ENGLISH

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Picture Style File Creating Software
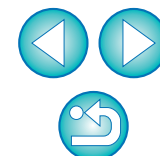
Picture Style Editor

Ver. 1.24

Instruction Manual

● Content of this Instruction Manual

- ● PSE stands for Picture Style Editor.
- ● In this manual, the windows used in the examples are from Windows 10.
- ● ▶ indicates the selection procedure of the menu. (Example: [File] menu ▶ [Exit].)
- ● 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.
- ● ⚠ : Marks information that should be read before use.
- ● 📝 : Marks additional information you may find helpful.

● Switching Between Pages

- ● Click on arrows on the bottom right of the screen.
  - ▷ : next page
  - ◁ : previous page
  - ↩ : return to a page you had previously displayed
- ● Click on the headings on the right side of the screen to switch to the contents page of that heading. Also, click the item you want to read about on the table of contents to move to the relevant page.

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Introduction

Picture Style Editor (hereinafter, "PSE") is software that allows you to edit Picture Style to your unique image characteristics and save the edited results as original Picture Style files.

● What is a Picture Style file?

A Picture Style file (extension ".PF2" or ".PF3") is an extended function of a Picture Style. It differs from the eight preset Picture Styles (Auto, Standard, Portrait, Landscape, Fine Detail, Neutral, Faithful and Monochrome) and provides image characteristics that are effective in a very limited number of scenes.

You can further expand your photographic expression by using a Picture Style file effective for a specific scene.

● Main Features of PSE

With PSE, you can use the functions below to edit Picture Style to your unique image characteristics and save the edited results as original Picture Style files (extension ".PF2" or ".PF3").

- ● Select a Picture Style to be used as a basis for your images
- ● Set the [Sharpness], [Contrast], [Color saturation] and [Color tone]
- ● Make adjustments to a specific color
- ● Adjust the brightness and contrast (gamma characteristic)

In addition, you can register your saved original Picture Style files on a camera with the Picture Style function and then apply those styles to shot images. You can also use Digital Photo Professional (hereinafter, "DPP") to apply the styles to RAW images.

● Color Management

Use PSE in a computer environment with color management. Also, set the profile of the monitor you are using and the color space of the sample image to be used to perform the adjustments, etc. in the preferences window .

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	Images shot with EOS-1D X Mark III: Intel Core i series (recommended Intel Core i7 or later) Images shot with other cameras: Core 2 Duo 2.0 GHz or faster (recommended Core i series or later)
RAM (memory)	Images shot with EOS-1D X Mark III: 4.0 GB or more of RAM (8.0 GB or more recommended) Images shot with other cameras: 2.0 GB or more of RAM (4.0 GB or more recommended)

- Only supported on 64-bit OSs. Cannot be installed or used on 32-bit version PCs.

* With Microsoft .NET Framework installed

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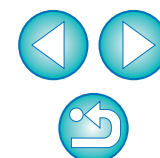Contents

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Sample Images for Adjustment

PSE enables you to use RAW images shot with EOS cameras* (excluding the EOS DCS1 and EOS DCS3), PowerShot G7 X Mark II, PowerShot G9 X Mark II, PowerShot G1 X Mark III, PowerShot G5 X Mark II, and PowerShot G7 X Mark III as sample images for adjustment. You can then save the completed adjustments as original Picture Style files.

* Compatible with RAW images shot with EOS D2000 that have been converted to RAW images using the CR2 Converter and have the ".CR2" extension.
For information on CR2 Converter, refer to Canon website.

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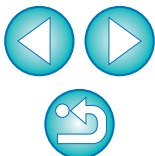
Contents

Preparing
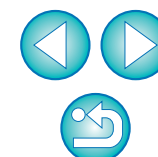a Sample

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Preparing Sample Images

PSE uses a sample image to perform the various adjustments and save the adjusted results as an original Picture Style file. For this reason, a sample image (p.3) to be used for this purpose needs to be prepared in advance and saved on your computer.

The settings performed in PSE are saved as a Picture Style file (p.19) which is separate from the sample image, and the sample image used to perform the adjustments is not affected at all.

Starting up PSE

**Double-click the [Picture Style Editor] icon on the desktop.**

➡ The main window (Description on the right) appears when PSE starts up.

Opening a Sample Image

Open a sample image and perform various adjustments with that image as a basis.

Noise reduction to the sample images may be applied by PSE included in EOS Solution Disk Ver.26 or later.

