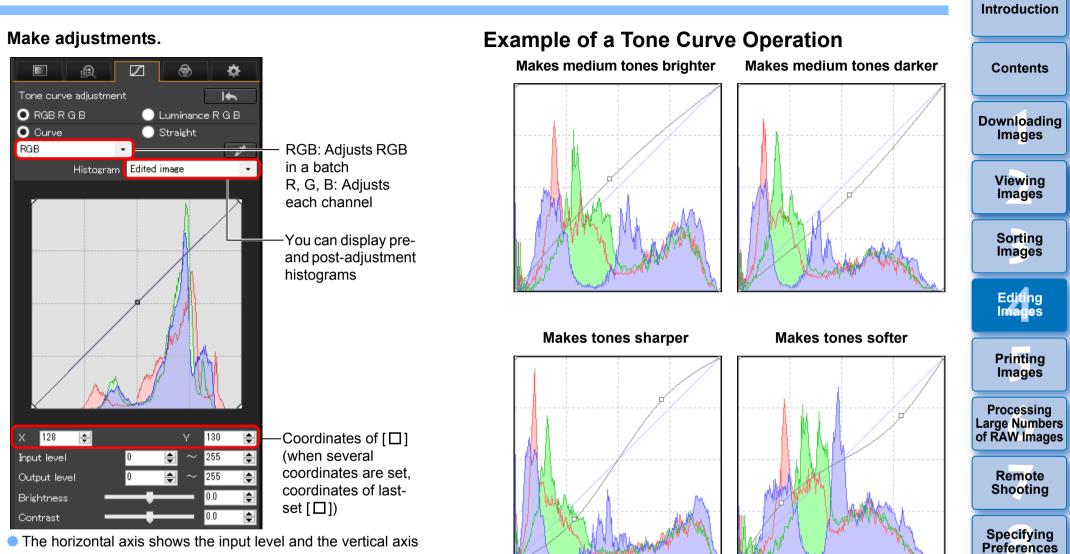
### **Adjusting Tone Curve**

You can adjust the brightness, contrast and color of a specific area by changing the tone curve (p.138).

#### Select the tone curve mode and interpolation method.



Contents Downloading Images Viewing Images Sorting Images Editing Images Printing Images Processing Large Numbers of RAW Images Remote Shooting Specifying Preferences **Reference**/ Index 60



**Reference**/

Index

- shows the output level.
- The maximum number of [□] is 8.
- To delete a [□], either press the <Del> key or double-click on the [□].

Contents

Downloading Images

Viewing

Images

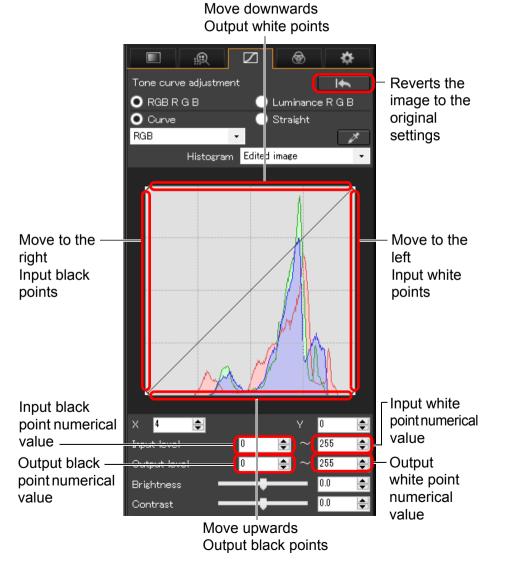
Sorting

Images

Editing Images

#### Advanced Adjusting Dynamic Range

Dynamic range (width of gradation expression) from dark points to bright points in an image can be adjusted.



 The horizontal axis shows the input level and the vertical axis shows the output level.

- The setting range of black points is 0 to 247 (in 1-stop increments when entering a value).
  - The setting range of white points is 8 to 255 (in 1-stop increments when entering a value).
  - You can display pre- and post-editing histograms (p.61).

## Using the Auto Lighting Optimizer

For information on using the Auto Lighting Optimizer, see "Using the Auto Lighting Optimizer" (p.55) in "Editing with the Basic Adjustment Tool Palette".

Printing Images

Processing Large Numbers of RAW Images

> Remote Shooting

Specifying Preferences

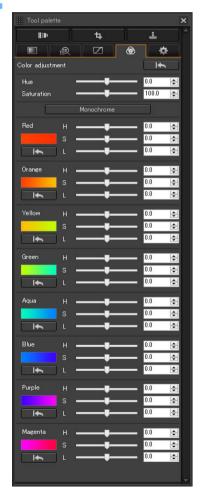
Reference/ Index

## JPEG/TIFF Editing with the Color Adjustment Tool Palette

With the Color Adjustment tool palette, you can adjust the hue, saturation and luminance in a specific color gamut for 8 color gamuts (red, orange, yellow, green, agua, blue, purple and magenta). You can also adjust the hue and saturation for the entire image and tune monochrome images.

Select an image in the main window, etc.

#### Display the Color Adjustment tool palette.



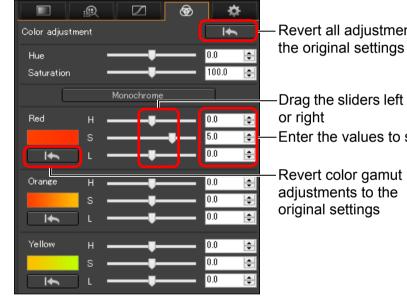
#### Advanced

Editing with the Color Adjustment Tool Palette

## Adjusting a Specific Color Gamut

Use the sliders to make adjustments. You can also make adjustments by directly entering a numeric value.

- H: Adjusts the hue.
- S: Adjusts the saturation.
- L: Adjusts the luminosity.



Revert all adjustments to

Enter the values to set

Processing Large Numbers of RAW Images

> Remote Shooting

Specifying Preferences

**Reference**/ Index



The adjustment ranges are as follows: H: -20 to +20 S: -10 to +10

L: -10 to +10

Introduction

Contents

Downloading Images

> Viewing Images

Sorting Images

Editing Images

Printing

Images

Contents

Downloading Images

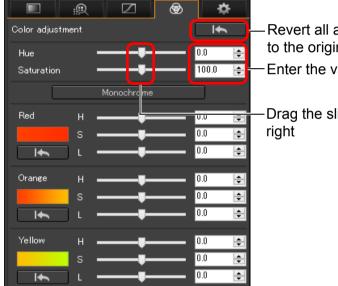
Viewing

Images

# Adjusting Hue and Saturation for an Entire Image

Use the sliders to make adjustments. You can also make adjustments by directly entering a numeric value.

- Hue: Move the slider to the right to make color tones more yellowish, and to the left to make color tones more reddish.
- Saturation: Adjusts the overall color intensity for the image. Move the slider to the right for more intense colors, and to the left for less intense colors.



Revert all adjustments to the original settings Enter the values to set

Drag the sliders left or right

## Adjusting in Monochrome

Press the [Monochrome] button to set the 8 color gamuts to their least saturation (-10) and create a monochrome image. After creating it, you can tune the monochrome image with the H and L sliders for each color gamut, adjusting the hue and brightness.

Color adjustm Hue Saturation	ent		®	<b>I</b> ← 0.0 100.0		<ul> <li>Drag the right</li> <li>Reverted to the restored to t</li></ul>
		Monochrome				
Red	н	<b>-</b>		0.0	-	
	s	ŧ_		0.0	<b>÷</b>	
<b>I</b>	L			0.0	-	
Orange	н			0.0	-	
	s	<b>-</b>		0.0	<b>÷</b>	
	L			0.0	÷	
Yellow	н			0.0	÷.	
	s			0.0	÷	
	L			0.0	÷	

orag the sliders left or ght Revert all adjustments the original settings inter the values to set

Sorting Images

> Editing Images

Printing Images

Processing Large Numbers of RAW Images

> Remote Shooting

Specifying Preferences

Reference/ Index



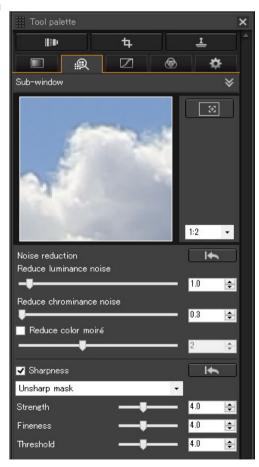
The adjustment range for hue is –30 to +30; and for saturation is 0 to 200.

# **Editing with the Detailed Adjustment Tool Palette**

You can use the Detailed Adjustment tool palette to reduce the noise that occurs in images shot at night or at high ISO settings. This tool palette can also be used in conjunction with the sharpness adjustment functions. Note that you can use the functions in this tool palette with JPEG and TIFF images as well as RAW images.

Select an image in the main window, etc.

### Display the Detailed Adjustment tool palette.

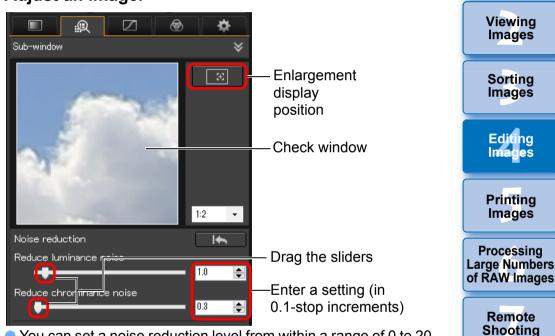


## **Reducing Noise**

You can reduce noise that arises in images shot at night or with a high ISO speed.

\* NR stands for Noise Reduction.

#### Adjust an image.



 You can set a noise reduction level from within a range of 0 to 20. The larger the setting, the larger the noise reduction effect.

 The noise reduction effect can also be checked in the check window.



Introduction

Contents

Downloading Images

#### Setting the same noise reduction level for several images

You can set the same noise reduction level for several images by first selecting multiple images in the main window, and then adjusting the noise reduction level using the [Reduce luminance noise] and [Reduce chrominance noise] sliders.

- If [Reduce luminance noise] is set, resolution may be reduced along with reduction of noise.
  - If [Reduce chrominance noise] is set, color bleeding may occur along with reduction of noise.

#### Adjusting Image Sharpness

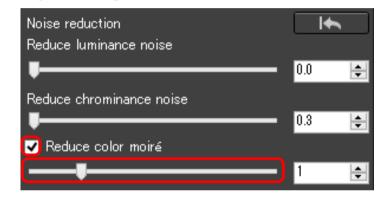
You can also use this palette to adjust the image sharpness. For information on making adjustments, see "Adjusting Image Sharpness" in "Editing with the Basic Adjustment Tool Palette" (p.56).

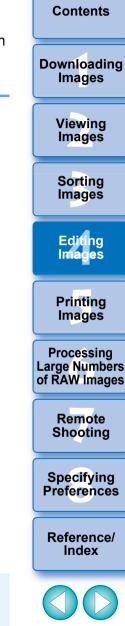
#### **Reducing Color Moiré in an Image**

You can reduce color moiré\* occurring in an image.

\*Color moiré: Occurrence of a color appearing that is not originally in an image. In particular, tends to occur when taking photos of latticed or similar patterns.

## Checkmark the [Reduce color moiré] checkbox and adjust using the slider.





 Depending on the subject, you may not be able to correct color moiré completely.

 Using this function may cause hue to change depending on the subject. If there is a noticeable change in hue, lower the level of adjustment.

## **UPEGITIFE** Editing with the Trimming/Angle Adjustment Tool Palette

You can crop only the part of an image you need, or change the composition of an image where an image shot horizontally becomes vertical. You can also adjust the angle of an image before cropping.

#### Select the image to be cropped.

#### Display the Trimming/Angle Adjustment tool palette.

- You cannot make adjustments with the Trimming/Angle Adjustment tool palette in a window that only shows thumbnails.
- Adjust the angle of the image as needed.

#### Trimming/angle adjustment window

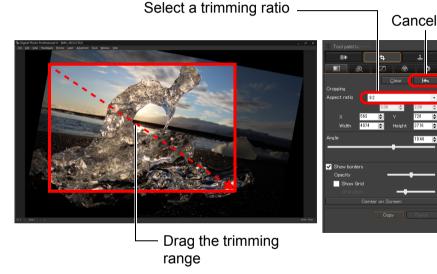


Drag (0.01-degree increments; adjustment range: -45 to +45 degrees)

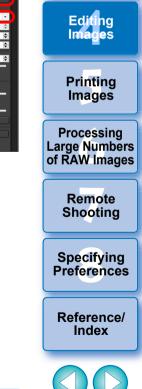
Use the mouse (click  $\blacktriangle/ \bigtriangledown$ ) to adjust the angle or directly enter the adjustment angle (0.01-degree increments; adjustable range: -45 to +45 degrees)

- If you click [Center on Screen], you can display the trimming range in the center of the window.
- When correcting lens aberrations, it is recommended to perform lens aberration correction before adjusting the angle of the image.
- If you have only adjusted the angle of the image, the image will be cropped at the largest possible trimming range.

#### Select a ratio and drag the trimming range.



- The trimming range can be moved by dragging.
- You can enlarge or reduce the size of the trimming range by dragging the four corners of the trimming range.



67

Introduction

Contents

Downloading

Images

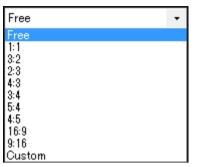
Viewing

Images

Sorting Images

When aspect ratio information is attached to an image shot with any supported camera other than the EOS 5D Mark II, the displayed trimming range is based on the aspect ratio information.

List of aspect ratios (width : height)



[Free]: You can crop an image to any size, regardless of the selectable ratio.

[Custom]: You can crop an image at the specified ratio.

#### Return to the main window.

- The trimming range frame is displayed in the cropped image (p.137).
- When the cropped image is displayed in a preview window or the edit image window, it is displayed in its cropped form.

#### Cropped images

#### The trimmed range can be reverted to its original condition at any time

A cropped image is displayed or printed as a cropped image. However, since the image is not actually cropped, you can always revert to the original image by clicking the [[]] button in the trimming/angle adjustment window or performing the "Re-Editing an Image" procedure (p.87).

#### Display of the cropped image in each window

- Main window: The frame showing the trimming range is displayed on the image (p.137).
- Preview window: The image is displayed in its cropped condition.
- Edit image window: The thumbnail image is the same as the main window display, and the enlarged image is the same as the preview window display.
- Printing a cropped image

You can print as a cropped image by printing it in DPP.

- The image becomes a cropped image when converted and saved The cropped RAW image actually becomes a cropped image when converted to a JPEG or TIFF image and saved (p.85).
- Images that have aspect ratio set will be displayed as cropped images

When aspect ratio or cropping information is attached to a RAW image shot with any supported camera other than the EOS 5D Mark II, the image will be displayed with the set trimming range based on the information. Since the image is not actually cropped, you can change the trimming range or revert to its condition before cropping. However, when a JPEG image is shot either with an aspect ratio set with a camera that supports aspect ratio information or with the EOS 5DS/EOS 5DS R set to crop shooting, its trimming range cannot be changed or the image is actually cropped and saved.\* When reverting to the trimming range that is based on the aspect ratio information at the time of shooting, click the [Clear] button. Also, if you want to cancel all the trimming range, click the [Clear] button.

Contents

Downloading Images

> Viewing Images

Sorting Images

Editing Images

Printing Images

Processing Large Numbers of RAW Images

> Remote Shooting

Specifying Preferences

Reference/ Index



\* When shooting with EOS 5DS/EOS 5DS R, EOS 5D Mark IV, EOS 5D Mark III, or EOS 7D Mark II and [Add cropping information] is set in Custom Functions, aspect ratio information is only set and the image is not actually cropped, even for JPEG images.

#### Operate using the menu

Each operation can also be performed with the menu which appears when you right-click with the mouse on the image.

#### Apply the trimmed range to another image

You can apply the trimmed range to another image by clicking the [Copy] button to copy the trimmed range, displaying another image and then clicking the [Paste] button.

To batch apply a copied trimming range to multiple images, select the cropped image in the main window together with the images to which you want to apply the trimming range and then display the Trimming/ Angle Adjustment tool palette. With the cropped image displayed, click the [Copy] button and then click the [Paste] button. This will apply the trimming range to all the images selected when the trimming/angle adjustment window is displayed.

To select multiple images in the main window, click the images while holding down the <Ctrl> key. To select multiple consecutive images, click on the first image, and then click on the last image while holding down the <Shift> key.

Introduction

Contents

Downloading Images

> Viewing Images

Sorting Images

Editing Images

Printing Images

Processing Large Numbers of RAW Images

> Remote Shooting

Specifying Preferences

Reference/ Index



For images shot with ISO speed range expansion set, noticeable noise may make it difficult to view the image in detail in the trimming/angle adjustment window.

## **Editing with the Lens Correction Tool Palette**

With the Lens Correction tool palette, you can use the lens aberration correction functions and the Digital Lens Optimizer to correct lens aberration in your images and to improve their resolution. This tool palette can also be used in conjunction with the sharpness adjustment functions. Note that the lens aberration correction functions and the Digital Lens Optimizer can only be used with RAW images.

Select an image in the main window, etc.

#### Display the Lens Correction tool palette.



## **Correcting Lens Aberration**

You can easily make corrections to drops in peripheral illumination. distortions in the subject, and color blur which occur by the physical characteristics of the lens or slightly remaining aberration. You can only correct aberration in RAW images which have been shot with compatible lenses. JPEG or TIFF images cannot be corrected. Note that even though the EOS 20D/EOS 20Da and EOS 350D are EOS cameras supporting the Digital Photo Professional, they are not compatible with the lens aberration correction function. Also, note that the lens aberration correction function is compatible with the EOS 5D with the firmware version 1.1.1 and the EOS 30D with the firmware version 1.0.6.

Downloading Images Viewing Images Sorting Images Editing Images Printing Images Processing Large Numbers of **RAW** Images To use this function, the EOS Lens Registration Tool (version 1.4.20 Remote Shooting

- or later) must be installed.
- Lenses compatible with this function are those displayed in the [Add or Remove lens data] window (p.76).
- You can also correct RAW images taken with the compatible lens even when the extender is attached.
- You can also correct RAW images shot with EF50mm f/2.5 Compact Macro fitted with Life Size Converter EF.
- The aberration correction function is not available for images shot with a lens other than those given under "Compatible Lenses". They are therefore not displayed and cannot be used.
- The lens aberration correction function is not available for multiple-exposure RAW images created on the camera.
- EF cinema lenses (CN-E lenses) are not compatible.