Drag and drop a sample image to the main window.
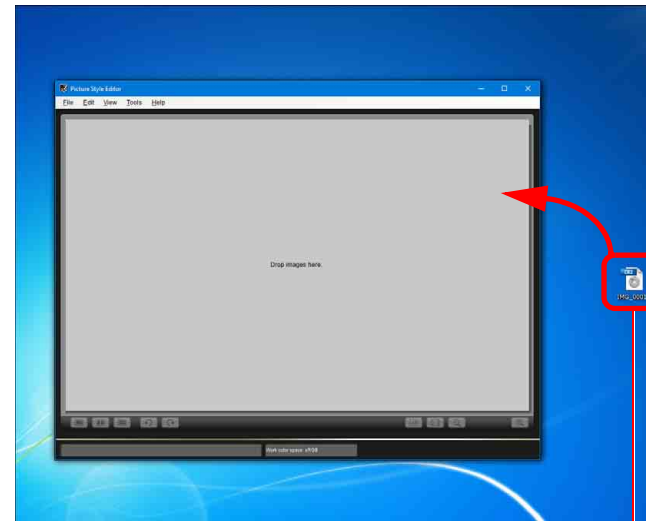
Drag and drop

➡ The sample image is displayed in the main window with the camera settings at the time of shooting.
➡ The [Tool palette] appears.

- If you open an image as a sample image with PSE, the shot settings on the camera will appear in the image. However, the Auto Lighting Optimizer settings will not appear.
- If you adjust a RAW image in DPP and then open it as a sample image with PSE, the adjustments made in DPP will not appear in the image.

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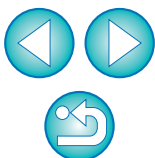
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Main Window

You can select the display magnification and the display method, etc. of the sample image.

Image rotation (90 degree increments to the left or right)

Before and after adjustment comparison display (Top/bottom split) (p.7)

Before and after adjustment comparison display (Left/right split) (p.7)

Normal screen

Cursor coordinates position

100% (actual pixel size) view

Full view

Display magnification (5 ratios: 12.5%, 25%, 50%, 100% and 200%)

Work color space display (p.21)

Color values of the cursor position (Before adjustment/after adjustment/ difference between before and after adjustment) (8-bit conversion)

Color display mode (p.18)

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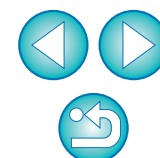
Enlarging a Specific Area

You can enlarge a specific area in the main window to 100%.

In the main window, double-click the area you want to enlarge.
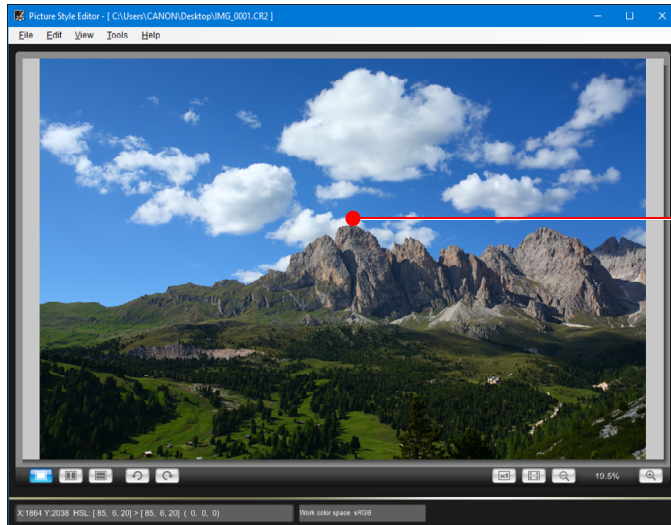
Double-click

➜ The area you double-clicked is enlarged to 100% (actual pixel size). If you wait for a while, it changes to a clearer display.
● To change the display position, drag on the image or drag the enlargement display position (p.8) in the [Navigator] window.
● Double-click again to revert to the full view.

Adjusting While Comparing with the Original Image

You can display before and after versions of an adjusted image in the same window and perform adjustments while checking the adjustment results.

Select [▬] or [▮▮].

➜ The images are displayed split top and bottom or left and right.

[▬] (Top/bottom split) display   [▮▮] (Left/right split) display
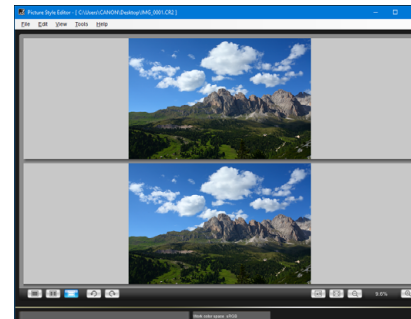
● The image before adjustment is displayed at the top, and that after adjustment at the bottom.
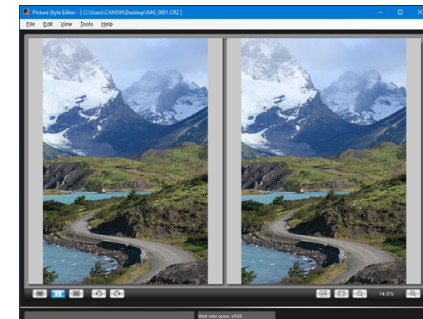
● The image before adjustment is displayed on the left, and that after adjustment on the right.
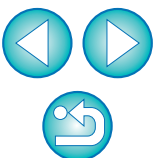
Navigator Window

The display position of an image when it is enlarged in the main window and the image histogram can be displayed in the navigator window. You can also set warning indicators to prevent excessive settings being made.