Introduction

Contents

Specifying Preferences

**Reference**/ Index

## **Making Corrections**

You can make corrections to any of the five aberrations as below, either one at a time or simultaneously.

- Peripheral illumination
- Chromatic aberration (color fringing which occurs in the periphery of an image)
- Color blur (blue or red color blur which sometimes occurs at the edge of the highlighted area of an image)
- Distortions
   Diffraction

Select an image in the main window.

# Display the Lens Correction tool palette and checkmark the items to be corrected.



Enlargement display section

- Check the results of corrections to peripheral illumination or distortions in the full view.
- Check the results of corrections to chromatic aberration and color blur by clicking the area on the image you want to check and then checking the enlargement display section in the top of the window. You can choose from 4 display scales between 1:1 and 1:4 for the enlargement display.
- You can lessen the degree of correction by moving the slider to the left.
- You can respectively correct red chromatic aberration with the [R] slider of the [Chromatic aberration] or blue chromatic aberration with the [B] slider.
- To correct distortion aberration of images shot with a fisheye lens (EF8–15mm f/4L USM Fisheye or EF15mm f/2.8 Fisheye), four effects can be selected from the [Effect] list box in addition to [Shot settings] normally used for distortion correction.

The level of an effect can be adjusted with the adjustment slider located below [Distortion].

For detailed information on each effect, see "Effects of Distortion Correction for Fisheye Lenses" (p.72).

 For images shot with EF8–15mm f/4L USM Fisheye, a fine-tune slider is also displayed when you select [Emphasize Linearity] from the [Effect] list box.

Adjust the amount of correction for distortion aberration with the adjustment slider, and then adjust with the fine-tune slider if more adjustment is required.

- When the list box for selecting an extender is displayed, select the extender attached at the time of shooting from the list box.
- [Diffraction correction] corrects only those images shot with a camera with a diffraction correction function. By checkmarking this option, images are corrected according to the camera's diffraction correction function. Note that this function cannot be used at the same time as the Digital Lens Optimizer.

Contents

Downloading Images

> Viewing Images

Sorting Images

Editing Images

Printing Images

Processing Large Numbers of RAW Images

> Remote Shooting

Specifying Preferences

Reference/ Index



→ The image is corrected and redisplayed.

→ In the main window, the [) mark is displayed on the image to indicate that the lens aberration correction is applied (p.137).

# Effects of Distortion Correction for Fisheye Lenses

#### Shot settings

By selecting this option, only the aberration corrections will be performed to correct the optical distortions.



#### Emphasize Linearity

This converts the image to a "central projection" style image. This projection method is employed for general lenses.

Since central projection displays straight lines as straight lines, a wide-view panoramic image can be obtained by selecting this option. However, the periphery is stretched, resulting in decreased resolution.



#### Emphasize Distance

This converts the image to an "equidistant projection" style image. This projection method preserves distance relationships. Equidistant projection displays a distance in the same distance anywhere from the center to the periphery. In particular, when shooting a celestial body such as the celestial sphere, same heights above the horizon(declination) are captured at the same heights. This method is therefore used in such photography as celestial photography (star maps, solar path diagrams, etc.).



#### Emphasize Periphery

This converts the image to a "stereographic projection" style image. This projection method emphasizes the periphery.

Stereographic projection allows position relationships on a spherical surface, such as N, S, E, W on a map, to be displayed correctly. It is therefore used for world maps and monitoring cameras.

By selecting this option, the periphery is stretched and may result in decreased resolution.



Contents
Downloading Images
Viewing Images
Sorting Images
Editing Images
Printing Images

Processing Large Numbers of RAW Images

> Remote Shooting

Specifying Preferences

Reference/ Index



#### Introduction

#### Emphasize Center

This converts the image to an "orthographic projection" style image. With this projection method, the center is more emphasized. Since an orthogonal projection allows a subject of the same brightness to be displayed as occupying the same area in the image, this method has typical uses in photography for celestial luminance distributions and center-emphasized animal photography. By selecting this option, the center is stretched and may result in decreased resolution.



## **Shooting Distance Information Slider**

- When correcting RAW images and if shooting distance information has been saved to the image, the slider is set automatically according to this shooting distance information. However, if no shooting distance information is saved to the image, the slider is set automatically to the right end at infinity position and a [<!>] appears above the slider. If the image's shooting distance is not infinite, you can minutely adjust the distance by operating the slider while looking at the screen.
- When correcting RAW images shot with the cameras in the table below, it is set automatically to the right end at infinity position. You can then minutely adjust the distance by operating the slider while looking at the screen if the shooting distance is not infinite.

EOS-1D Mark II N	EOS-1Ds Mark II	EOS-1D Mark II
EOS 1D	EOS 1Ds	EOS 5D
EOS 30D	EOS 400D	-

- For RAW images shot with MP-E65mm f/2.8 1-5x Macro Photo or EF50mm f/2.5 Compact Macro with Life Size Converter EF, the slider indicator changes to [Magnification factor].
- The [Shooting distance information] slider is applied to all the correction items with check marks.
- If the lens requires no adjustment with the [Shooting distance information] slider, the slider cannot be used.

Contents

Downloading Images

> Viewing Images

Sorting Images

Editing Images

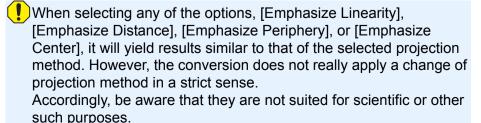
Printing Images

Processing Large Numbers of RAW Images

> Remote Shooting

Specifying Preferences

Reference/ Index



# **Correcting Multiple Images at a Time**

You can apply the same corrections to several images by first selecting multiple images in the main window, and then performing correction procedures (p.71).

Also, you can apply same corrections by copying the recipe of the corrected image and pasting it onto the multiple images (p.89).

### Additional information

### Some noise appeared in the periphery of an image after correcting [Peripheral illumination]

You can reduce the noise by using luminance and/or chromatic noise reduction of the noise reduction function (p.65). However, if you had applied high amount of [Peripheral illumination] correction to the images that have been shot at night or with a high ISO speed, the noise might not be reduced.

### The image appears with less resolution after correcting [Distortion]

You can make the image similar to the one before correction by applying more sharpness with the sharpness adjusting function (p.66).

### The colors of the image became weaker after correcting [Color blur]

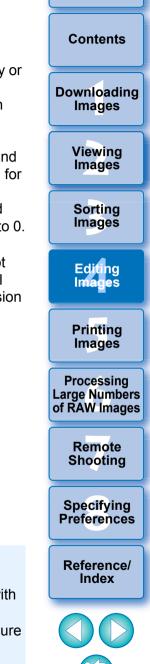
You can make the image similar to the one before correction by adjusting the color tone (p.52) and/or the color saturation (p.64) to make the color deeper.

### The result of [Color blur] correction cannot be detected

[Color blur] correction is effective for correcting blue or red color blur which occurs at the edge of the highlighted area of an image. If conditions do not match, correction cannot be made.

# **Digital Lens Optimizer**

This function enables the resolution of images to be increased by removing any remaining aberration related to image-forming capability or any deterioration of resolution resulting from diffraction phenomena. These optical phenomena cannot be corrected under Lens aberration correction (p.70). Correction is achieved using the designed value of each lens. You can correct these optical phenomena in RAW images which have been shot with compatible lenses. JPEG. TIFF. S-RAW, and M-RAW images cannot be corrected. To use this function, [Lens data] for the lens used to shoot images first needs to be downloaded to your computer. Before using the Digital Lens Optimizer, it is recommended that you set [Sharpness] or [Strength] for [Unsharp mask] for images to 0. Note that even though the EOS 20D/EOS 20Da and EOS 350D are EOS cameras supporting the Digital Photo Professional, they are not compatible with the Digital Lens Optimizer. Also, note that the Digital Lens Optimizer is compatible with the EOS 5D with the firmware version 1.1.1 and the EOS 30D with the firmware version 1.0.6.



- To use this function, the EOS Lens Registration Tool (version 1.4.20 or later) must be installed.
- The Digital Lens Optimizer is also available for images shot with an extender attached to a compatible lens.
- You cannot use the Digital Lens Optimizer with multiple-exposure RAW images created on the camera.
- EF cinema lenses (CN-E lenses) are not compatible.
- [Diffraction correction] cannot be used at the same time as the Digital Lens Optimizer.

# Using the Digital Lens Optimizer

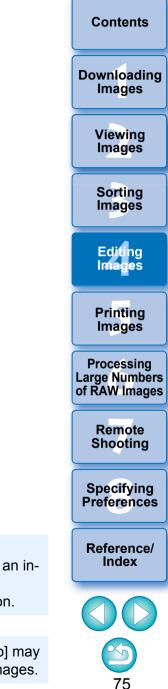
Check the status of [Lens data] for [Digital Lens Optimizer].

Shooting distance information	
	<u> </u>
C Lens data : No	
Digital Lens Optimizer	
<b>.</b>	 0.0 🚖
0	

- [Not Available] is displayed for an image shot with a noncompatible camera or lens, or for a non-compatible image such as a JPEG, TIFF, S-RAW, or M-RAW image. The function cannot be used for these images.
- If [No] is displayed, proceed to step 2. To use the function, you need to download the lens data for the lens used when shooting the image. It is recommended that you check the lens used when shooting the image beforehand. The lens used can be checked using the image information and shooting information displays. You can also check it with the menu that appears when you right-click with the mouse on an image.
- If [Yes] is displayed, proceed to step 4.

Click the [	] button.
Shooting distance information	
Lens data : No	
0	0.0 ÷

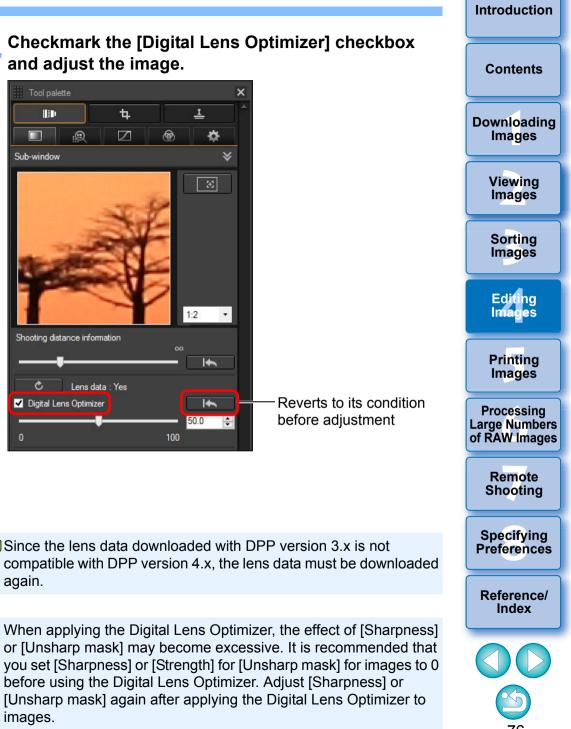
→ The [Add or Remove lens data] window appears.



Introduction

- To use this function, an environment with Internet access (subscription to a provider, browser software installed and an inplace line connection) is required.
- An administrator-level privilege is required for this operation.

Before you click the [**CCC**] button in step 2, Lens data [No] may be displayed instead of [Not Available] for non-compatible images.

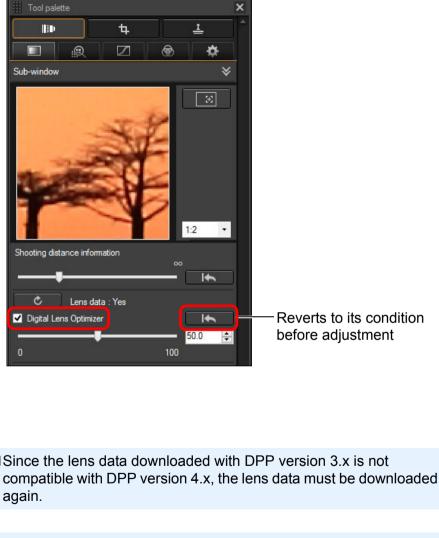


Checkmark the checkbox for the lens used to shoot the image, and click the [Start] button.

•	Add or Re	move lens dat	a (Version 1.4.20)	×
-Select a lens categor	v			
✓ Ultra wide and		✓ Macro	✓ EF-M	
✓ Standard and m	edium telephoto	✓ Zoom		
✓ Telephoto		EF-S	Select all	Clear all
Extender	✓ EF1.4X	✓ EF2X	L lenses on	ly .
EE20-35mm f/35				·
EF24-70mm f/28				^
EF24-70mm f/2.8				
EF24-70mm f/4L	IS USM			
EF24-85mm f/3.5	-4.5 USM			
C 5591 105mm 6/9	S S S IS STM			
🚺 🗹 EF24-105mm f/4l	IS USM			
EF 20-70mm 17 2.0				
EF28-90mm f/4-9				
EF28-90mm f/4-9				
EF28-90mm f/4-8				
EF28-105mm f/35-45 II USM				
EF28-105mm f/4				
EF28-135mm f/3				
EF28-200mm f/3				
EF28-200mm f/3.				
EF28-300mm f/3	5-5.6L IS USM			
EF55-200mm f/4.	5-5.6 II USM			
EF55-200mm f/4.	5-5.6 USM			
EF70-200mm f/2.				
FE70-200mm f/2	81 LISM			× I
Destination Folde	r Add:1 / [	Delete:0	Star	t Cancel
Note				<u>^</u>
				×

- → The lens data is downloaded to your computer.
- → When the downloading of the lens data ends, the indication for the lens data changes to [Yes].
- Lenses compatible with this function are those displayed in the [Add or Remove lens data] window.
- If you remove the check mark from the checkbox for alreadydownloaded lens names and click the [Start] button, the lens data will be deleted from your computer.
- Depending on the type, current state, etc. of software running on your computer, the download of the lens data may fail. If it occurs, wait for a while then try downloading the data again.
- If you want to change the destination where lens data is saved when there is already downloaded lens data, move the previously downloaded lens data from the old folder to the new destination folder manually.

Checkmark the [Digital Lens Optimizer] checkbox and adjust the image.



- Use the slider to adjust the Digital Lens Optimizer effect.
- If no shooting distance information is saved to the image, the shooting distance slider is set automatically to the right end at infinity position and a [<!>] appears above the shooting distance slider.
- If the lens requires no adjustment with the [Shooting distance information] slider, the slider cannot be used.
- Images cannot be corrected for [Chromatic aberration] in the lens aberration correction tool pallet if the Digital Lens Optimizer has been applied.
- → In the main window, the [ ] mark is displayed on the image to indicate that the Digital Lens Optimizer is applied (p.137).

# **Adjusting Image Sharpness**

You can also use this palette to adjust the image sharpness. For information on making adjustments, see "Adjusting Image Sharpness" in "Editing with the Basic Adjustment Tool Palette" (p.56).

77

# **Editing with the Dust Delete/Copy Stamp Tool Palette**

You can use this tool palette to erase dust and other marks in a shot image and to correct an image by copying part of the image and pasting it onto an unnecessary part of the image.

Note that you can use the functions in this tool palette with JPEG and TIFF images as well as RAW images.

## **Dust Delete/Copy Stamp Tool Palette**



# **Performing Automatic Dust Erasure Processing**

The Dust Delete Data that is appended to images can be used to automatically erase dust spots.

Select an image with dust delete data attached in the main window, etc.

### Display the Dust Delete/Copy Stamp tool palette.

- You cannot make adjustments with the Dust Delete/Copy Stamp tool palette in a window that only shows thumbnails.
- When the image has redrawn itself, click the [Apply Dust Delete Data] button.



→ Dust spots are erased in a single operation.

Return to the main window.

Contents Downloading Images Viewing Images Sorting Images Editing Images Printing Images Processing Large Numbers of **RAW** Images Remote Shooting Specifying Preferences **Reference**/ Index

78

Penc

Introduction

**32bit** On 32-bit OSs, the results of erasing dust manually (repair function) (p.80) and erasing unwanted parts of an image (copy stamp function) (p.82) can only be checked in the window in which erasure was performed, in the print results, or in the image after being converted and saved.

### Additional information

 The dust-erased image can be reverted to its original condition at any time

A dust-erased image is displayed or printed as a dust-erased image. However, since the dust on the image is not actually erased, you can always revert to the original image by clicking the [[][]]] button in the Dust Delete/Copy Stamp tool palette or performing the "Re-Editing an Image" procedure (p.87).

### Printing dust-erased images

You can print as a dust-erased image by printing it in DPP.

 To erase dust spots that cannot be erased with the automatic dust erasure processing

In automatic dust erasure processing, dust spots are erased based on information relating to dust saved in the Dust Delete Data. However, there may be cases where you will not be able to erase dust spots depending on the type of dust. If this occurs, erase those dust spots using the repair function (p.80) or the copy stamp function (p.82).

### The image becomes a dust-erased image when converted and saved

The dust-erased RAW image actually becomes a dust-erased image when converted to a JPEG or TIFF image and saved (p.85).

#### Applying the dust erasure result to another image

You can apply dust erasure to the same place in another image by clicking the [Copy] button to copy the dust erasure results and then displaying the other image to which you want to apply the results and clicking the [Paste] button.

### Automatic Dust Erasure Processing in the Main Window

In the main window, you can also automatically erase dust spots in multiple images appended with Dust Delete Data.

# Select multiple images appended with Dust Delete Data, and then select the [Adjustment] menu ▶ [Apply Dust Delete Data].

Dust spots in all the selected images are erased in a single operation.

Contents Downloading Images Viewing Images Sorting Images Editing Images Printing Images Processing Large Numbers of RAW Images Remote Shooting Specifying Preferences **Reference**/ Index

# Manually Erasing Dust (Repair Function)

You can erase dust spots in an image by selecting them one by one.

- In the main window, select the image from which you want to erase dust spots.
- Display the Dust Delete/Copy Stamp tool palette.

### Click the point from where dust is to be erased.



Click

- → The display changes to 100% view.
- The display position can be changed by dragging.

### Click the button that matches the dust spot to be erased.

- If the dust spot is dark in color, click the [\_\_\_\_\_] button, and if the dust spot is light in color, click the [ (Light) button.
- When you move the cursor over the image, the dust erasure range is indicated with [O].

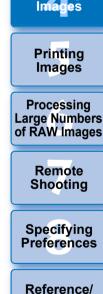
Place the dust spot to be erased within the  $[\bigcirc]$  and click.