Display the [Navigator] window.

● Select the [View] menu ▶ [Navigator].

Enlargement display position (p.7)
Move the display position by dragging

Switches the histogram display

Histogram

Warning indicator setting

Warning range

📄 [Y] in the histogram display indicates luminance.

Setting the Warning Indicators

You can set warning indicators for luminance values (Y) and color values (RGB) which are useful for preventing excessive settings being made. Luminance and color value domains which are outside the set range blink as warning indicators on images in the main window.

1 Checkmark [Show warning on images] and select [Y] or [RGB].
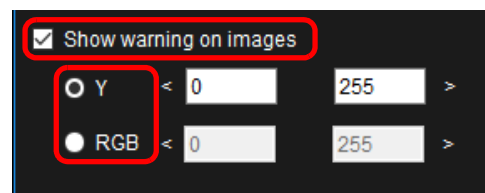
2 Enter the upper and lower limit values of the warning range.

→ The domain where values are outside the upper and lower limit of the range blinks on the image in the main window.

● To stop the warning indicators, remove the check mark from the [Show warning on images] checkbox.

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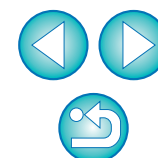
Tool Palette
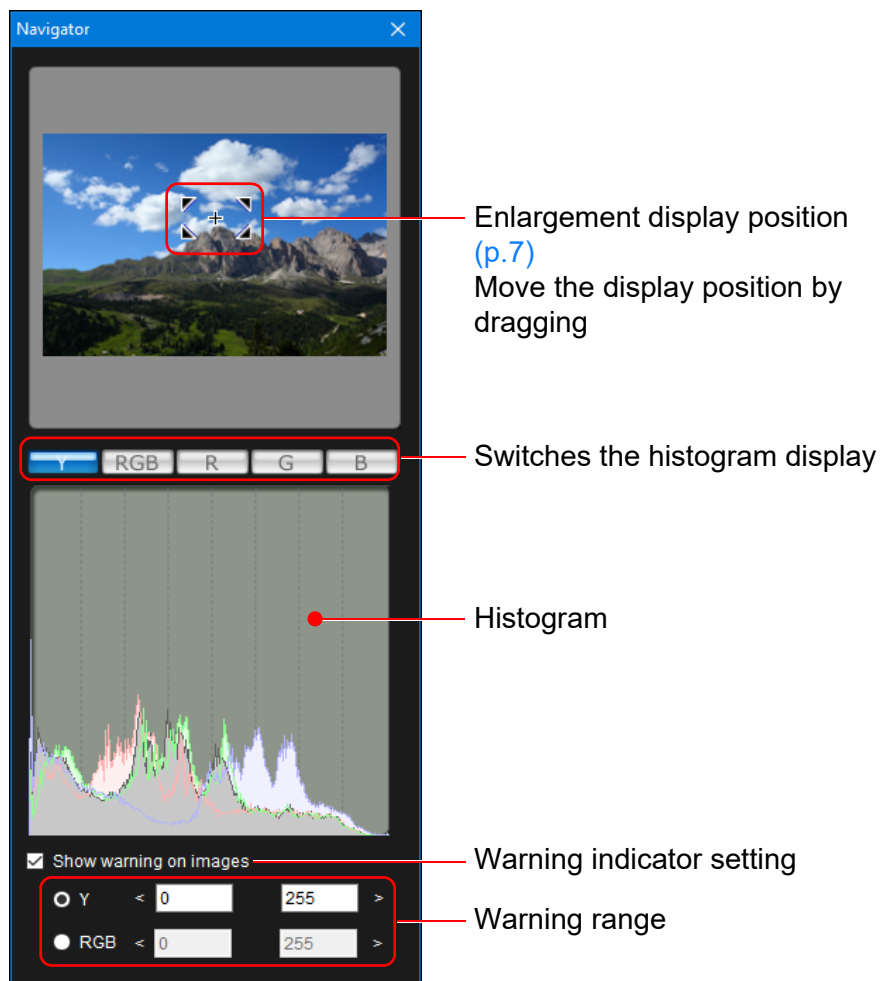
You can adjust the image characteristics of the Picture Style file by using the various functions of the [Tool palette].
The adjustments made with the [Tool palette] are immediately applied to the image in the main window, enabling you to check the results as you work.
We recommend that you make adjustments in the following order.
(1) Adjust with the [Basic] tab sheet (p.11)
(2) Adjust with the [Six Color-Axes] tab sheet (p.13)
(3) Adjust with the [Specific Colors] tab sheet (p.14)

[Basic] Tab Sheet
Make basic adjustments to image characteristics.