Click

- $\rightarrow$  The dust spot within the [O] is erased.
- Click on another part of the image to continue erasing dust spots within the displayed image.
- To erase dust in another part of the image, either right-click with the mouse, or click the button clicked in step 4 again to cancel dust erasure processing and perform the operation again from step 3.
- When the dust spot cannot be erased, [N] is displayed.

### Return to the main window.





Index

#### Introduction

### Contents

Downloading Images

> Viewing Images

Sorting Images

Editing Images

#### Introduction

### Additional information

- Click several times when dust spots are not erased completely Where unwanted dust spots are not erased even after performing step 5 once, they may be erased completely when you click several times.
- Mainly spots of dust can be erased with the repair function Spots of dust can be erased with the repair function. You may be unable to erase lines of dust. In this case, use the copy stamp function (p.82).
- The dust-erased image can be reverted to its original condition at any time

A dust-erased image is displayed or printed as a dust-erased image. However, since the dust on the image is not actually erased, you can always revert to the original image by clicking the [[]][]]] button in the Dust Delete/Copy Stamp tool palette or performing the "Re-Editing an Image" procedure (p.87).

### Printing dust-erased images

You can print as a dust-erased image by printing it in DPP.

 The image becomes a dust-erased image when converted and saved

The dust-erased RAW image actually becomes a dust-erased image when converted to a JPEG or TIFF image and saved (p.85).

-à Useful functions of the copy stamp window Contents Switch between full screen display/normal screen display using shortcut keys You can also switch between full screen display/normal screen Downloading display by pressing the <Alt> + <Enter> keys. Images Viewing Images Sorting Images Editing Images Printing Images Processing Large Numbers of RAW Images Remote Shooting Specifying Preferences **Reference**/ Index For images shot with ISO speed range expansion set, noticeable noise may make it difficult to view dust spots in the copy stamp window, so using this function is not recommended. 81

# Erasing Unwanted Parts of an Image (Copy Stamp Function)

You can correct an image by pasting a section copied from another part of the image to an unwanted part of the image.

# Follow steps 1 to 3 in "Manually Erasing Dust (Repair Function)" (p.80).

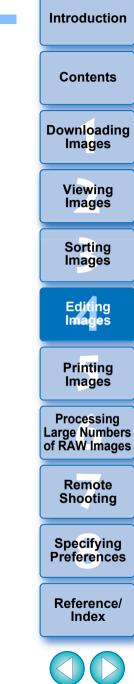
### Specify the section to be copied.

- Click on the section that is to be the copy source after clicking the [Select Copy Source] button.
- To change the section that is to be the copy source, perform the operation above again.
- To fix the position of the copy source, checkmark [Fix Copy Source position].

## Correct the image.

- Click or drag on the part of the image you want to modify. [+] in the window indicates the copy source and [O] indicates the copy destination.
- → The copied image is pasted in the position to which it was dragged.
- For [Pen type], you can select from [Brush] (the pasted image's borders simulate a brush) and [Pencil] (the pasted image's borders are sharp).

Return to the main window.



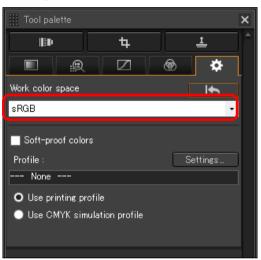
82

# **Setting Work Color Space**

A different work color space (p.139) from the default settings (p.131) can be set for each image.

Display the Settings tool palette ▶ select the color space to be set.

### Settings tool palette

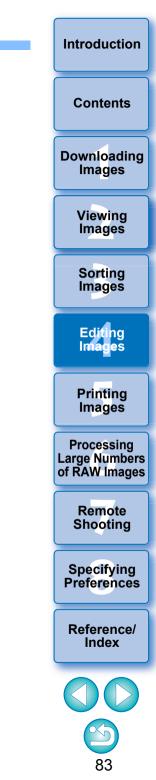


# **?** A color space set individually does not change even when the default setting is changed

If you set an image with a color space different to the default setting and then subsequently change the default color space setting (p.131), this default setting will not be applied and the individually set color space will remain.

# The color space of a RAW image can be changed freely as many times as required

Since only the image processing conditions information changes, the color space of a RAW image can be changed at any time.



# **Using the Soft-Proof Colors Function**

By using the soft-proof colors function, you can apply a selected printing profile or CMYK simulation profile to the displayed image. The reliability of the soft-proof colors function depends on the monitor quality, the monitor and printer profiles, and surrounding lighting conditions where you are working.



The [Color management] tab sheet in [Preferences] appears.
 Select the profile to apply from the [Printing profile]
 or [CMYK simulation profile] list box, and click the [OK] button.

		Preferences		×
General settings	Default settings of Work color space *			
Image Processing 1	sRGB	Apple RGB		
Image Processing 2	Adobe RGB	ColorMatch RGB		
Color management	O Wide Gamut RGB			
View settings Properties display settings	Use shooting color space as work co	or space		
settines	Color matching settings			
	For display			
	⊖ sRQB			
	<ul> <li>Use the OS settings</li> </ul>			
	<ul> <li>Monitor profile</li> </ul>			
			Browse	
	Printing profile	Rendering in		
	x00000000000000		e Colorimetric	
			e Golorimetric	
	CMYK simulation profile	Rendering in	ntents	
	None	Percept	tual	
		<ul> <li>Relative</li> </ul>	e Colorimetric	
			OK Cancel	
*Changes take effect a	tter restarting		OR OUNDI	

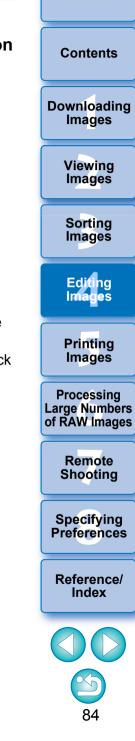
→ The [Color management] tab sheet in [Preferences] closes.

According to the profile selected in step 2, select either [Use printing profile] or [Use CMYK simulation profile], and checkmark the [Soft-proof colors] checkbox.

lin 14		<u>1</u>
	1 🛞	*
Work color space		
sRGB		•
Soft-proof colors		Settings
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX		
<ul> <li>Use printing profile</li> <li>Use CMYK simulation pro</li> </ul>	file	

The profile selected in step 2 is applied to the displayed image including its thumbnail.

The profile is not applied to images displayed in the quick check window.



Introduction

# JPEG/TIFF Saving Editing Results

# Saving Editing Contents to an Image

All the contents adjusted with the tool palette (recipe) can be saved to the image or saved as a separate image.

## Select the [File] menu ▶ desired item.

ile			
Clos	e window	Ctrl+W	
Save	e	Ctrl+S	
Save	e As	Ctrl+Shift+S	
Con	vert and save	Ctrl+D	
Bato	ch process	Ctrl+B	
Print	t	Ctrl+P	
Print	t with detailed setting	Ctrl+Alt+P	
Plug	j-in printing	+	
Add	to collection	Ctrl+G	
Rem	nove from collection	Ctrl+Shift+G	
Clea	ar collection		
Sele	ect collection	•	
Dele	ete collection	•	
Boo	kmark		
Rem	nove bookmark		
Mov	ve to Recycle Bin	Del	
Exit		Alt+F4	_

→ Your adjustments are saved to the image.

# Saving as a separate image

To view, edit and print a RAW image with software other than DPP, convert to a more versatile JPEG or TIFF image and save. If a JPEG or TIFF image is saved as described below, the image can be saved as a separate image with the adjustments (recipe) applied to it. The image is saved as a separate image, so the original image remains footod ur

unaffeo	unaffected.				
Se	elect the image to	be conve	erted.		
<u> </u>	elect the [File] me	enu ▶ [Cor	nvert and save].		
	Close window	Ctrl+W			
	Save Save As	Ctrl+S Ctrl+Shift+S			
	Convert and save	Ctrl+D			
	Batch process	Ctrl+B			
	Print Print with detailed setting Plug-in printing	Ctrl+P Ctrl+Alt+P	•		
	Add to collection Remove from collection Clear collection	Ctrl+G Ctrl+Shift+G			
	Select collection Delete collection		<b>*</b>		
	Bookmark Remove bookmark				
	Move to Recycle Bin	Del			
	Exit	Alt+F4	_		

→ The [Convert and save] window appears.

# Introduction

Contents

Downloading Images

Viewing Images

> Sorting Images

Editing Images

Printing Images

Processing Large Numbers of RAW Images

> Remote Shooting

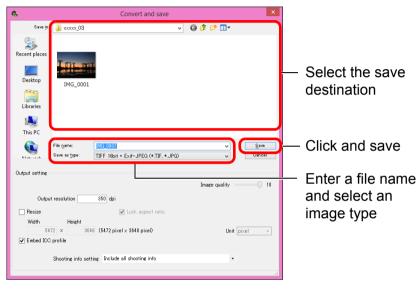
Specifying Preferences

**Reference**/ Index



# Specify the necessary settings, and then click the [Save] button.

 By default, the image is converted and saved to a JPEG image with the highest image quality, without changing the image size. Change the settings according to your requirements.



The RAW image is converted to a JPEG or TIFF image which is then saved as a new image in the specified save destination.

### To save the developing/editing results for the version you are currently using

DPP's RAW image development processing technology is continually being improved upon so that you can perform the latest image processing more appropriately.

Meaning that, between two different versions of DPP, processing results may differ very slightly even if with the same RAW image data, or the results of significant editing of RAW image data with an attached recipe may be different.

When you want to save the developing or editing results of the version you are currently using as it is, saving the image as a separate file (p.85) is recommended.

- By saving as a separate JPEG or TIFF image as explained above, some image deterioration that accompanies editing/saving occurs as when editing with general image editing software.
  - By saving as explained above, a trimmed image (p.67) or dusterased image (p.78 to p.82) actually becomes a trimmed image or dust-erased image.
  - You can batch convert and save multiple images (p.117).

Downloading Images

Introduction

Contents

Viewing Images

Sorting Images

Editing Images

Printing Images

Processing Large Numbers of RAW Images

> Remote Shooting

Specifying Preferences

Reference/ Index



# **Re-Editing an Image**

Only the image processing conditions are changed in images adjusted with the tool palette (p.43 to p.83), so the "original image data itself" remains unaffected. (The trimming range or dust-erasure information of a cropped image (p.67) or dust-erased image (p.78 to p.82) is simply saved to the image.)

For this reason, you can undo any adjustments saved (p.85) to the image, trimming range and dust-erasure information, and revert to the condition when last saved, or when the image was shot.

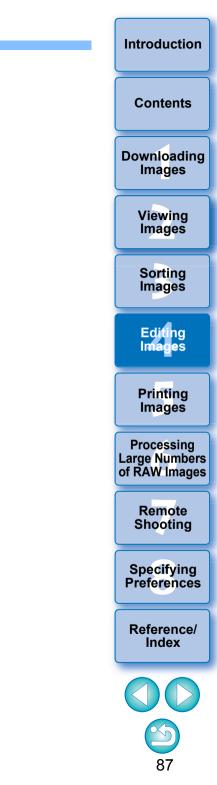
### Select the image that is to be re-edited.

## Select the [Adjustment] menu ▶ desired item.

#### Adjustmen

I	Rotate Left	Ctrl+L	
	Rotate Right	Ctrl+R	
	Apply Dust Delete Data		
	Work color space		۲
1	Revert to last saved settings	Ctrl+Alt+Z	
	Revert to shot settings	Ctrl+Shift+Z	J

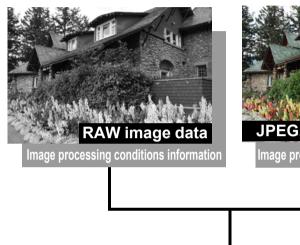
→ The image reverts to the conditions of the selected item.



# Utilizing Adjustment Contents (Recipe)

All the adjustment contents (recipe) made using the tool palette can be saved as an individual recipe file (extension ".dr4") and loaded and applied to another image.

You can edit images efficiently by selecting and adjusting one image from images shot with the same shooting environment and batch applying the adjustment results to a large number of images.





# cipe .dr4

Contents adjusted using the tool palette can be handled individually as a recipe file (extension ".dr4").

- A recipe file with contents that can only be adjusted in RAW images are not reflected even if it is applied to a JPEG or TIFF image.
  - Recipes are not compatible between DPP version 4.x and DPP version 1.x to 3.x. Images with DPP version 1.x to 3.x recipe files attached are displayed with the shot settings in DPP version 4.x. Conversely, images with DPP version 4.x recipe files attached are displayed with the shot settings in DPP version 1.x to 3.x.

Images Sorting Images Editing Images Printing Images

Processing Large Numbers of RAW Images

> Remote Shooting

Specifying Preferences

Reference/ Index



Introduction

Contents

Downloading

Images

Viewing

Introduction

# Copying a Recipe and Applying to Another Image

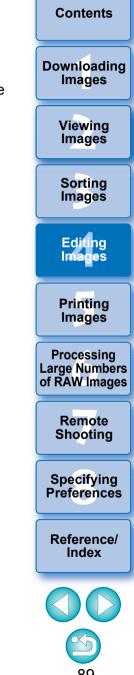
You can copy a recipe of an edited image and then apply it to another image.

- Select the image with the recipe you want to copy.
- To copy all items of a recipe, select the [Edit] menu ▶ [Copy recipe]. To copy only selected items of a recipe, select the [Edit] menu ▶ [Copy selected recipe].
  - → The recipe is copied.
  - To select recipe items, select the [Edit] menu 
     [Select and copy recipe settings] and select items in the window that appears.
     After specifying settings, click the [OK] button and close the window.
- Select the image to which the recipe is to be applied and then select the [Edit] menu ▶ [Paste recipe].
- → The recipe is applied to the image.

When a recipe for an image is copied and applied to an image in a different orientation, the image orientation also changes. To prevent the orientation of the image from changing, select the [Edit] menu ► [Select and copy recipe settings] and remove the check mark from the [Rotate left / Rotate right: 0°] checkbox in the window that appears.

# Saving a Recipe as a File

- Select an edited image, and then select the [Edit] menu ▶ [Save recipe in file].
- → The [Save recipe in file] dialog box appears.
- To save all of a recipe, select the [Save all recipes] option in the window displayed.
- To select and save recipe settings, select the [Save selected recipes] option in the window displayed and then click the [Specify Recipe Details] button. In the window displayed, checkmark the recipe settings to be saved and then click the [OK] button.
- Select the destination folder, enter a file name, and then click the [Save] button.



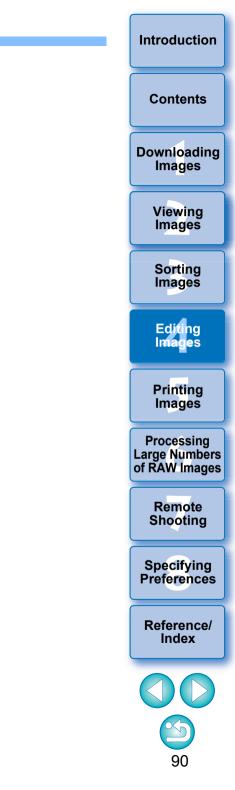
# Loading and Applying Recipes

Select the image to which a recipe is to be applied, and then select the [Edit] menu ▶ [Read and paste recipe from file].

→ The [Open] dialog box appears.

Select a recipe and click the [Open] button.

 $\rightarrow$  The recipe is applied to the image.



# JPEGITIFF Adjusting by Comparing Multiple Images

You can synchronize the areas in different images to be displayed among multiple preview windows, and adjust images while comparing them.

In the preview window, display the multiple images to be compared.

## Align the images.

- Select the [Window] menu 
   [Arrange horizontally] or [Arrange vertically].
- → The preview windows are aligned.
- Select the [Preview] menu ▶ [Sync preview position] and [Sync preview display size].

### Enlarge the image.

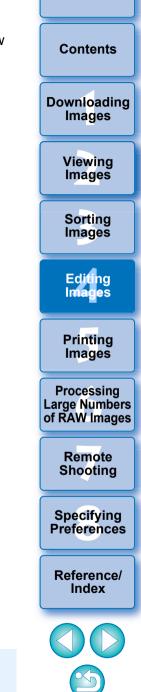
Enlarge and display any of the preview windows.



Other preview windows will also be displayed in the same position/enlargement ratio. Move the area to be displayed.

### If you move the enlargement display area in one of the preview windows, the enlargement display area will also change in all other preview windows.

 To cancel synchronization, select the [Preview] menu ▶ [Sync preview position] and [Sync preview display size] again.



91

Introduction

Synchronization only applies to the enlargement display position and the enlargement ratio. Adjustments to the images are not synchronized.

# Editing Efficiently

# Editing in the Edit Image Window

The thumbnail display and the preview window are combined, and images can be edited efficiently while quickly switching between images to be edited. Select the images to be edited beforehand in the main window.

In the main window, select the images you want to edit.

### Switch to the edit image window.

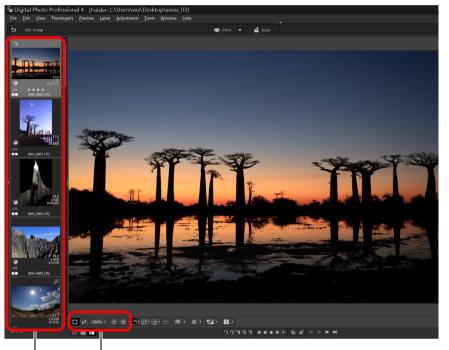
🗟 Digital	Photo	Profession	al 4 - [Fo	lder: C:	\Users\xxx	\Deskt	op\xxxx	_03]
<u>F</u> ile <u>E</u> dit	<u>V</u> iew	Thumb <u>n</u> ails	<u>P</u> review	<u>L</u> abel	<u>A</u> djustment	<u>T</u> ools	<u>W</u> indow	<u>H</u> elp
Edit	Image		Quick Che	ck	Remote	Shootin	g	
Folder	Book	mark		Filte	r ON	OFF	E	Sort b
Cli	ick							

→ The main window switches to the edit image window.

### Edit image window



Edit the image.



Change the display magnification

Select the image to be edited

The selected image is displayed as an enlargement in the middle of the window

- For information on icons displayed on the frame of a thumbnail, see "Image Frame Information in the Main Window and Edit Image Window" (p.137).
- The tool palettes, navigator palette, and histogram palette are displayed and you can edit the image.
- To revert to the condition before the last operation performed on the tool palette, select [Undo] in the [Edit] menu or press <Ctrl> + <Z> keys.



Introduction

Contents

Downloading

Images

Editing Images

Printing Images

Processing Large Numbers of RAW Images

> Remote Shooting

Specifying Preferences

Reference/ Index



### Click the area you want to enlarge.

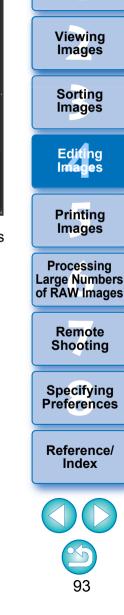


- → The area you clicked is enlarged to 100% (actual pixel size).
- To change the display area, drag on the image or drag the enlargement display area (p.18) of the navigator palette.
- Click again to revert to the full view ([Fit to window]).
- To return to the main window, click the [5] button on the toolbar.

# Changing the Thumbnail Display Position to Horizontal Select the [View] menu ▶ [Horizontal Thumbnails].



 If you select [Vertical Thumbnails], the thumbnail display reverts to the vertical position.



Introduction

Contents

Downloading Images

With the edit image window, you can only select images from a folder. To gather images from several folders for editing, see "Gathering and Editing Images in the Collection Window" (p.94).

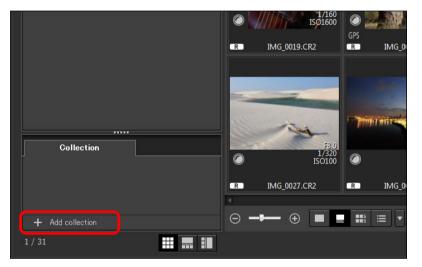
#### Introduction

## Gathering and Editing Images in the Collection Window

You can gather selected images together in Collection folders for viewing, comparison and editing.

You can gather images from several folders as well as from a single folder, allowing you to work with them efficiently.

# Click [+ Add collection] in the [Collection] area in the main window.

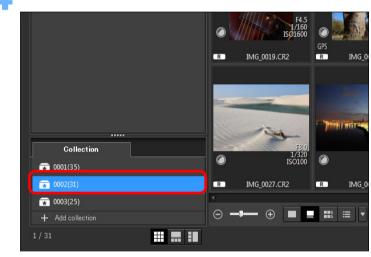


- → A new collection folder is created in the [Collection] area.
- Enter a name for the collection folder.
- To create additional collection folders, repeat the operation. Up to 20 folders can be created.
- Select the [File] Menu ▶ [Select collection], and select a collection folder to gather images from the collection folder names displayed.

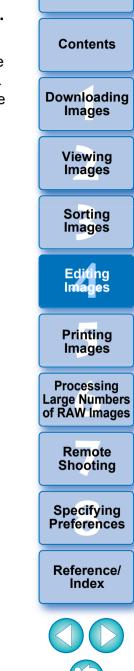
### Select images or image folders in the main window. Select the [File] menu ▶ [Add to collection].

- The images are added to the selected collection folder, and the number of selected images in the collection folder is displayed. When an image set to single-image display (p.22) is added, the number of images is indicated as two images.
- You can also add images to a collection folder by selecting images and folders and then selecting [Add to collection] from the menu that appears when you right-click the mouse.

### Select a collection folder in the [Collection] area.



→ Images in the selected folder are displayed.



### Check the displayed images.



### Edit the images.

- Edit the displayed images.
- Displayed images are retained in the collection folders even after exiting DPP.

### To remove images from collection folders

### Removing selected images

Select images in a collection folder, select images, and select [Remove from collection] in the [File] menu. (You can also remove images from a collection folder by selecting the images, right-clicking with the mouse, and selecting [Remove from collection] from the menu that appears.) Note that even if you remove an image from a collection folder, the original image remains unaffected.

### Removing all images

Select [Clear collection] in the [File] menu. Note that even if you remove all images from a collection folder, the original images remain unaffected.

### Deleting a collection folder

Select a collection folder in the collection area, then select [Delete collection] from the menu that appears when you right-click with the mouse. Note that if you delete a collection folder, the original images remain unaffected.

Contents

Downloading Images

> Viewing Images

Sorting Images

Editing Images

Printing Images

Processing Large Numbers of RAW Images

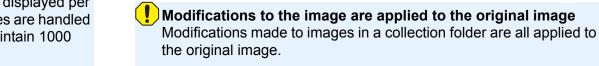
> Remote Shooting

Specifying Preferences

Reference/ Index

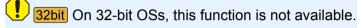


32bit On 32-bit OSs, only up to 1000 images can be displayed per collection folder. Starting with the 1001st image, images are handled in the same way as non-supported images. Try to maintain 1000 images or less per folder.



# **Compositing Images**

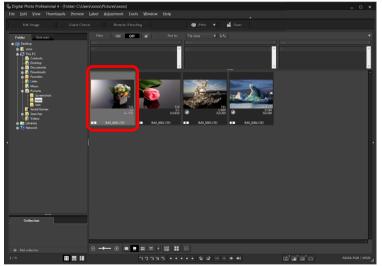
You can combine two images into a single image. You can further combine images by adding another image to the composited image. Since the composited image is saved as a separate image, the original images remain as they are.



**T** 

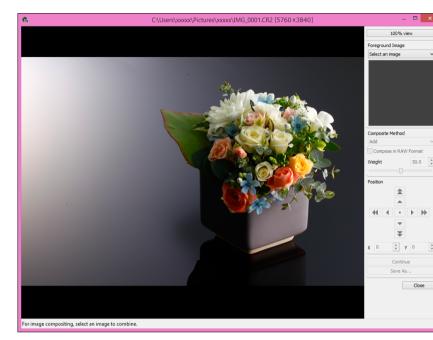
- This function can be used with all image types (p.4) supported by DPP.
- The color space of a composited image will be the color space of the background image.
- Image information is not appended to a composited image.

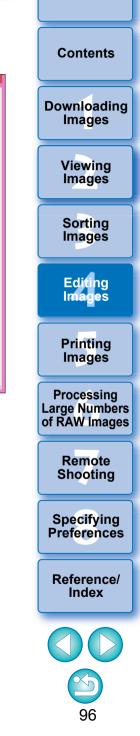
### Select a background image in the main window.



You can also select a background image from the edit image window or [Collection] window.

- Select the [Tools] menu ▶ [Start Compositing tool].
  - The compositing tool window appears.





Introduction



Images

Processing

Large Numbers

of **RAW** Images

Remote

Shooting

Specifying

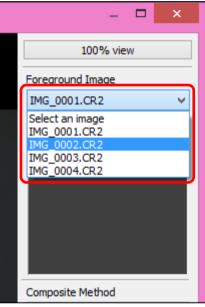
Preferences

Reference/ Index

97

### Select the image to combine.

• Select the image to combine from the [Foreground Image] list box.

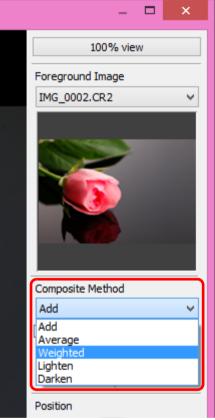


- The selected image is displayed in the [Foreground Image] thumbnail display.
- → A preview of the combined background image and [Foreground Image] is displayed in the composite preview.
- The following images can be combined.
  - When a background image is selected in the main window: images in same folder as background image
  - When a background image is selected in the [Collection] window: images in the [Collection] window
  - When a background image is selected in the edit image window: images displayed in the thumbnail display area
- You can also combine images of different sizes.

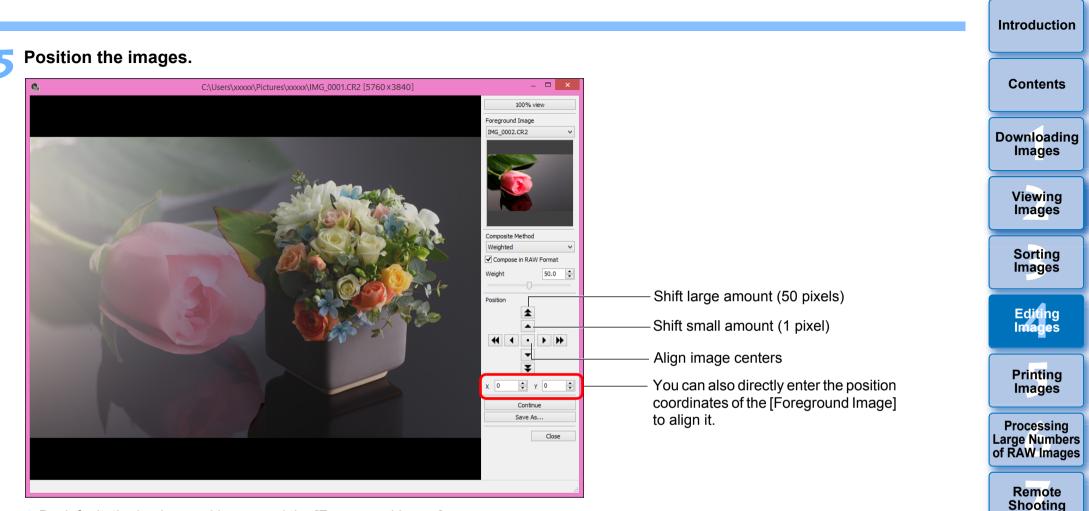


### Select a compositing method.

 Select a compositing method from the [Composite Method] list box.



- The compositing method selected in the composite preview is applied.
- The compositing method can be selected from five types: Add, Average, Weighted, Lighten, and Darken. For details on each compositing method, see "Compositing Methods" (p.99).
- If you select [Weighted], you can set the proportion of the image to be combined. Use the [Weight] slider at the bottom of the [Composite Method] list box or directly enter a value to set the proportion.
- By clicking the [100% view] button, the image is displayed at 100% magnification (actual pixel size).



- By default, the background image and the [Foreground Image] are displayed with their centers aligned.
- [Compose in RAW Format]

Checkmark the [Compose in RAW Format] checkbox as necessary.

You can set [Compose in RAW Format] under the following conditions.

Both the background image and [Foreground Image] are RAW images, and all the following conditions are met.

- · The cameras used to shoot were of the same model
- The ISO speed setting at the time of shooting was the same
- The highlight tone priority setting at the time of shooting was
   the same
- · The image sizes (original size) are the same

The following functions are not available for images composited with [Compose in RAW Format]. Specifying

Preferences

**Reference**/

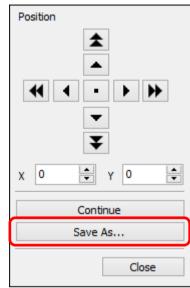
Index

98

- Auto Lighting Optimizer (p.55)
- Picture Style Auto (automatically set to Standard) (p.46)

Contents

### Click the [Save As] button.



- Specify the required settings in the window that appears and then click the [Save] button.
- By clicking the [Continue] button, images are combined to create a new background image, and you can continue by combining another image.
- To finish, click the [Close] button.

# **Compositing Methods**

#### Add

The background image and [Foreground Image] are added and images are combined.

### Average

The background image and the [Foreground Image] are combined in proportions of 50% each.

If you want to change the proportion of the [Foreground Image], select [Weighted].

Weighted

Set the proportion of the [Foreground Image] and then combine the background image and [Foreground Image].

Lighten

The background image and the [Foreground Image] are compared, with only brighter portions of the [Foreground Image] being combined.

Darken

The background image and the [Foreground Image] are compared, with only darker portions of the [Foreground Image] being combined.



Printing

Images

Processing Large Numbers of RAW Images

> Remote Shooting

Specifying Preferences

Reference/ Index



You can display this function as a function button in the main window's toolbar (p.108).

# **UPEGITIFF** Creating HDR (High Dynamic Range) Images

You can create images with a wide dynamic range where clipping in highlights and shadows has been reduced, and images that appear like paintings. This is suited for scenes such as still-lifes and landscapes. This function is most effective when using three images with different exposures for the same scene (negative exposure, standard exposure, positive exposure) to create an HDR image. However, you can also create an HDR image from two images, or even only one.

Since an HDR image is saved as a separate image, the original images remain as they are.

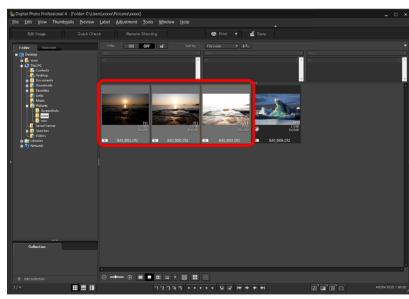
\* HDR stands for High Dynamic Range.

-

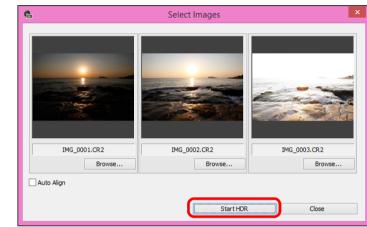
# 32bit On 32-bit OSs, this function is not available.

- This function can be used with all image types (p.4) supported by DPP.
- Image information is not appended to an HDR image.

### Select an image in the main window.



- Select the [Tools] menu ▶ [Start HDR tool].
- → The [Select Images] window appears.
- You can also display the [Select Images] window from the edit window and edit image window.
- Specify the required settings, then click the [Start HDR] button.



- To change the selected image or add another image, click the [Browse] button, and in the [Open] dialog box that appears, select the image file and click the [Open] button.
- If you select two images of the same size, you can checkmark the [Auto Align] checkbox for auto image alignment. However, auto image alignment may not work properly with repetitive patterns (lattice, stripes, etc.) or flat, single-tone images.
- By clicking the [Start HDR] button, the [Adjust Image] window appears.
- After using auto image alignment, the periphery of the images is partially deleted.



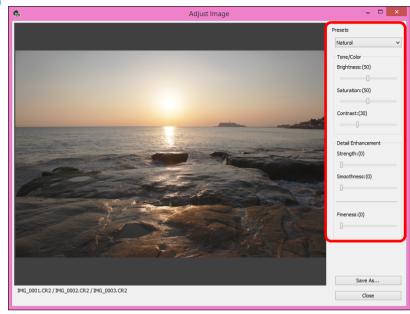
100

Contents

Downloading

Images

### Make required selections to adjust the image.



Sliders in [Adjust Image] window

### [Tone/Color]

- [Brightness]: Adjusts the overall brightness of the image. Move the slider to the right to brighten the image, and to the left to darken the image.
- [Saturation]: Adjusts the overall color saturation of the image. Move the slider to the right to make the color deeper, and to the left to make the color weaker.
- Adjusts the overall contrast of the image. Move [Contrast]: the slider to the right to make contrast stronger and to the left to make contrast weaker.

### [Detail Enhancement]

#### [Strength]: Adjusts the overall contrast and contrast of details together. Move the slider to the right for a stronger effect. [Smoothness]: Adjusts the overall smoothness of the image. Move the slider to the right for a smooth and natural impression. Adjusts the clearness of details. Move the slider [Fineness]: to the right for a sharper outline.

### [Presets] and finishing effects

With [Presets], you can select from the five preset finishing effects below from a pulldown menu ([Natural] is selected by default), instead of operating the sliders individually. By selecting a finishing effect, each slider moves according to the setting. You can also operate and adjust the sliders after selecting an effect.

- In high-contrast scenes, rendering in areas [Natural]: where highlights or shadows are usually clipped is corrected, for a finish with reduced highlight and shadow clipping.
- [Art standard]: Gives a finish with painting-like tonality for an impressive image. [Art vivid]:
  - For a more vivid look than with [Art standard].
- For a more vivid look than with [Art standard], [Art bold]: that makes the subject pop out.
- [Art embossed]: Tones down vividness more than [Art standard], for an old-fashioned feel.

Viewing Images
Sorting Images
Editing Images
Printing Images

Processing Large Numbers of **RAW** Images

> Remote Shooting

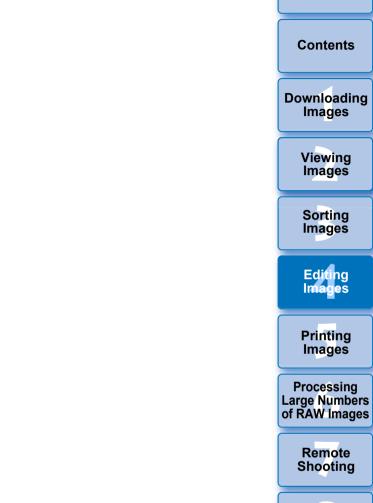
Specifying Preferences

**Reference**/ Index



Click the [Save As] button.	
Fineness:(0)	
Save As	
Close	

→ Specify the required settings in the window that appears by clicking the [Save As] button and click the [Save] button.



Specifying Preferences

Introduction

Reference/ Index



You can display this function as a function button in the main window's toolbar (p.108).

# Advanced Using the Dual Pixel RAW Optimizer

By setting the Dual Pixel RAW function on the camera compatible with the function before shooting RAW images, images are recorded as "special RAW images (Dual Pixel RAW images)" with dual pixel information appended from the imaging sensor. This is called Dual Pixel RAW shooting. Using this function, the [Dual Pixel RAW Optimizer], with Dual Pixel RAW images, you can make use of the Dual Pixel data recorded with the Dual Pixel RAW image for microadjustment of the position of maximum sharpness and resolution using the depth information contained within the file, repositioning the viewpoint or foreground bokeh for a more pleasing result, and reducing the appearance of ghosting in images.

### Cautions for Dual Pixel RAW shooting

Note the following when shooting in Dual Pixel RAW.

- Common to all functions
  - Effects are most easily gained when the lens aperture value is f/5.6 or lower.
  - Effects may be different between shooting in vertical orientation and horizontal orientation.
  - It is recommended that the ISO speed be ISO 1600 or lower.
- Only for "Microadjustment of the position of maximum sharpness and resolution using the depth information contained within the Dual Pixel RAW file"
  - It is recommended that the lens focal length be at least 50 mm.
  - It is recommended that this function be used when the camera is at a distance from the subject.\*
  - \* Use the following as a guide to subject distances according to focal length.

When the lens focal length is 50 mm, the subject distance should be approx. 1 m - 10 m / 3.3 ft. - 32.8 ft.

When the lens focal length is 100 mm, the subject distance should be approx. 2 m - 20 m / 6.6 ft. - 65.6 ft.