[Six Color-Axes] Tab Sheet
Make color adjustments to image characteristics.
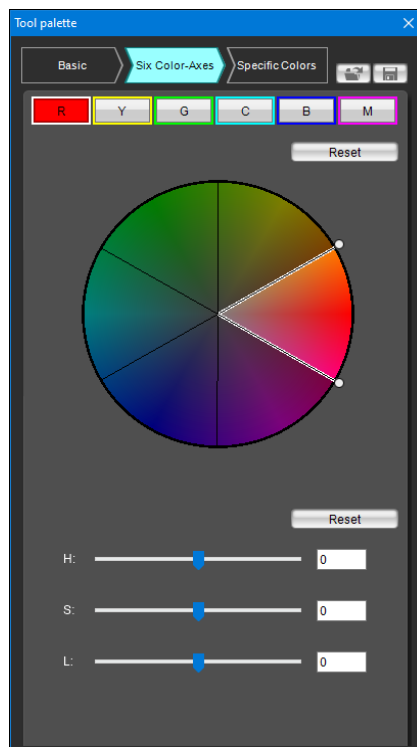
[Specific Colors] Tab Sheet
Make fine adjustments to a specific color gamut.

You can select the [View] menu ▶ [Tool palette] to switch the [Tool palette] show/hide.

Pre-adjusting the Images

Sample images used in the adjustment process (p.3) which do not have proper exposure or white balance can be adjusted using the [Preliminary adjustment] window to correct their brightness and white balance.

However, please remember that adjustments made with the [Preliminary adjustment] window are merely pre-adjustments for performing adjustments with the [Tool palette] (p.9). For this reason, adjustments made with the [Preliminary adjustment] window are not saved in the Picture Style file which you create.

If the sample image used for adjustments has proper exposure and white balance, it is not necessary to make adjustments with the [Preliminary adjustment] window.

Correcting the Brightness

1 **Select the [Tools] menu ▶ [Preliminary adjustment].**
➡ The [Preliminary adjustment] window appears.
● When the [Preliminary adjustment] window appears, the display switches to normal display, even if the main window display is showing a comparison of images before and after adjustment (p.7).

2 **Adjust to correct the brightness of the image.**

Drag to the left or right to adjust
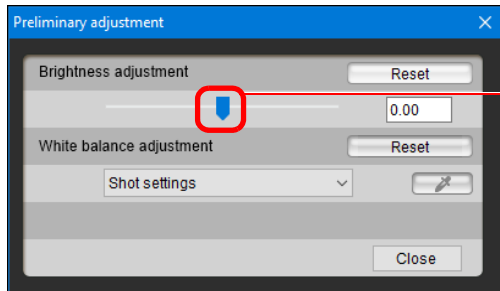
➡ The adjustments are applied to the image.

Correcting the White Balance

Adjust to correct the white balance.
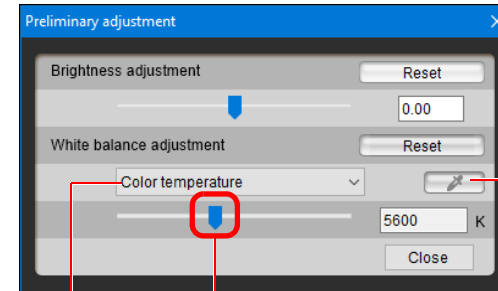
Click white balance
Click the [🖋] button and then click on a point that is to be the standard for white

The color temperature slider
Select [Color temperature] from the white balance list box, then drag the slider left or right

Select the white balance

➡ The adjustments are applied to the image.

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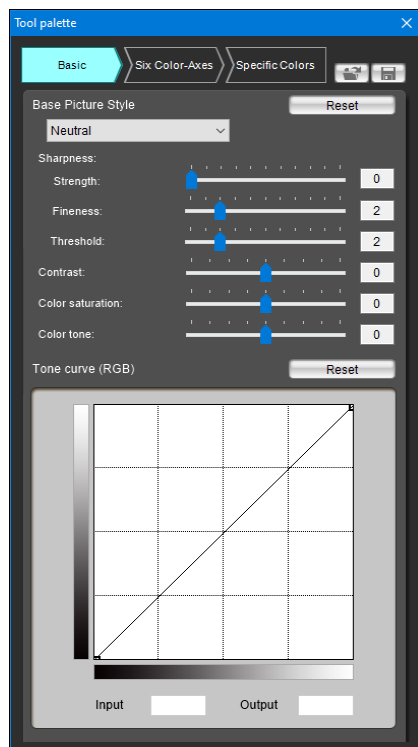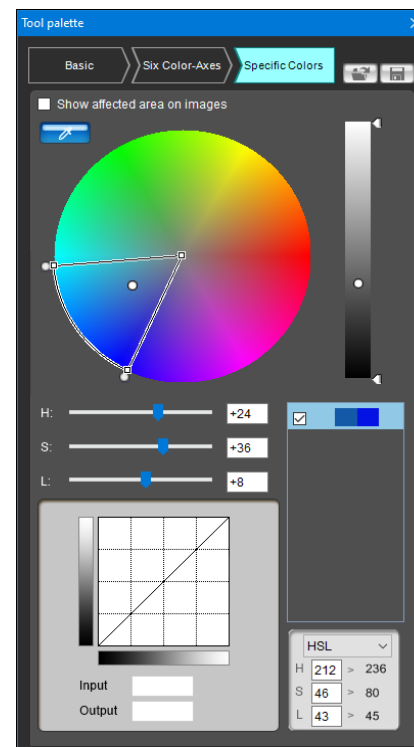# Making Basic Adjustments to Image Characteristics

Use the [Basic] tab sheet in the [Tool palette] to make basic adjustments to image characteristics.