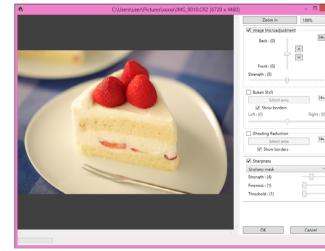
When the lens focal length is 200 mm, the subject distance should be approx. 4 m - 40 m / 13.1 ft. - 131.2 ft.

You can display this function as a function button in the main window's toolbar (p.108).

# Microadjustment of the Position of Maximum Sharpness and Resolution Using the Depth Information Contained within the Dual Pixel RAW File

Microadjust the position of maximum sharpness and resolution, using the depth information contained within the Dual Pixel RAW images.

- In the main window or edit image window, select the Dual Pixel RAW image you want to adjust, and then select [Start Dual Pixel RAW Optimizer] from the [Tools] menu.
  - → The Dual Pixel RAW Optimizer window appears.



Checkmark the [Image Microadjustment] checkbox.

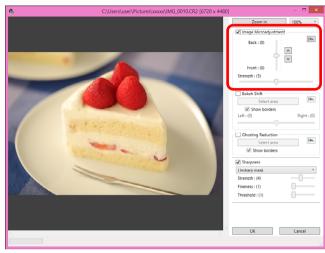


103

Introduction

Contents

### Adjust the image.



 Use the slider to adjust the resolution based on depth information and the level of resolution.

### Click the [OK] button.

Adjustment results are applied to the image. For information on saving adjustment results to images, see "Saving Editing Results" (p.85).

 If the subject's outline or any bokeh look unnatural, or there is an increase in noise or noticeable changes in hue or brightness, lower the level of adjustment.

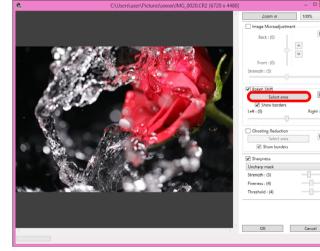
 This function cannot be used at the same time as "Reposition the viewpoint or foreground bokeh for a more pleasing result" or "Reduces the appearance of ghosting in images".

# Reposition the Viewpoint or Foreground Bokeh for a More Pleasing Result

Reposition the viewpoint or foreground bokeh for a more pleasing result, using the dual pixel information recorded in Dual Pixel RAW images.

- In the main window or edit image window, select the Dual Pixel RAW image you want to adjust, and then select [Start Dual Pixel RAW Optimizer] from the [Tools] menu.
  - → The Dual Pixel RAW Optimizer window appears.
  - Checkmark the [Bokeh Shift] checkbox.

## Specify the area to adjust.



 Click the [Select area] button and drag on the image to specify the area to be adjusted, and right-click with the mouse to fix the area.

You can also remove the check mark from the [Show borders] checkbox to hide the border.

	Contents
_	Downloading Images
•	Viewing Images
	Sorting Images
	Editing Images
	Printing Images
	Processing Large Numbers of RAW Images
	Remote Shooting
	Specifying Preferences
	Reference/ Index

104

Introduction

# Introduction Contents Downloading Images

Viewing Images

Sorting Images

Editing Images

Printing Images

Processing Large Numbers of RAW Images

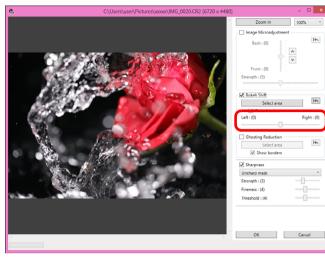
Remote Shooting

Specifying Preferences

Reference/ Index



### Adjust the image.



Use the slider to adjust the viewpoint.

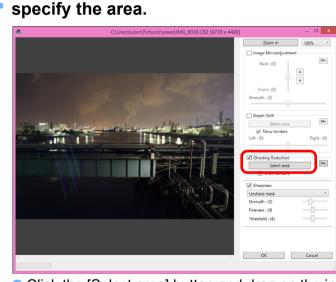
## Click the [OK] button.

Adjustment results are applied to the image. For information on saving adjustment results to images, see "Saving Editing Results" (p.85).

- If the subject's outline or any bokeh look unnatural, or there is an increase in noise or noticeable changes in hue or brightness, lower the level of adjustment.
  - Resolution may expand in the depth direction according to the level of adjustment.
- If the border of the selected area in the image appears unnatural, lower the level of adjustment.
- This function cannot be used at the same time as "Microadjustment of the position of maximum sharpness and resolution using the depth information contained within the Dual Pixel RAW file" or "Reduces the appearance of ghosting in images".
- Click the [Select area] button and drag on the image to specify the area to be adjusted, and right-click with the mouse to fix the area.

You can also remove the check mark from the [Show borders] checkbox to hide the border.

→ Any ghosting and flare in the specified area is reduced.



→ The Dual Pixel RAW Optimizer window appears.

**Reduces the Appearance of Ghosting in Images** 

In the main window or edit image window, select the

Dual Pixel RAW image you want to adjust, and then

Checkmark the [Ghosting Reduction] checkbox, and

select [Start Dual Pixel RAW Optimizer] from the

Reduce the appearance of ghosting in images, using the dual pixel

information in Dual Pixel RAW images.

[Tools] menu.

### **Click the [OK] button.**

Adjustment results are applied to the image. For information on saving adjustment results to images, see "Saving Editing Results" (p.85).

- There may be cases where the subject's outline and any bokeh look unnatural, or where an increase in noise or noticeable changes in hue or brightness occur.
- There may be cases where the border of the selected area in the image looks unnatural.
- This function cannot be used at the same time as "Microadjustment of the position of maximum sharpness and resolution using the depth information contained within the Dual Pixel RAW file" or "Reposition the viewpoint or foreground bokeh for a more pleasing result".

Sorting Images Editing Images Printing Images Processing

Introduction

Contents

Downloading Images

> Viewing Images

Large Numbers of RAW Images

> Remote Shooting

Specifying Preferences

Reference/ Index



# Advanced Transferring a RAW Image to Photoshop

A RAW image can be converted to a TIFF image (16bit) and transferred to Adobe Photoshop.

### Select the [Tools] menu ▶ [Transfer to Photoshop].

→ Photoshop starts up and the transferred image is displayed.

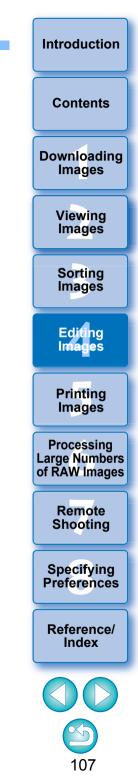
### A single image can be transferred at a time

Only one image can be transferred at a time. To send multiple images at a time, see p.119.



-

- Transferred images are automatically converted to TIFF images (16bit) to which an ICC profile (p.138) is added. The ICC profile contains information about [Preferences] (p.131) or work color space (p.83) set for each image as described and the appropriate color information is relayed to Photoshop.
- When you exit Photoshop, only the original RAW image remains, and the transferred image will disappear. Saving the transferred image as a separate image in Photoshop is recommended.



# Advanced Customizing the Main Window Toolbar

You can display buttons for frequently-used functions in the main window's toolbar.

You can also change how the buttons are laid out.

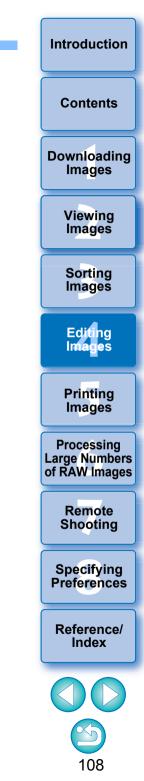
# Select the [Tools] menu ▶ [Customize toolbar].

→ The [Configure Toolbar] window appears.

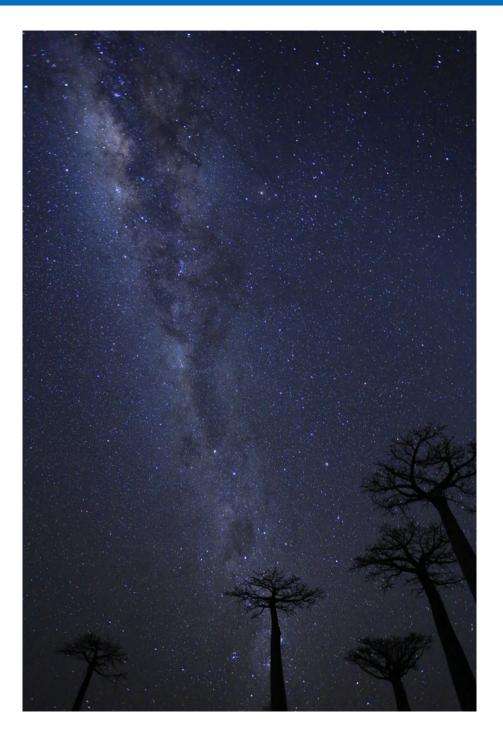
# Select functions to display in the toolbar.

Configure Toolbar	×
Select items to show in the toolbar.	
<ul> <li>✓ Print</li> <li>✓ Save</li> </ul>	Move Up
Rename Tool	Move Down
✓ Compositing Tool ✓ HDR Tool	
<ul> <li>✓ Dual Pixel RAW Optimizer</li> <li>✓ Photoshop</li> </ul>	
	Close

- To rearrange buttons, select the function you want to change, and then click the [Move Up] or [Move Down] button.
- After specifying settings, click the [Close] button and close the window.
- → The settings are applied to the main window's toolbar.



# **5** Printing Images



Printing an Image 110	Conte
Printing with Shooting Information 111	Conte
Printing a Thumbnail List (Contact Sheet	Downlo
Printing) 112	Downlo Imag
Plug-in printing 113	

110 111	Contents
112	Downloading Images
113	
	Viewing Images
	Sorting Images
	Editing Images
	Printing Images
	Processing
	Processing Large Numbers of RAW Images
	Remote Shooting
	Specifying Preferences
	Reference/ Index
	$\bigcirc$
	109

## **Printing an Image**

You can print images with a printer. As an example, the procedure to print one image on one sheet of paper is described here.

### Select the image to be printed.

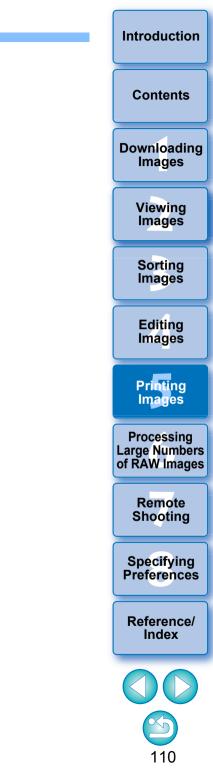
### Select the [File] menu ▶ [Print].

ile	2		
	Close window	Ctrl+W	
	Save	Ctrl+S	
	Save As	Ctrl+Shift+S	
	Convert and save	Ctrl+D	
	Batch process	Ctrl+B	
	Print	Ctrl+P	)
	Print with detailed setting	Ctrl+Alt+P	
	Plug-in printing		۲
	Add to collection	Ctrl+G	
	Remove from collection	Ctrl+Shift+G	
	Clear collection		
	Select collection		۲
	Delete collection		۲
	Bookmark		
	Remove bookmark		
	Move to Recycle Bin	Del	
	Exit	Alt+F4	
-			

→ The printer's print settings dialog box appears.

## Print.

- Specify the optimum settings for printing photographs in the printer's print settings dialog box and click the [OK] button.
- → Printing begins.



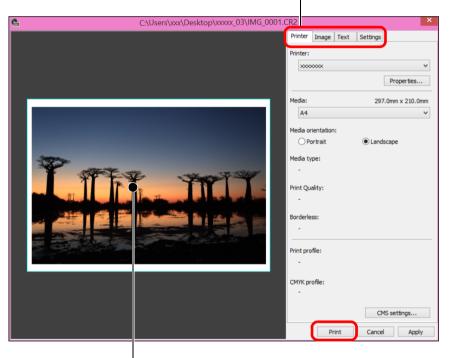
## **Printing with Shooting Information**

-à

You can freely layout one image on one sheet of paper and print together with titles and shooting information, etc.

- Select one image to be printed.
- Select the [File] menu ▶ [Print with detailed setting].
- Specify the required settings for printing, and then click the [Print] button.

Switches the settings tab sheet



Print preview

- The image can be moved by dragging.
- Drag the four corners of the image to change the size.
- For the shooting information, click [1] on the [Text] tab sheet and select the necessary items in the window that appears.

To maintain the settings Contents The settings of each tab sheet in step 3 are memorized when printing or the [Apply] button is clicked. The settings can be applied to another image when printing. Downloading Memorized settings are options in [Printer], [Media], [Media orientation], Images [Registration marks], [Header], [Footer], and [Image Information], and settings in the [Settings] tab sheet. Viewing Images Sorting Images Editing Images Printing Images Processing Large Numbers of RAW Images Remote Shooting Specifying Preferences

You can set printer profiles (p.132).

If CMYK simulation is set, the image is printed in the set colors.





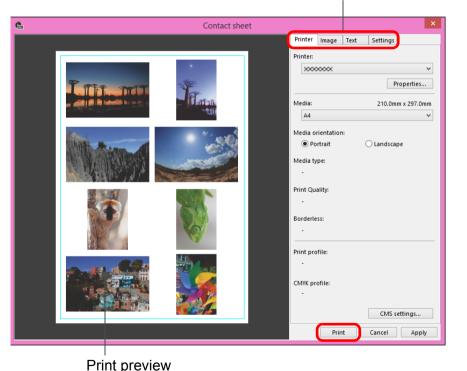
## Printing a Thumbnail List (Contact Sheet Printing)

You can print rows of multiple images on one sheet of paper.

## Select images to be printed in a thumbnail list.

Select the [File] menu ▶ [Print contact sheets].

Specify the required settings for printing, and then click the [Print] button.



Switches the settings tab sheet

#### -) To maintain the settings

The settings of each tab sheet in step 3 are memorized when printing or the [Apply] button is clicked. The settings can also be applied to another image when printing.

Memorized settings are [Printer], [Media], and [Media orientation], and settings in the [Image] and [Settings] tab sheets.

- - You can set printer profiles (p.131).
  - If CMYK simulation has been set, the image is printed in the set colors (p.131).
  - By using this function in the edit image window, all images in the window (not only the selected ones) are printed in a thumbnail list.

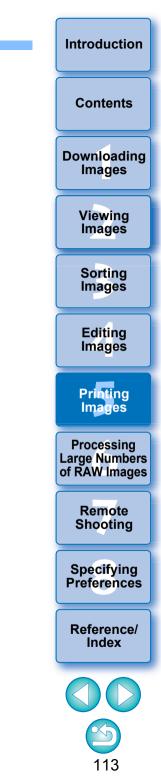


Introduction

## **Plug-in printing**

Select the [File] menu ▶ [Plug-in printing] ▶ Plug-In for the printer you use.

- → The Plug-In starts up.
- Specify the required settings for printing photographs and then print.



# **6** Processing Large Numbers of RAW Images



Batch Apply White Balance to Images	
(Personal White Balance) 115	
Registering Personal White Balance 115	
Applying Personal White Balance 116	
Batch Save as JPEG or TIFF Images (Batch	
Processing) 117	
Batch Transfer Images to Image Editing Software 119	
Batch Change the File Name of Images 120	
Changing the File Name of Images in the Order	
in the Main Window 120	ſ

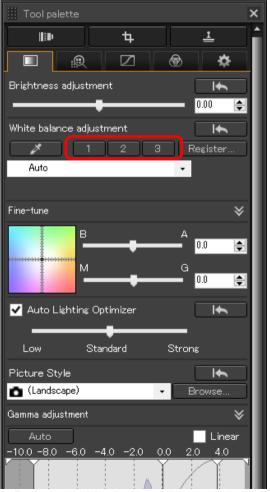
15	Contents
15 16	Downloading Images
17 19	Viewing Images
20	Sorting Images
20	Editing Images
	Printing Images
	Processing Large Numbers of RAW Images
	Remote Shooting
	Specifying Preferences
	Reference/ Index
	(114) 114

#### Batch Apply White Balance to Images (Personal White Balance) Introduction The white balance adjustments made to a RAW image shot in a specific shooting environment can be registered as personal white balance. You Contents can then perform efficient white balance adjustment by applying this personal white balance to a large number of RAW images shot in the same shooting environment. Downloading Personal white balance data for versions before DPP 4 cannot be Images applied. Viewing **Registering Personal White Balance** Images Adjust the white balance (p.49, p.50). Sorting • To adjust white balance, select a setting other than [ ] ( )] from Images the [White balance adjustment] list box (p.48). Registering the adjustments is not possible if [ [ ] is selected. Editing In the Basic adjustment tool palette, click the Images [Register] button. → The [Register personal white balance] dialog box appears. Printing Images Select the button number to be registered from the list and click the [OK] button. Processing Large Numbers of RAW Images × Register personal white balance Register current setting in personal white balance Remote Destination Load.. Shooting Save... ΟК Cancel Specifying Preferences To use the registered personal white balance on another computer **Reference**/ 1 In step 3, click the [Save] button to write as a file. Index 2 Copy the file to another computer. 3 In DPP on another computer, display the window of step 3. 4 Click the [Load] button and in the window that appears, select the copied file. You cannot change or adjust white balance with multiple-exposure RAW images created on the camera.

## **Applying Personal White Balance**

In the main window, select the image to which a personal white balance is to be applied.

- Select the [View] menu ▶ [Tool palette].
- $\rightarrow$  The tool palette appears.
- Click the personal white balance number button that is to be applied.



Introduction Contents Downloading Images Viewing Images Sorting Images Editing Images Printing Images Processing Large Numbers of RAW Images Remote Shooting Specifying Preferences

> Reference/ Index



→ Personal white balance is applied to all the selected images.

## **Batch Save as JPEG or TIFF Images (Batch Processing)**

You can batch convert and save edited RAW images to highly versatile JPEG or TIFF images.

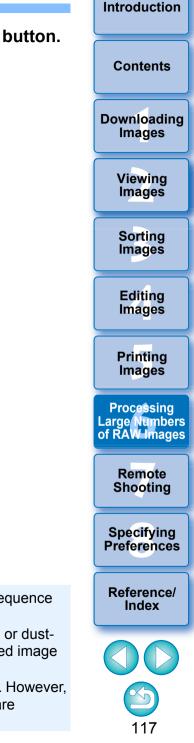
The images are saved as separate images, so the RAW images remain unaffected.

- In the main window, select multiple images to be converted.
- Select the [File] menu ▶ [Batch process].
  - → The [Batch settings] window appears.
- Specify the required settings, and then click the [Execute] button.

	Batch settings ×
IMG_0001CR2 IMG_0002CR2 IMG_0003CR2 IMG_0004CR2 IMG_0005CR2 IMG_0005CR2 IMG_0005CR2 IMG_0005CR2 IMG_0005CR2	Destination folder
MG_0009CR2 MG_0010CR2 MG_0011CR2 MG_0012CR2 MG_0013CR2 MG_0014CR2 MG_0015CR2 MG_0015CR2 MG_0015CR2 MG_0015CR2	Output setting       Save as type       Exif-JPEG (*,JPG)       Output resolution       350       dpi       Resize       Width       Height
IMG_0019CR2 IMG_0020CR2 IMG_0021CR2 IMG_0022CR2 IMG_0022CR2 IMG_0023CR2 IMG_0024CR2 IMG_0024CR2	Shooting info setting     Include all shooting info
IMG_0026CR2 IMG_0027CR2 IMG_0028CR2 IMG_0029CR2 IMG_0030CR2 IMG_0031CR2 IMG_0031CR2 IMG_0032CR2 IMG_0033CR2	File name Current file name New file name String 00000000 String Ex.: IMQ.0001.JPG, IMQ.0002.JPG
	Image transfer settings Open image using software Browse_
	Convert RAW images only Execute Cancel

- → The batch processing dialog box appears and saving begins.
- When all the images are saved, the [Exit] button appears in the batch processing dialog box.

In the processing dialog box, click the [Exit] button.



- If you have selected [New file name] in [File name], [Sequence number] has to be set.
  - By saving as explained above, a trimmed image (p.67) or dusterased image (p.78 to p.82) actually becomes a trimmed image or dust-erased image.
  - You can also use this function in the edit image window. However, all images in the window (not only the selected ones) are converted and saved.

### **?** Saving images with recipe is not possible

In the [Batch settings] window, you cannot perform [Save] or [Save As] (p.85) to edited RAW images.

## To save the developing/editing results for the version you are currently using

DPP's RAW image development processing technology is continually being improved upon so that you can perform the latest image processing more appropriately.

Meaning that, between two different versions of DPP, processing results may differ very slightly even if with the same RAW image data, or the results of significant editing of RAW image data with an attached recipe may be different.

When you want to save the developing or editing results of the version you are currently using as it is, converting and saving images as JPEG or TIFF images is recommended.

### Skillful batch saving

#### While saving is being performed, you can continue working in another window

Since the saving function operates independently in the background, you can continue with an operation in another window such as the main window or the preview window during the saving process.

#### To convert all images and save, do not select an image in the main window

If you do not perform step 1 and perform step 2 with no image selected in the main window, all the images displayed in the main window will be converted and saved.

Introduction Contents Downloading Images Viewing Images Sorting Images Editing Images Printing Images Processing Large Numbers of RAW Images Remote Shooting Specifying Preferences **Reference**/ Index

## **Batch Transfer Images to Image Editing Software**

You can transfer multiple images to image editing software. Unlike "Transferring a RAW Image to Photoshop" (p.107), you transfer images that have first been converted and saved as a separate image, so the transferred image will not be deleted after exiting the destination software. The software used here as an example is Adobe Photoshop.

- In the main window, select multiple images to be transferred.
- Select the [File] menu ▶ [Batch process]. → The [Batch settings] window appears.
- Perform settings required for transferring (e.g. file format).

## Checkmark [Open image using software].

### Select Photoshop.

button.

transferred.

- In the [Open] dialog box, select a Photoshop file or a shortcut and click the [Open] button.
- The [Open] dialog box closes and [Image transfer settings] in the [Batch settings] window is set to Photoshop.

### Click the [Execute] button.

 $\rightarrow$  The processing dialog box appears and batch transfer begins.

To reset the transfer destination to another software, click the

dialog that appears, select the software and click the [Open]

all images in the window (not only the selected ones) are

→ When the first image has been transferred. Photoshop starts up and transferred images are displayed in transferred order.

Downloading Images Viewing Images Sorting Images Editing Images Printing Images Processing Large Numbers of RAW Images Remote Shooting Specifying Preferences **Reference**/ Index [Browse] button in [Image transfer settings], and in the [Open] • You can also use this function in the edit image window. However, 119

Introduction

Contents

	Batch settings	×
IMG_0001.CR2	Destination folder	
IMG_0001.CR2 IMG_0002.CR2	Same as original files	
IMG 0003CR2		
IMG_0004.CR2	O Use this folder	
IMG_0005.CR2	C#Users#user#Pictures	Browse
IMG_0006.CR2	Create storage subfolders for each file type	
IMG_0007.CR2		
IMG_0008.CR2	Exif-JPEG + Subfolder name JPEG	
IMG_0009.CR2 IMG 0010.CR2	Output setting	
IMG_0010.CR2	Output setting	
IMG_0012.CR2	Save as type Exif-JPEG (*.JPG) - In	nage quality 🛛 🗌 10
IMG 0013.CR2		
IMG_0014.CR2	Output resolution 350 dpi	
IMG_0015.CR2	Resize	
IMG_0017.CR2		
IMG_0018.CR2	Width Height	
IMG_0019.CR2	5472 × 3648 (5472 pixel × 3648 pixel)	Unit pixel -
IMG_0020.CR2 IMG 0021.CR2	Embed ICC profile	
IMG_0021.0R2 IMG_0022.0R2		
IMG 0023.CR2	Shooting info setting Include all shooting info	•
IMG_0024.CR2	Shooting into setting include all shooting into	•
IMG_0025.CR2		
IMG_0026.CR2	File name	
IMG_0027.CR2	Ourrent file name	
IMG_0028.CR2	🔿 New file name	
IMG_0029.CR2 IMG 0030.CR2	String Sequence number Additional string	
IMG_0030.CR2 IMG 0031.CR2	00000001	
IMG_0032.CR2	Save serial number	
IMG 0033.CR2		
	Ex.: IMG_0001.JPG, IMG_0002.JPG	
	Image transfer settings	
	Open image using software	
		Browse
	Convert RAW images only Exe	ecute Cancel

→ The [Open] dialog box appears.

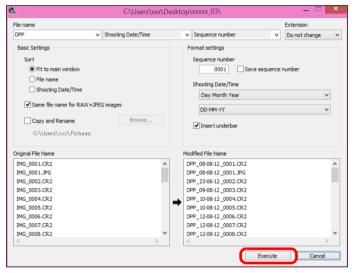
## **Batch Change the File Name of Images**

1

In the main window, select multiple images of which the file names are to be changed.

Select the [Tools] menu ▶ [Start Rename tool]. → The rename window appears.

# Specify the required settings and click the [Execute] button.



→ Processing begins and the file names are changed.

### Changes cannot be made when the file name is duplicated

If a file name in red text appears in [Modified File Name], the file name is duplicated. Changes cannot be made if even one file name is duplicated. Change the settings so that duplication does not occur.

- You can change the file name of only one image in the main window by selecting the thumbnail, right-clicking with the mouse, and selecting [Rename] from the menu that appears.
  - You cannot start up the rename tool from the [Collection] window (p.94). You also cannot change the file name of one image.

# Changing the File Name of Images in the Order in the Main Window

When you change the order of the images in the main window, you can change in one operation the names of the files for the images, in the order they were rearranged.

- Change the order of the images in the main window (p.35).
- In the main window, select multiple images of which the file names are to be changed.
- Select the [Tools] menu ▶ [Start Rename tool].

### Select [Fit to main window].

e.	C:\Users\xxx\Des
File name	
DPP	<ul> <li>Shooting Date/Time</li> </ul>
Basic Settings	
Sort	
Fit to main wi	indow
O File name	
O Shooting Dat	e/Time

### Specify the required settings.

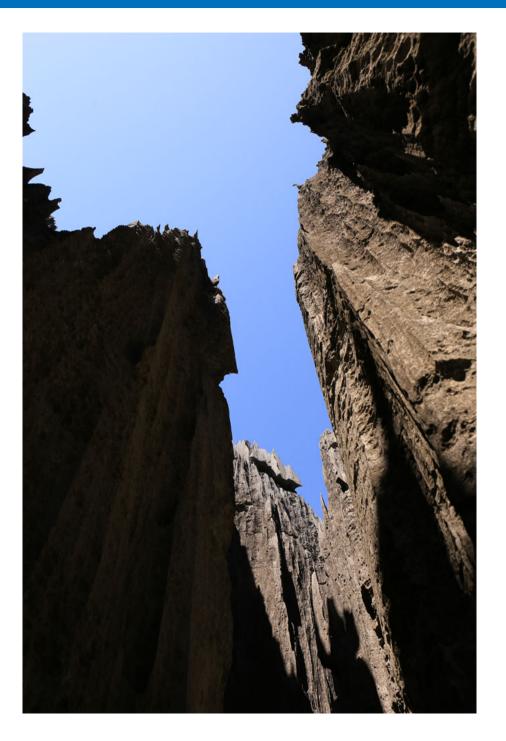
To copy an image, checkmark [Copy and Rename].

### Click the [Execute] button.

The file names are changed and the order in the main window is maintained.

Introduction Contents Downloading Images Viewing Images Sorting Images Editing Images Printing Images Processing Large Numbers of RAW Images Remote Shooting Specifying Preferences **Reference**/ Index

# Remote Shooting



Remote Shooting 122 Registering Click White Balance in the Camera 125	Contents
	Downloading Images
	Viewing Images
	Sorting Images
	Editing Images
	Printing Images
	Processing Large Numbers of RAW Images
	Remote Shooting
	Specifying Preferences
	Reference/ Index

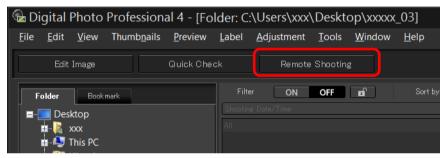
Introduction

## **Remote Shooting**

You can perform remote shooting by using "EOS Utility" which enables communication with a camera in combination.

For remote shooting, "EOS Utility Ver. 3.x" must be installed on your computer. For information on cameras compatible with "EOS Utility Ver. 3.x", refer to "EOS Utility Ver. 3.x Instruction Manual" (electronic manual in PDF format). This function is not available on EOS M series cameras or PowerShot cameras.

# Click the [Remote Shooting] button on the toolbar in the main window.



→ Remote shooting setting window appears.

# 2 Set the [Destination] in the Specify Remote Shooting Folder window.

Specify Remote Shooting Folder	
Destination	
O Current Folder	
C:¥Users¥xxxxx¥xxxxx¥xxxxx	
● Use this folder	
C#Users#xxxxx#xxxxx Select	
Destination folder	
New folder1	
File Name	
Do not modify Settings	
OK	

- To save to the currently selected folder, select [Current Folder].
- To create a new folder for saving images, select [Use this folder], click the [Select] button, then select the destination and enter a name for [Destination folder].
- After specifying settings, click the [OK] button.
- → The remote shooting window appears.



122

You can change the [File Name] for Specify Remote Shooting Folder window.

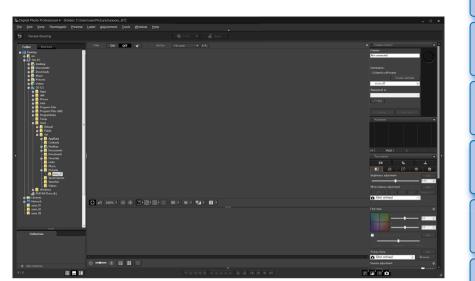
(If [Do not modify] is selected, images are saved with the file names set on the camera.)

1 Click the [Settings] button to display the Set file name for captured image window.

Set	file name for captured image
Do not modify	~
File Prefix	Customize
IMG	
Assign Sequence No.	
Number of Digits	4
Start	1
Shooting Date Format	Day Month Year V Delimiter Underline V DD-MM-YYYY V
	OK Cancel

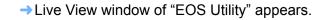
2 Select a naming rule for image file names from the list box. You can click the [Customize] button and customize naming rules for file names.

- You can individually set prefix characters, number of digits for serial numbers, and the start number for file names.
- If you are using the shooting date in file names, you can specify the date format (order and style for year-month-date) and dividing characters on the Set file name for captured image window.
- 3 After specifying settings, click the [OK] button.
- →The Set file name for captured image window closes.
- After clicking the [Remote Shooting] button, you can click the
   [o] button at the bottom right of the main window to show/ hide the [Camera Control] palette.



- You can perform shooting while checking the image by switching the window to multi-layout.
- Connect a camera and a computer, and set the camera's power switch to <ON>.
  - Click the [Live View] button.

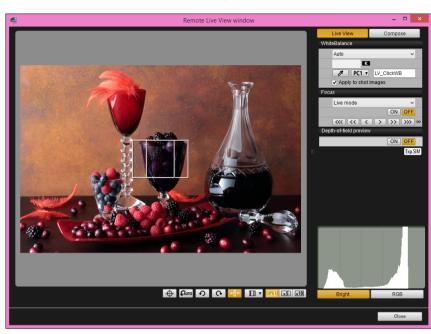
III Camera Control	-
Camera	
EOS XXX	$\cap$
1/50 F4.0 ISO400	$\bigcirc$
Destination :	
C:\Users\xxx\Pictures	
Create subfolder	
xxxxx_07 🔹	
Registered to :	
xxxxxxxx -	
<i>7**</i> 0	
Settings Live View	



Cont	ents
Downlo Ima	
Viev Ima	
Sort Ima	ting ges
Edit Ima	
Prin Ima	ting ges
Proce Large N of RAW	umbers
Ren Sho	iote ting
Speci Prefer	fying ences
Refer Ind	
	O

Introduction

#### Specify the required settings.



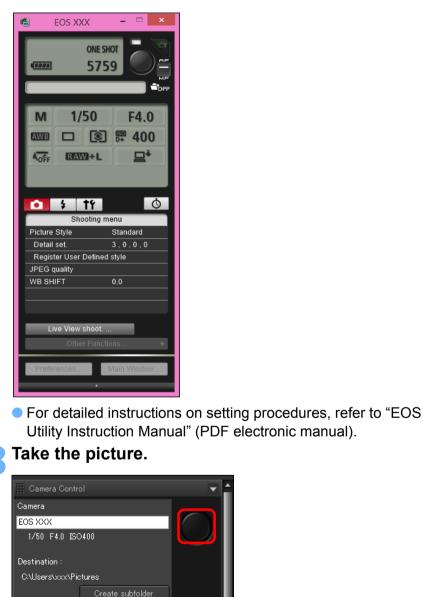
 For detailed instructions on setting procedures, refer to "EOS Utility Instruction Manual" (PDF electronic manual).

## **6** Click the [Settings] button.



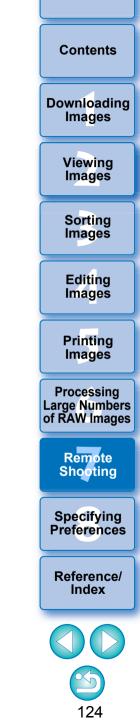
→ The capture window of "EOS Utility" appears.

### Specify the required settings.



xxxxx\_07 Registered to

xxxxxxxxxxx





- → The shot image is displayed.
- The shot image will be saved in the folder created in step 2.
- The images in the folder mentioned above will be displayed in the thumbnail display area.

You can also create a sub-folder in the folder mentioned above to save images. To create a sub-folder, click the [Create subfolder] button on the remote shooting window, enter [Folder name] on the screen appeared, then click the [OK] button.

Do not exit "EOS Utility" when remote shooting is being set or performed.

- In the cases below, perform shooting with EOS Utility.
  - You want to autofocus with EOS Utility's shoot button
  - · You want to perform continuous shooting
- You can perform shooting while comparing the shot image with a pinned image by pinning an image (p.20). This is convenient for image selection.

## **Registering Click White Balance in the Camera**

During remote shooting, you can register click white balance to the connected camera. To use this function, EOS Utility version 3.4.20 or later must be installed on your computer.

This function is not available on EOS M series cameras or PowerShot cameras.

Display the shot image to be used as the standard for white balance.



 This function supports only RAW images with a ".CR2" extension.

Select the destination where to register click white balance.

📰 Camera Contro			
Camera			
EOS XXX			$\bigcap$
1/50 F4.0 ISO	400		$\bigcirc$
Destination :			
C:\Users\xxx\Pic	tures		
	Create subfolder		
xxxxx_07		•	
Registered to :			
xxxxxxxxxxx		•	
240			

 Select the destination where to register white balance from the [Registered to] list box. Options in the list box depend on the camera model.

Contents Downloading Images Viewing Images Sorting Images Editing Images Printing Images Processing Large Numbers of RAW Images Remote Shooting Specifying Preferences **Reference**/ Index

125

Select a point that is to be the standard for white balance in the shot image, and register the white balance in the camera.

Introduction

Contents

Downloading Images

> Viewing Images

Sorting Images

Editing Images

Printing

Images

Processing

Large Numbers of RAW Images

> Remote Shooting

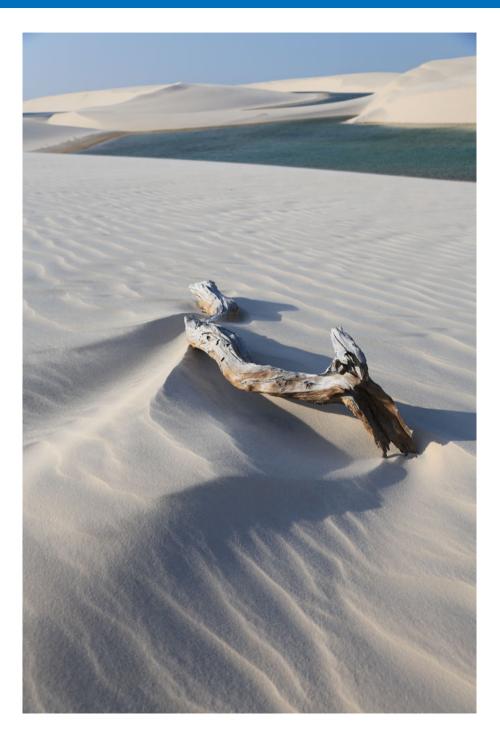
Specifying Preferences

Reference/ Index

III Camera Control	-
Camera	
EOS XXX	$\bigcap$
1/50 F4.0 ISO400	$\bigcirc$
Destination :	
C:\Users\xxx\Pictures	
Create subfolder	
xxxxx_07 -	
Registered to :	
xxxxxxx -	
<i>≱*</i> 0	
Settings Live View	

- Click the [ ] button, and in the displayed image in step 1, click on a point that is to be the standard for white balance with the mouse.
- The white balance is registered to the destination selected in step 2, and applied to displayed images.
- Click [ ] again to exit the function.