Select the [Basic] tab in the [Tool palette].

Load a Picture Style file (this page)

Save a Picture Style file (p.19)

Select a Picture Style to be used as a basis (this page)

Adjust Sharpness, Contrast, Color saturation, and Color tone (p.12)

Adjust the Gamma Characteristic for RGB (p.12)

→ The [Basic] tab sheet appears.

Selecting a Picture Style to Be Used as a Basis

Select the Picture Style used as the basis of the adjustments from the preset Picture Styles except Auto or Monochrome.
You can also register and use a Picture Style file effective for the scene that you have downloaded from Canon website.
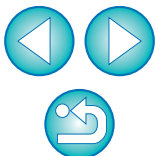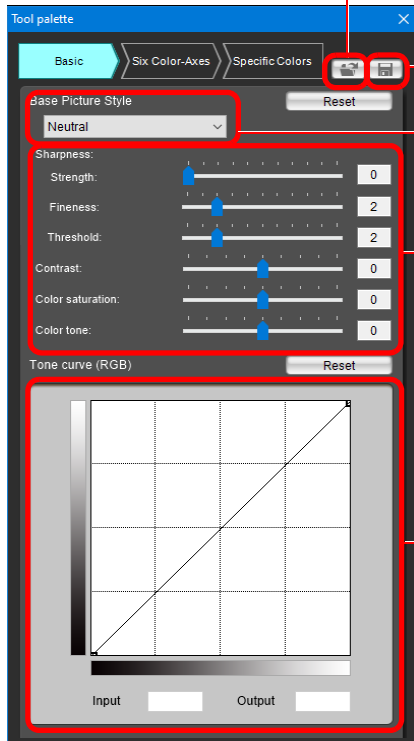
Select a Picture Style.
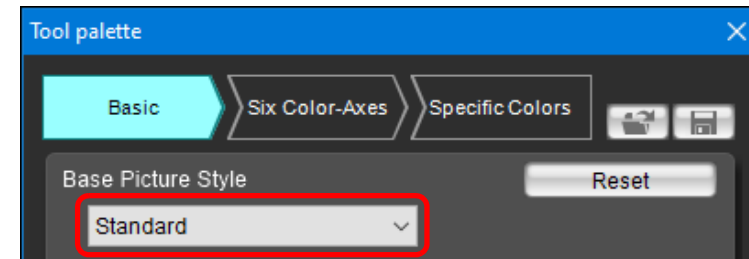
→ The selected Picture Style is applied to the image.

Using a Downloaded Picture Style File Effective for the Scene

1 **Click the [📷] button.**
→ The [Open Picture Style file] window appears.

2 **Select a Picture Style file to be registered and click the [Open] button.**
→ The selected Picture Style file is applied to the image.

- Original Picture Style files created with PSE (p.19) can also be registered and used by following the procedure above.
- Picture Style files compatible with PSE are files with the ".PF2" or ".PF3" extensions.
- You cannot select [Fine Detail] in [Base Picture Style] for the images shot with a camera which does not have [Fine Detail] as a preset Picture Style.

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Setting Sharpness, Contrast, Color Saturation and Color Tone

Drag each slider.

➜ The settings are applied to the image.

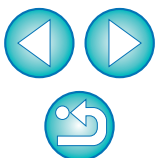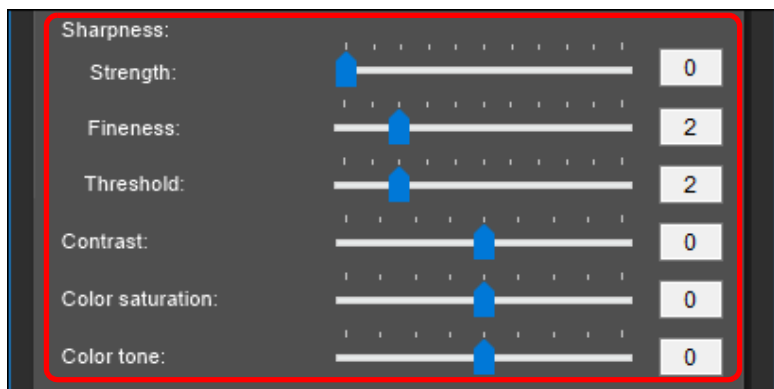⚠ [Fineness] or [Threshold] in [Sharpness] cannot be set for the images shot with a camera which does not have [Fine Detail] as a preset Picture Style.

Adjusting the Gamma Characteristic for RGB

You can use the tone curve to adjust brightness and contrast under RGB.
Use the tone curve in this tab sheet before adjusting with the [Six Color-Axes] tab sheet or [Specific Colors] tab sheet.

Adjust the brightness and contrast.
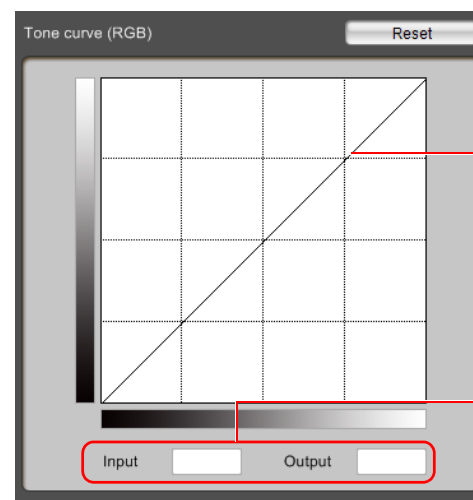
Click to add a [☐] (adjustment point) and adjust by dragging

The value of the selected point (you can also enter numerical values)

➜ The brightness and contrast of the image change.
● The horizontal axis shows the input level and the vertical axis shows the output level.
● The maximum number of [☐] is 10.
● To delete a [☐], select the [☐] and then either press the <Del> key on the keyboard or double-click on the [☐].

📝 Note that if you adjust the tone curve in the [Basic] tab after making adjustments with the [Six Color-Axes] tab sheet or [Specific Colors] tab sheet, the color characteristic will be further adjusted and intended image characteristics may not be achieved. To further adjust brightness and contrast after adjusting with the [Six Color-Axes] tab sheet or [Specific Colors] tab sheet, use the tone curve for adjusting luminosity in the [Specific Colors] tab sheet.

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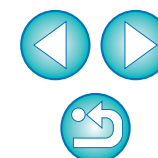
Adjusting Color

You can adjust the color region you selected using hue, saturation, and luminosity.

1 Select the [Six Color-Axes] tab in the [Tool palette].

Load a Picture Style file (p.11)

Save a Picture Style file (p.19)

Hue region select buttons (this page)

Adjustment color wheel (this page)

Hue adjustment sliders (p.14)

➜ The [Six Color-Axes] tab sheet appears.

📄 Note that if you adjust a color with the [Basic] tab sheet after making adjustments with the [Six Color-Axes] tab sheet, the color characteristic will be further adjusted and intended image characteristics may not be achieved. We recommend that you make adjustments in the following order.
(1) Adjust using the [Basic] tab sheet, (2) adjust using the [Six Color-Axes] tab sheet, (3) adjust using the [Specific Colors] tab sheet.

2 Select the color region you want to adjust.
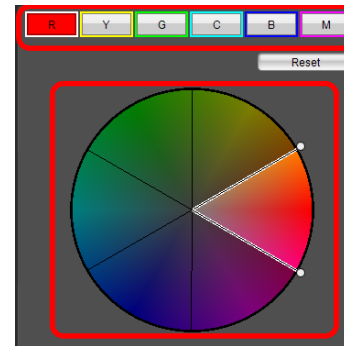
● Select the color region you want to adjust from the adjustment color wheel.
You can also select the color region by clicking a hue region select button.

3 Adjust the upper and lower hue limits for the selected region.
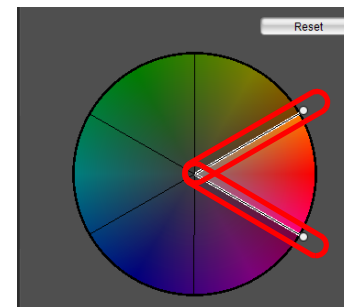
● You can adjust the upper and lower hue limits for the selected region by dragging the boundary lines for each hue in the direction of the circumference.

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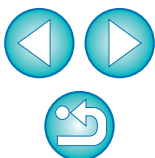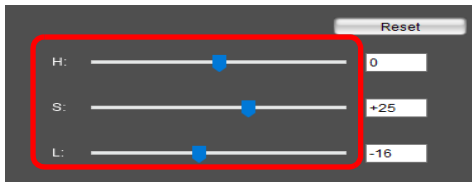
4 Adjust color.

- Drag the sliders to adjust color. You can also directly enter values to adjust.
  H: Adjust hue.
  S: Adjust saturation.
  L: Adjust luminosity.

Making Minute Adjustments to Color

You can make minute adjustments to a color you have specified, using the hue, saturation and luminosity functions in order to get the color you want. You can also set a range for the effect on surrounding colors which occurs when you adjust the colors you have specified.

1 Select the [Specific Colors] tab in the [Tool palette].

Load a Picture Style file (p.11)

Save a Picture Style file (p.19)

Minute adjustments to a specified color (p.15)

Adjustment color list (p.17)

Color display mode (p.18)

Adjust the gamma characteristic for luminosity (p.18)

➜ The [Specific Colors] tab sheet appears.