# **8** Specifying Preferences



Specifying Preferences 128	
General Settings 128	Contents
Image processing 129	
Color Management 131	Downloading Images
View Settings 132	
Properties Display Settings 133	Viewing

28	Contents
29 31 32	Downloading Images
33	Viewing Images
	Sorting Images
	Editing Images
	Printing Images
	Processing Large Numbers of RAW Images
	Remote Shooting
	Specifying Preferences
	Reference/ Index
	(127) 127

## **Specifying Preferences**

You can change the various functions of DPP in the [Preferences] window. Check the contents of each window and set. Refer to the detailed explanations if available, as well as to each window.

### Select the [Tools] menu ▶ [Preferences].

→ The [Preferences] window appears.

Select a tab sheet, specify the settings, and then click the [OK] button.

	Preferences
General settings Image Processing 1 Image Processing 2 Color management View settings	Startup folder *
View settings Properties display settings	Save recipe  O Display message when adding file  O Add to file automatically
	Movie file playback Play with EOS MOVIE Utility Movies that cannot be played with EOS MOVIE Utility are passed to the default application.
	Receiving files from external applications Automatically focus on a file received
	Default value of output resolution *           350         dp/(1-6000)
	Temporary Files* Currently used 0.9 MB Delete Reset Amount of Dual Pixel RAW cache used 0.0 MB Delete
	Maximum available on disk     4 GB     0     32       Destination     C#Users#user#AppData#Roaming#Canon_Inc_JC     Browse
*Changes take effect a	ter restarting OK Cancel

You can specify the folder that opens when DPP is started up, saving of recipes, etc.

## **General Settings**

		Preferer	nces			×
settings	Startup folder *					
Processing 1	<ul> <li>Last displayed folder</li> </ul>					
Processing 2						
nagement	C.¥Users¥user¥Pictures					Browse
tings s display						
display	Save recipe					
	Display message when adding file					
	<ul> <li>Add to file automatically</li> </ul>					
	Movie file playback					
	Play with EOS MOVIE Utility					
	Movies that cannot be played with B	EOS MOVIE Utility are	passed to the	default application.		
	Receiving files from external application	ns				
	Automatically focus on a file receiv	ed				
	Default value of output resolution *					
	350 dpi(1-60000)					
	Temporary Files*					
	Currently used		0.9 MB	Delete		Reset
	Amount of Dual Pixel RAW cache used		0.0 MB	Delete		
	Maximum available on disk		4 GB	0	32	
				- v	52	
		¥Users¥user¥AppDat	a¥Roaming¥Ua	non Inc IC		Browse

#### Movie file playback

You can change the movie playback application to EOS MOVIE Utility. Movies that cannot be played back with EOS MOVIE Utility are played back with the movie playback application specified with the computer's OS settings. For detailed instructions on EOS MOVIE Utility, refer to the EOS MOVIE Utility Instruction Manual.

- If you have changed the movie playback application to EOS MOVIE Utility, and playback does not start after starting up EOS MOVIE Utility, check compatible models with the EOS MOVIE Utility Instruction Manual.
  - If the movie playback application specified with the computer's OS settings is set to EOS MOVIE Utility, MOV and MP4 files shot with the models that are not compatible with EOS MOVIE Utility will not be played back. Check the OS settings and change the movie playback application.



## Contents

Downloading

Images

Viewing

Images

Sorting Images

Editing Images

Printing Images

Processing Large Numbers of RAW Images

Remote

Shooting

Specifying Preferences

Reference/

Index

#### Default value of output resolution

When saving JPEG or TIFF images created by converting RAW images (p.85, p.117), the resolution of the JPEG or TIFF images can be set.

#### Temporarily saved files

You can delete temporarily saved files that were created and improve operation speed, change file save destinations, or set a limit on disk usage. Any changes you made will be applied when you start up DPP again.

[Delete] button:
 Click the [Delete] button to delete temporarily saved files.
 [Maximum available on disk]: Set with the slider (setting range: 0 to 32 GB).
 Once usage reaches the limit, files are erased starting with the oldest.
 [Destination]:
 Click the [Browse] button to change the save destination in the dialog that appears.
 [Reset] button:

t] button: Click the [Reset] button to revert all changes to the original settings.

## Image processing

You can specify settings for processing images in DPP.

## **Image Processing 1**

General settings	JPEG image quality *		
Image Processing 1	Remove block noise and mosquito noise		
Image Processing 2 Color management	Modified Picture Style settings *		
View settings	☑ Retain settings of each Picture Style		
Properties display settings	Preview image settings		
	Show stamp editing status on preview images		
	Select to show stamp editing status on all preview screens.		
	Clear to show stamp editing status only on the stamp editing	screen.	
	Noise reduction defaults*		
	<ul> <li>Apply camera settings</li> </ul>		Applies to RAW images only
	<ul> <li>Set as defaults</li> </ul>		
	Reduce luminance noise		0.0 🜩
	Reduce chrominance noise		0.0 \$
		× ·	
	Sharpness defaults*		
	<ul> <li>Apply camera settings</li> </ul>		Applies to RAW images only
	<ul> <li>Set as defaults</li> </ul>		
	Unsharp mask		
	Strength		0.0 ‡
	Fineness		0.0 \$
	Threshold		0.0 \$
	THOMA A		
*Changes take effect a	the second s		OK Cancel

#### JPEG image quality

[Remove block noise and mosquito noise]

 You can improve the quality of a JPEG image by reducing the noise particular to JPEG images.

This setting is also effective when RAW images are converted to JPEG images and saved (p.85, p.117) and for JPEG images that to be saved with a different name. The higher the JPEG image's compression rate, the better the effect. And when the compression rate is low, the effect of noise reduction may not be noticeable.

#### Modified Picture Style settings

If you checkmark the checkbox, setting values for [Color tone], [Color saturation], [Contrast], [Unsharp mask], [Sharpness], and other options will be retained for each Picture Style.



Introduction

Contents

Downloading

Images

Viewing

Images

Sorting Images

Editing

Images

Printing

Images

Processing Large Numbers of RAW Images

Remote

Shooting

Specifying

Preferences

Reference/ Index

#### Noise reduction defaults

You can set a default beforehand for the noise reduction level. Only RAW images are supported.

- When [Apply camera settings] is selected, you can pre-set a noise reduction level that suits the camera settings beforehand as the default.
- When [Set as defaults] is selected, you can pre-set a preferred default setting for the noise reduction level beforehand.

For images not having a recipe attached, the default noise reduction level set here is applied. If you changed settings, they will be applied to images as the default noise reduction level when you start up DPP again.

For images with a recipe attached, the noise level recorded in the recipe remains as it is and the default for noise reduction level set here is not applied.

#### Sharpness defaults

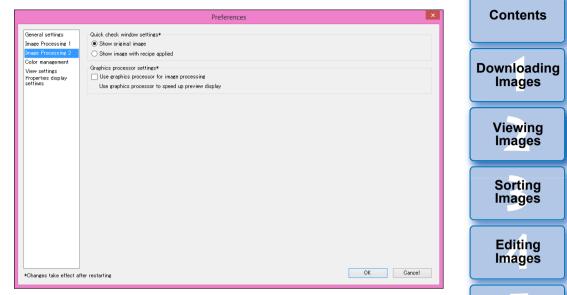
You can set a default beforehand for the sharpness. Only RAW images are supported.

- When [Apply camera settings] is selected, you can pre-set a sharpness that suits the camera settings beforehand as the default.
- When [Set as defaults] is selected, you can pre-set preferred default settings for the sharpness and unsharp mask beforehand.

For images not having a recipe attached, the defaults for sharpness and unsharp mask set here are applied. If you changed settings, they will be applied to images as the default sharpness level when you start up DPP again.

For images with a recipe attached, the sharpness level recorded in the recipe remains as it is and the defaults for sharpness and unsharp mask set here are not applied.

## **Image Processing 2**



#### Quick check window settings

You can specify image display settings for the quick check window. By selecting [Show image with recipe applied], images with a recipe attached are displayed with the recipe applied. Any changes you made will be applied when you start up DPP again.

#### Graphic processor settings

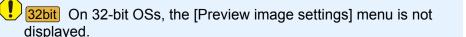
If you checkmark [Use graphics processor for image processing], the graphics processor is used to allow a faster preview display. The CPU handles convert and save tasks as well as print tasks as usual. Settings will be applied the next time DPP is started up.



Printing

Images

Introduction



## **Color Management**

You can specify settings relating to color management, such as settings for work color space, conditions for color matching, etc.

	Preferences	Downloading Images
General settings	Default settings of Work color space *	
Image Processing 1	sRGB     Apple RGB	
Image Processing 2	Adobe RGB     ColorMatch RGB	
Color management	O Wide Gamut RGB	Viewing
View settings Properties display	Use shooting color space as work color space	Images
settings	Color matching settings	
	For display	
	⊖ sRgB	
	Use the OS settings	Sorting
	O Monitor profile	Imagaa
	Browse	Images
	Printing profile Rendering intents	
	None   Perceptual	
	Relative Colorimetric	
		Editing
	CMYK simulation profile Rendering intents	Images
	None     Perceptual	5
	Relative Colorimetric	
		Printing
		Images
	OK Cancel	
*Changes take effect a	fter restarting	_
		Processing

#### Default settings of Work color space

You can select the color space (p.139) to be applied as a default setting of RAW images from five types. The color space set will be applied as the color space when a RAW image is converted and saved (p.85, p.117) or printed (p.110 to p.113).

- If you change the color space, and you restart DPP, the set color space is applied as the default color space.
- You can check the color space that is set in an image in all windows except the quick check window.
- If you checkmark [Use shooting color space as work color space], the color space specified with the camera when the image was shot will be set as work color space.



Large Numbers

Introduction

Contents

- To use this function, a NVIDIA CUDA (Compute Capability 2.0 or higher) GPU\* with at least 1.0 GB of video memory is necessary. Additionally, the latest NVIDIA GPU driver must be installed.
   \* GPU is an abbreviation of "Graphics Processing Unit".
  - The [Use graphics processor for image processing] checkbox is available only when a supporting GPU is installed.
- If the OS or other application software is using the GPU, processing by the GPU may not be possible in some circumstances. In such a case, the CPU handles processing as usual.

#### Introduction

Contents

#### $\widehat{\mathbf{W}}^{\in}$ Changes are not applied to the edited image

Even if the default setting is changed, the new default setting is not applied to edited (i.e., adjusted using the tool palette, cropped, dusterased) images. Change the settings individually.

You can set a color space that is different from the default settings for each image (p.83).

#### Color matching settings (color setting of the monitor)

Where a profile (p.138) is attached to the monitor you are using, you can display an image in more faithful colors by setting the profile.

- If you select [Use the OS settings], the color profile set in Windows will also be applied in DPP. If you are using multiple monitors, the profile set for each monitor is applied to DPP.
- Select the [Monitor profile], click the [Browse] button. You can select a profile for your monitor in the dialog box that appears.

#### Precise coloring with a third-party monitor color reader

If you use a profile created using a third-party monitor color reader, images can be displayed in even more precise colors.

#### Printing profile (color setting of the printer)

Where a profile is not attached to the printer you are using to print images, you can print an image, simulating the colors displayed on screen by setting the profile in DPP.

When you set a profile for printing in DPP, set the color adjustment function of the printer driver to off. If it is left on, the image may not be printed in colors close to those displayed on screen.

## **View Settings**

You can set layout for screen display.

		Preferences	×	Downloadin
General settings Image Processing 1 Image Processing 2	Thumbnail order Default sort order	File name v	Ascending     Descending	Images
Color management View settings Properties display settings	Save sort order for each folder Tool tips     Show tool tips Reset user interface * Restore defaults at startup			Viewing Images
	Reset size and position only     Reset all user interface settings  Image background color  Preview screen background color	(default) •		Sorting Images
	Imate zooming	O Double-click		Editing Images
*Changes take effect af	ter restarting		OK Cancel	Printing Images

#### Thumbnail order

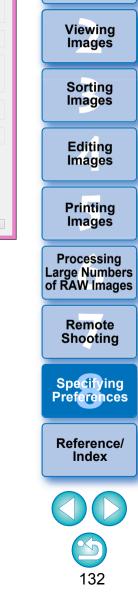
Specify the default order of images in the main window, and that the order of rearranged images be maintained. If you checkmark the checkbox, the order of rearranged images is maintained starting the next time you select a folder (p.35).

#### Reset user interface

You can reset user interface settings.

Choose from either of 2 reset states.

By checkmarking the [Restore defaults at startup] checkbox, settings revert to their original settings for next time you start up DPP. The checkmark is also removed from the checkbox for the next startup.



#### Introduction

## **Properties Display Settings**

You can specify settings for shooting and recipe information that appears with thumbnails and in the preview window.

	Preferen	ces		
General settings Image Processing 1 Image Processing 2 Color management View settings Hroperties display settings	Use Recommended Thumbnail display settings Show Av/Tv/ISO on thumbnails Show icon on thumbnail to indicate edited recipes Preview properties font			
Isettings	xxxx 16 pt		Browse	Restore Defaults
	Display settings for thumbnails with info  File Spec Owner's name Shooting mode + Metering mode Aporture Value - Shutter Speed Deposite Compensation White balance Picture Style Color space	Add >>	Restore Defaults Stootune Data/Time Camera Model Name Image Size + RAW Type Lens Focal Length	Clear All
			Move Up Move Dov	wn
*Changes take effect a	fter verterling		1	OK Cancel

#### Thumbnail display settings

You can specify information that appears on thumbnails. If the [Show Av/Tv/ISO on thumbnails] checkbox is checked, Av/Tv/ISO information is displayed on thumbnails if thumbnails are set at Size 3 or larger.

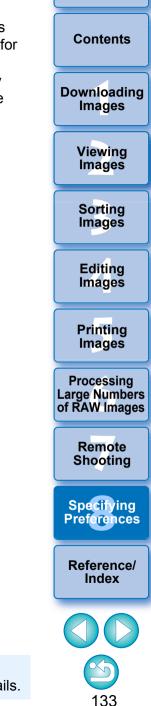
#### Preview properties font

You can specify the font used for information displayed in the preview window.

#### Properties to display

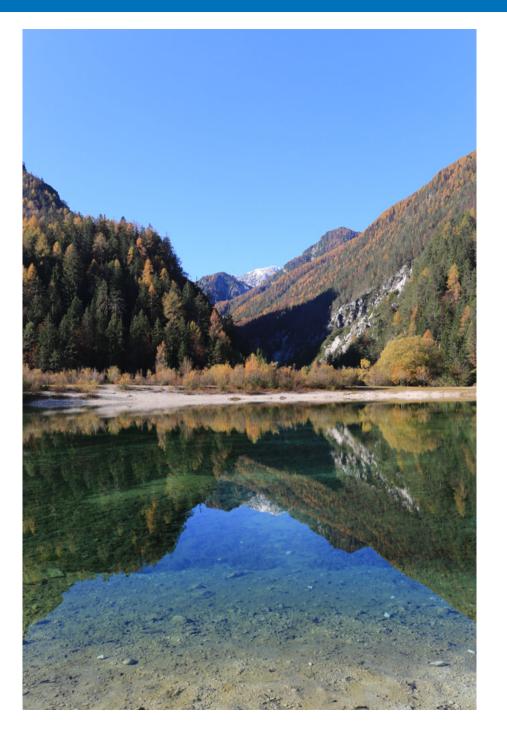
You can specify detailed settings for [Display settings for thumbnails with info], [Display settings for thumbnail list], and [Display settings for preview properties].

Items that can be selected appear in the list box at left, and actually displayed items appear in the list box at right. Specify items with the [Add >>] button and [<< Remove] button. You can also change the display order with the [Move Up] button and [Move Down] button.



All the property items may not be displayed depending on the combination of window, preview window, or the size of thumbnails.

## Reference



Troubleshooting	135
Deleting the Software (Uninstalling)	136
Image Frame Information in the Main Window	
and Edit Image Window	137
Glossary	138
Index	140
About This Instruction Manual	144
Trademarks	144

35	
36	Contents
	Downloading
37	Downloading Images
38	
40	Viewing Images
14	
14	Sorting Images
	Editing
	Images
	Printing
	Images
	Processing
	Large Numbers of RAW Images
	Remote
	Shooting
	Specifying Preferences
	Reference/ Index
	134

## Troubleshooting

If DPP is not operating correctly, refer to the subjects below.

### Installation can not be completed correctly

 Select an administrator-level privilege ([Computer administrator], [Administrator], etc.) when setting the user. You cannot install the software if the user setting other than an administrator-level privilege is selected. For detailed information on selecting an administratorlevel privilege, refer to your computer User's Manual.

## DPP does not work

- DPP does not operate correctly on a computer if its system requirements are not met. Use DPP on a computer with compatible system requirements (p.3).
- Even if your computer has the RAM capacity (memory) described in the system requirements (p.3), if other applications are running at the same time as DPP, you may not have sufficient RAM (memory). Exit any applications other than DPP.

## The card reader does not detect the SD card

 Depending on the card reader and computer OS used, SDXC cards may not be correctly detected. In such a case, connect your camera and computer with the provided interface cable, and transfer the images to your computer using EOS Utility.

### Images are not displayed properly

Images that are not supported by DPP are not displayed. (Thumbnail images are displayed as [?].) On a 32-bit version PC, when more images than the maximum displayable amount are detected, images beyond the maximum are not displayed. (Thumbnail images are displayed as [?].) There are various types of JPEG and TIFF images, so JPEG images other than Exif 2.2, 2.21 or 2.3 compatible images and TIFF images other than Exif compatible images may not to be displayed properly (p.4).

## A recipe could not be pasted (applied) to another image

 Contents that can only be adjusted for RAW images cannot be applied as a recipe to JPEG images or TIFF images.

# Colors are subdued in the image when viewed with other software

- If a RAW image which has a color space other than sRGB is converted and saved as a JPEG or TIFF image (p.83, p.131), the colors will be subdued when viewed in software that is only compatible with sRGB color space. In such a case, set the RAW image's color space to sRGB, convert and save again as a JPEG or TIFF image, and then view the image.
- The Auto Lighting Optimizer (p.55) is a function compatible with cameras equipped with the Auto Lighting Optimizer. Adjustments made with the Auto Lighting Optimizer cannot be applied to RAW images shot with the cameras not compatible with this function.