📝 Note that if you adjust a color with the [Six Color-Axes] tab sheet or [Basic] tab sheet after making adjustments with the [Specific Colors] tab sheet, the color characteristic will be further adjusted and intended image characteristics may not be achieved. We recommend that you make adjustments in the following order.
(1) Adjust using the [Basic] tab sheet, (2) adjust using the [Six Color-Axes] tab sheet, (3) adjust using the [Specific Colors] tab sheet.

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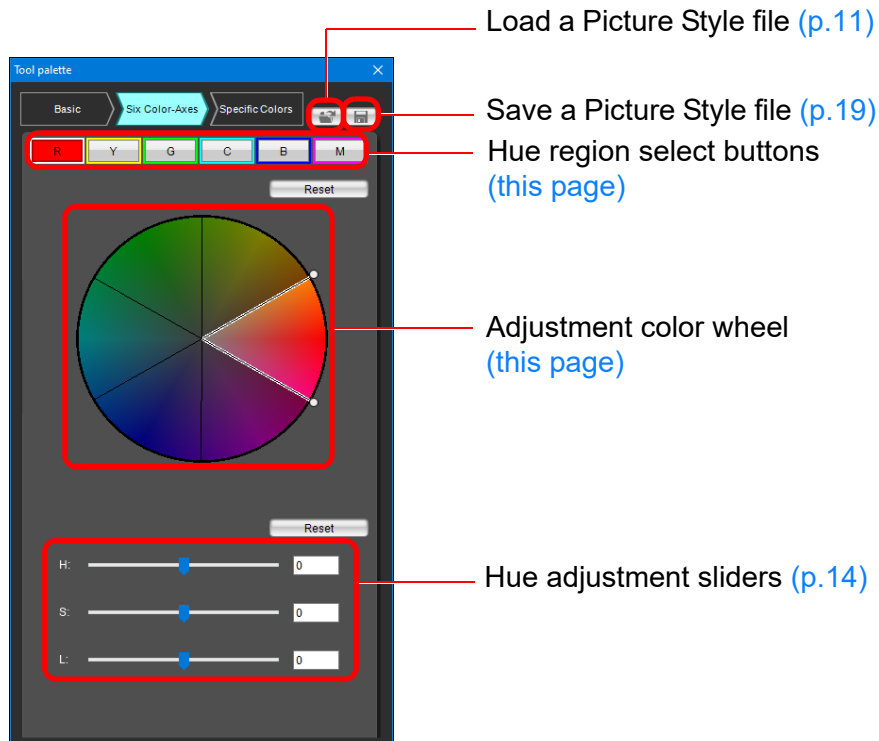Characteristics

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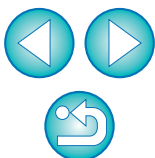
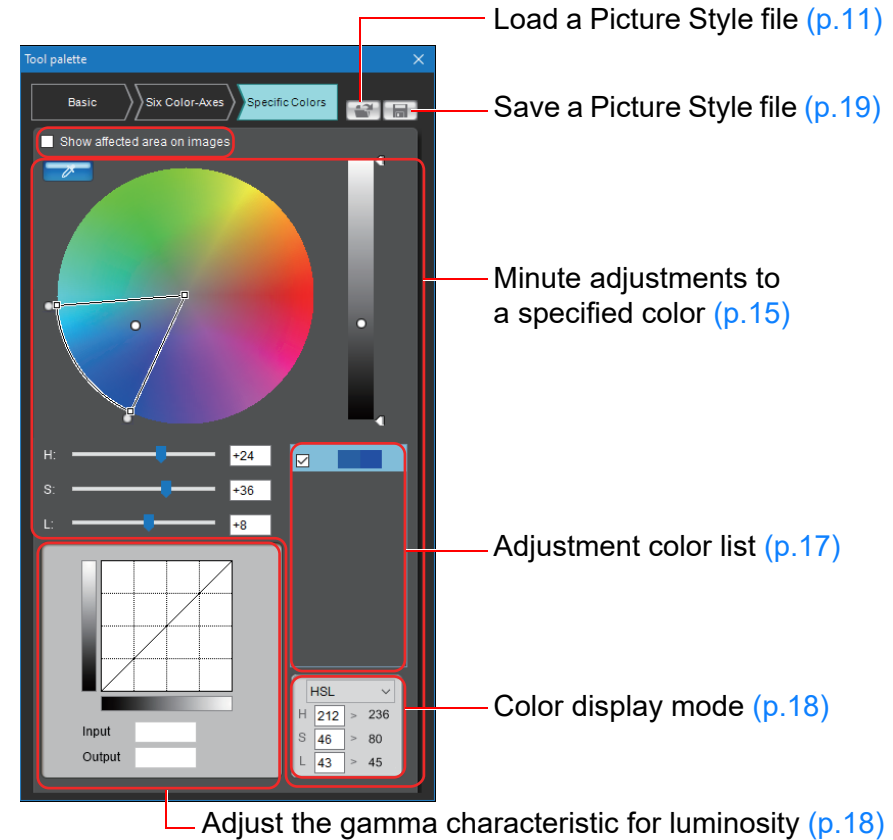## 2 Specify the color you want to adjust.