# The colors of the image displayed on screen and the colors of the printed image do not match

If the color of the monitor that displays an image is not adjusted correctly, or if the profile for a printer that is to print image is not set up, the color of the image displayed on screen and the color of the printed photograph may differ greatly. If the color of the monitor that displays images is corrected (p.131) and the profile for a printer is set up correctly (p.132), the color of a printed photograph and the color of an image on screen can be more closely matched. Using a Canon printer automatically sets up the profiles for the printer, so you only need to set the color of the monitor to bring the colors closer to each other.

# Printing a large number of images in batches cannot be performed

 If a large number of images are printed in batches, printing may stop in the middle or the images may not be printed. Reduce the number of images to print or increase the memory on your computer. Contents

Introduction

Downloading Images

> Viewing Images

Sorting Images

Editing Images

Printing Images

Processing Large Numbers of RAW Images

> Remote Shooting

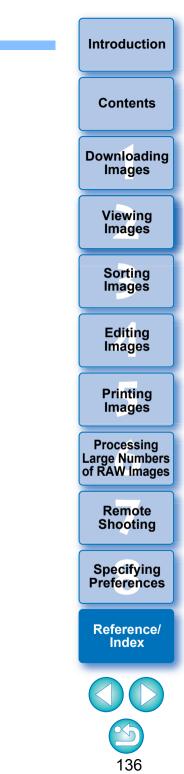
Specifying Preferences

Reference/ Index

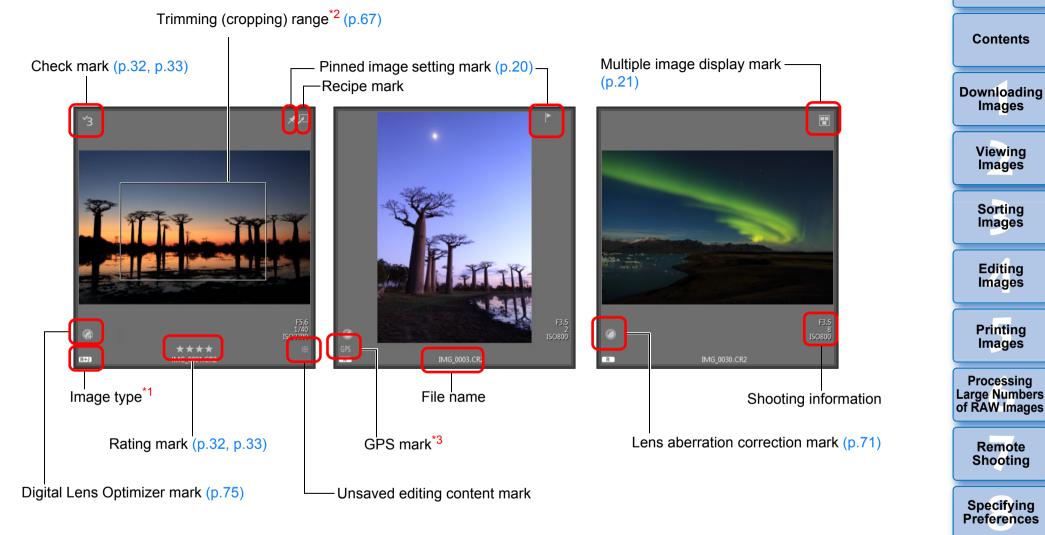


## **Deleting the Software (Uninstalling)**

- Exit any applications before uninstalling the software.
- Log in under an administrator-level privilege when uninstalling the software.
- Uninstall the software according to the OS software uninstalling method.
- To prevent computer malfunctions, always restart your computer after you have uninstalled the software. Re-installing the software without first restarting your computer is particularly likely to result in computer malfunctions.



## Image Frame Information in the Main Window and Edit Image Window (p.12, p.92)



\*1 Displayed on RAW+JPEG images displayed as a single image (p.14).

[**R**] is displayed in RAW images.

- [DPR] is displayed in Dual Pixel RAW images.
- \*<sup>2</sup> When aspect ratio information is attached to an image shot with any supported camera other than the EOS 5D Mark II, the image is displayed as a cropped image.
- \*<sup>3</sup> Displayed on images shot on a GPS functioncompatible Canon camera.
- [ 2] is displayed in an image frame when editing is not possible.



**Reference**/

Index

#### Introduction

## Glossary RAW image

EOS camera RAW images are recorded in an uncompressed 14bit or 12bit format.

Because RAW images are special images in an undeveloped status, you need software with development processing functions such as DPP in order to view them. The advantage of the undeveloped RAW images is that you can make a variety of adjustments to RAW images with almost no deterioration of the image.

\* "RAW" meaning "in a natural condition" or "not processed or refined".

## JPEG image

The most ordinary image in non-reversible compressed 8bit format. The advantage of this is that by saving at a high compression rate, the file size can be small, even for image data that has a high pixel count. Because during saving and compression part of the data is thinned out to make the file size small, every time you edit or save, the image deteriorates.

With DPP, even if you repeat editing/saving, only the recipe data is modified, and no overwriting or compression occurs so the original image data does not deteriorate.

\* JPEG is an abbreviation of "Joint Photographic Experts Group".

## TIFF image

Bitmap-format image recorded in a 8bit/16bit uncompressed format. Because TIFF images are in uncompressed format, they are suitable for saving an image while maintaining the original high image quality. \* TIFF is an abbreviation of "Tagged Image File Format".

## Recipe

The "Image processing conditions information" for RAW images that can be edited in DPP is called a "recipe".

Further, in DPP, you can perform image editing on JPEG and TIFF images that use "recipes" as with RAW images.

## bit number

Binary unit of information volume in the color of an image. The number shows the number of bits per pixel.

The larger the number of bits, the more the color numbers and the gradation becomes smoother. A one-bit image is a black-and-white image.

## **Color Management System (Color Matching)**

Digital cameras that shoot images, monitors that display images, and printers that print images each have a different way of creating color. For this reason, there may be a difference between the color of an image when viewed on a monitor and when printed.

A color management system is a system for managing color in order to bring these colors closer together. With DPP, you can more closely match color between different devices using ICC profiles between different devices.

## **ICC** profiles

ICC profiles are files containing color information such as color characteristics and color space for various devices, set by the ICC (International Color Consortium). Most devices such as the monitor we use to view images or the printer we use to print images can be managed (color management) using these ICC profiles and the color between different devices can be more closely matched. DPP has color management that uses these ICC profiles.

## **Tone Curve**

A tone curve shows values before adjustment (input) as the horizontal axis on a graph, and the values after adjustment (output) as the vertical axis. Since the values of before adjustment and after adjustment are the same before any adjustment is made, the tone curve displays as a straight line from bottom left to top right, and by changing this tone curve, you can adjust in detail the image's brightness, contrast and color. The more you go right on the horizontal axis, the more the plus value it becomes, and the higher you go on the vertical axis, the more the plus value it becomes. Contents

Downloading Images

> Viewing Images

Sorting Images

Editing Images

Printing Images

Processing Large Numbers of RAW Images

> Remote Shooting

Specifying Preferences

Reference/ Index



Contents

Downloading

Images

Viewing

Images

Sorting

Images

## **Color space**

A color space is the reproducible color range (color gamut

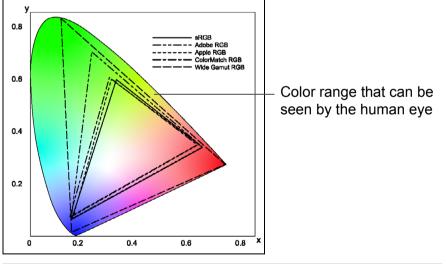
characteristics). DPP supports the following five kinds of color space.

- sRGB :Standard color space for Windows. Widely used for<br/>the standard color space of monitors, digital<br/>cameras, and scanners.Adobe RGB :A wider color space than sRGB. Mainly used for<br/>printing for business purposes.Apple RGB :Standard color space for Macintosh. A slightly
- wider color space than sRGB. **ColorMatch RGB**: A slightly wider color space than sRGB. Mainly used for printing for business purposes.

Wide Gamut RGB : A wider color space than Adobe RGB.

Refer to the color chart below for the color area of each color space.

## Color chart of color spaces compatible with DPP



	Gamma value	White point (color temp.)
 sRGB	2.2	6500K(D65)
 Adobe RGB	2.2	6500K(D65)
 Apple RGB	1.8	6500K(D65)
 ColorMatch RGB	1.8	5000K(D50)
 Wide Gamut RGB	2.2	5000K(D50)

## **CMYK simulation profiles**

A profile that simulates colors when printing in a CMYK environment (printing machine, etc.). With DPP, you can simulate color with four types of profile.

· <b>/</b> · · · · · · ·	
Euro Standard :	Profile normally used for book printing in Europe, suitable for simulation of standard
	European printing.
JMPA :	Profile normally used for book printing, etc. in Japan, suitable for simulation of magazine advertising standard color printing.
U.S.Web Coated :	Profile normally used for book printing in
	North America, suitable for simulation of
	North American standard printing.
JapanColor2001 type3	: Profile becoming a standard in the Japanese printing industry, suitable for simulation of
	JapanColor standard printing.

## **Rendering intent**

Rendering intents are color conversion methods when printing an image. The conversion method of each rendering intent is shown below.

Perceptual : Before and after conversion, all colors are converted to maintain the relationship between colors. Even where colors slightly change, you can print a natural-looking image which has maintained color harmony. However, depending on the image, the saturation may change overall.

Relative Colorimetric : There will not be much conversion to colors which are similar before and after conversion, but colors which are not similar are converted appropriately. Because there are little changes to similar colors which comprise most of an image, you can print a natural-looking image in which the saturation has not changed greatly. However, depending on the image, there are cases where the overall tone of an image changes somewhat as colors which are not similar and highlights change. Editing Images Printing

Processing Large Numbers of RAW Images

Images

Remote Shooting

Specifying Preferences

Reference/ Index



## Index

A
Adjust JPEG Images 43
Adjust TIFF Images 43
Adjusting
Adjustment Contents (Recipe)
Apply Adjustments
Automatic Adjustment (Gradation, Luminance) 54
Brightness
Brightness of Highlights 51
Brightness of Shadows
Click White Balance 49, 59
Color Saturation
Color Temperature
Color Tone
Convrast
Copy Adjustments
Filter Effect
Hue
Monochrome
Personal White Balance 115
Picture Style File 48
Saturation 63, 64
Save Adjustments 89
Sharpness 56
Tone Curve Adjustment 60
Toning Effect
White Balance
Adjusting Brightness
Adjusting Tone Curve
Adjustment Contents (Recipe)
Adobe RGB 139
AF Points
Apple RGB 139
Arrange Images
Auto Lighting Optimizer
Automatic Adjustment (Gradation, Luminance)
Automatic Dust Erasure Processing

#### В Contents Batch Apply White Balance to Images (Personal White Balance)..... 115 Batch Change the File Name of Images...... 120 Batch Convert/Save Images (Batch Process) ...... 117 Downloading Batch Process (Batch Save JPEG and TIFF Images)...... 117 Images Batch Process of Multiple Images Change File Name ...... 120 Viewing Images Recipe Data 88 Sorting Images Batch Settings Window...... 117, 119 Batch Transfer Images ..... 119 Editing Batch Transfer Images to Image Editing Software ...... 119 Images bit Number 138 Printing Images С Processing Large Numbers of RAW Images Changing the File Name of Images in the Order in the Remote Shooting Specifying Preferences **Reference**/ Index Color Chart ...... 139 Color Management (Preferences) ..... 131 140

	_
Color saturation 5	
Color Setting of the Monitor (Profiles) 13	
Color Setting of the Printer (Profiles) 13	31
Color Space 13	39
Adobe RGB 13	39
Apple RGB 13	
Color Space Setting for Each Image	
ColorMatch RGB	
sRGB 13 Wide Gamut RGB 13	
Color Space Setting for Each Image	
Color Temperature	
Color Tone	
ColorMatch RGB	
Compositing Images	
Contrast	
Convert One Image	
÷	
Convert to JPEG or TIFF Image and Save	
Copy Stamp (Image Correction)	
Copying and Pasting (Applying) Recipes	
Correct Images (Copy Stamp Function)	
Cropping 6	
Customize toolbar 10	)8
D	
Default Color Space Setting 13	31
Delete Images	
Deleting	
Delete Images	38
Delete the Software	
Deleting DPP (Uninstalling) 13	
Detailed Setting Printing (Printing with Shooting Information) 11	1
Digital Lens Optimizer	<b>'</b> 4

Digital Lens Optimizer mark..... 137

Before/After Comparison Display23Enlarged Display (Preview Window)17

Display

## 

6	
General Settings (Preferences)	128
GPS mark	137
Grid Lines	. 21

Filter Effect

Enlarged Display (Quick Check Window) 30	
Multi-Function Preview.       24         Single Image Display       35         Synchronize Preview Window.       91	Contents
Thumbnail Display (Main Window)	Downloading Images
Displaying Shooting Information	
Distortion Correction	Viewing Images
Downloading an Image to Your Computer	inageo
Downloading Images from a Camera       10         Downloading Images from a Card Reader       10         Downloading Images       10         Downloading Images       10	Sorting Images
Downloading Images from a Camera 10	Editing
Dual Pixel RAW Optimizer	Editing Images
Dust Delete Data	
Dust Delete/Copy Stamp Tool Palette	Desingtion of
Dust Erasure Processing	Printing Images
Automatic Dust Erasure Processing       78         Dust Delete/Copy Stamp Tool Palette       78	Processing
Image Correction (Copy Stamp Function)       82         Manual Dust Erasure (Repair Function)       80	Large Numbers of RAW Images
Dynamic Range	gee
E Edit Image Window	Remote Shooting
EditingAdjusting	
Enlarged Display (Preview Window) 17	Specifying Preferences
EOS Utility 10	
Exiting DPP 28	
F	Reference/ Index

Η	
HDR (High Dynamic Range) Images	100
Highlight Area Warning Indicator	22
Histogram Palette	16
Hue	44, 63, 64

ICC Profiles	138
Image Information	36
Image Marks (Image Frame Information)	137
Image processing (Preferences)	129
Image Quality	
Noise Reduction	65
J	
JPEG Image	43, 138
1	
Lens Aberration Correction	
Lens aberration correction mark	

137
54
90
65

### Μ

Main Window	. 12
Main Window (Multi-layout)	. 19
Main Window (Thumbnail Layout)	. 12
Manual Dust Erasure (Repair Function)	. 80
Monochrome	. 52
Filter Effect	. 53
Toning effect	. 53
Move or Copy Folders	. 39
Move or Copy Images	. 38
Multi-Function Preview	. 24
Multi-layout	. 19
Multiple image display mark	

## Ν

N	
Navigator Palette	
Noise Reduction	Contents
	Devente e din a
Organize Images	Downloading Images
Organizing Images	linagoo
Delete Images	
Move or Copy Folders	Viewing
Move or Copy Images	Images
-	
P	Sorting
Palettes	Images
Display Method of Palettes	
Rearranging Palettes	Editing
Perceptual	Images
Peripheral Illumination Correction	
Personal White Balance 115	Printing
Picture Style 46	Images
Picture Style File 48	
Pin	Processing
Pinned image setting mark 137	Large Numbers of RAW Images
Preferences 128	of ItATT Innages
Color Management 131	Remote
General Settings 128	Shooting
Image processing 129	
Properties Display Settings	
View Settings	Specifying Preferences
Preview Display Area	
Preview Window	Reference/ Index
Printing	Index
Printing a Thumbnail List (Contact Sheet Printing)	
Printing One Sheet of Paper	
Printing One Sheet of Paper	
Printing with Shooting Information (Detailed Setting Printing)	
Properties Display Settings (Preferences)	140
	142

Introduction

Q
Quick Check Window
R
Rating
Rating mark
RAW Image
Re-Adjusting an Image
Recipe
Recipe File
Re-Editing an Image
Registering Folders as Bookmarks
Remote Shooting 122
Rename Window 120
Rendering Intent (Matching Method) 139
Repair (Manual Dust Erasure) 80
Rotate Images 12
S
Saturation
Save
Batch Convert/Save Images (Batch Process) 117
Save
Save As
Save As
Saving Recipes
Second Windows
Select Images 12, 30, 92
Shadow Area Warning Indicator
Sharpness
Shooting Information Display
Single Image Display
Single Image Display of RAW and JPEG Image
Soft-Proof Colors Function
Sorting Images
Check marks
1 catings

sRGB	
Starting up DPP	
Supported Images	Contents
Synchronization (Preview Window)	
Synchronize Images	Downloading
Synchronize Preview Window	Images
System Requirements	
	Viewing
T Thumbnail Display (Filter/Sort Function)	Images
Thumbhail Display (Main Window)	
	Sorting
Change the Display	Images
Thumbnail Display and Enlarged Display (Edit Image Window)	
Thumbnail Display Area	Editing
Thumbnail Layout	Images
Thumbnails Control Panel	
TIFF Image	Printing
Tone Curve	Images
Toning effect	
Tool Palette	Processing Large Numbers
Basic Adjustment Tool Palette	of RAW Images
Color Adjustment Tool Palette	
Detailed Adjustment Tool Palette	Remote
Dust Delete/Copy Stamp Tool Palette 78	Shooting
Lens Correction Tool Palette	
Settings Tool Palette	Specifying
Tone Adjustment Tool Palette	Preferences
Toolbar	
Transfer	Reference/
Batch Transfer Images to Image Editing Software 119	Index
Transfer an Image to Photoshop 107	
Transfer an Image to Photoshop 107	
Trimming (cropping) range 137	
Trimming/Angle Adjustment Tool Palette	
Trimming/Angle Adjustment Window67	
	143

#### U

Unsaved editing content mark	137
Unsharp Mask	57
V	
View Settings (Preferences)	132
Viewing Images in the Main Window (Thumbnail Layout)	12
W	
White Balance	48
Click White Balance	49, 59
Color Temperature	50
Personal White Balance	115
Wide Gamut RGB	139
Work Color Space	83
Color Management	131

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Viewing Images Sorting Images

Introduction

Contents

Downloading Images

> Editing Images

Printing Images

Processing Large Numbers of RAW Images

> Remote Shooting

Specifying Preferences

Reference/ Index