● Click the [ ] button and then click the color you want to adjust on the image.

Click

Click
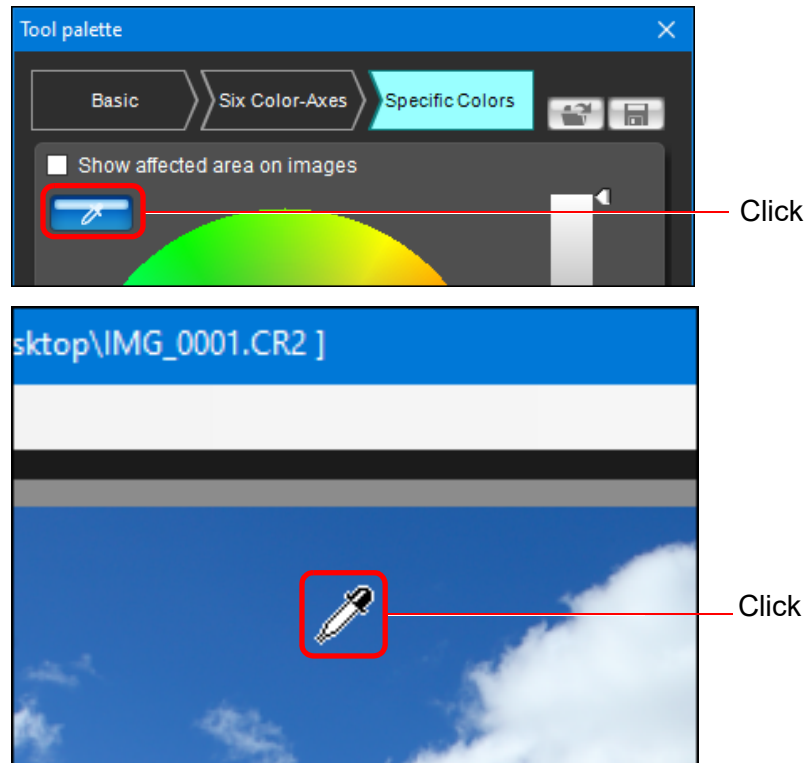
→ The selected color is displayed as an adjustment point [◯] on the color wheel.

3 Determine the range of effect for the color you want to adjust.

Within the frame is the range of effect

Color of the adjustment point selected in step 2

Range of upper and lower limit of luminosity
Drag to move up or down

Luminosity level of the adjustment point selected in step 2

Range of upper and lower limit of saturation
Drag to move towards the center or towards the outer perimeter

Range of upper and lower limit of hue
Drag to move along the circumference

● The range of effect for hue, saturation, and luminosity can be set within the limits below.

Setting	Range
Hue	30 - 180 degrees
Saturation	30 - 100
Luminosity	30 - 100

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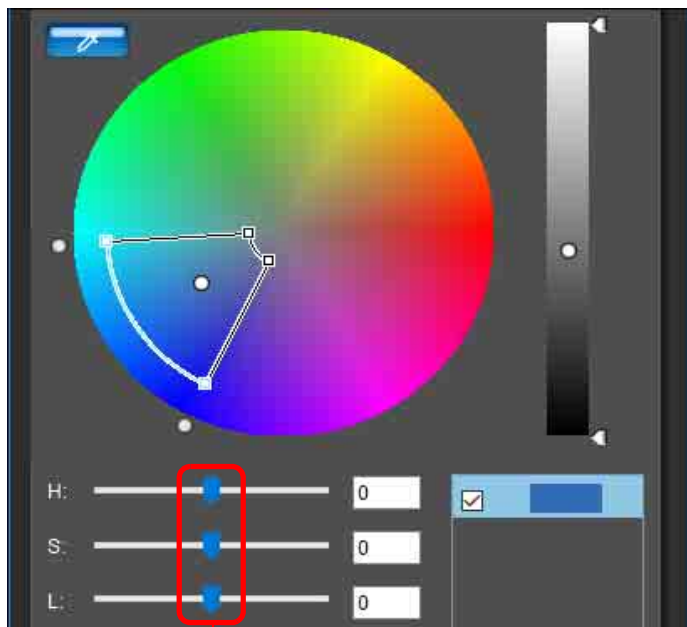
4 Adjust the color.

Drag to the left or right to adjust

➡ The color is adjusted to the range specified in step 3 and the color of the image changes.

● When dragging the slider, the point before adjustment [○] and the point after adjustment [●] will be displayed on the color wheel.

5 Check the range of application.

● If you checkmark [Show affected area on images], the range of application of the adjusted color blinks on the image.

6 Repeat steps 2 to 5 to adjust multiple colors.

● You can select and adjust colors for up to 100 spots.

● When using EOS Utility's Remote Live View function with PSE to edit Picture Styles, the [Show affected area on images] checkbox is not displayed, and you cannot check the range of application of adjusted colors.

● You can also specify the color to be adjusted in the method different from the one explained in step 2 .

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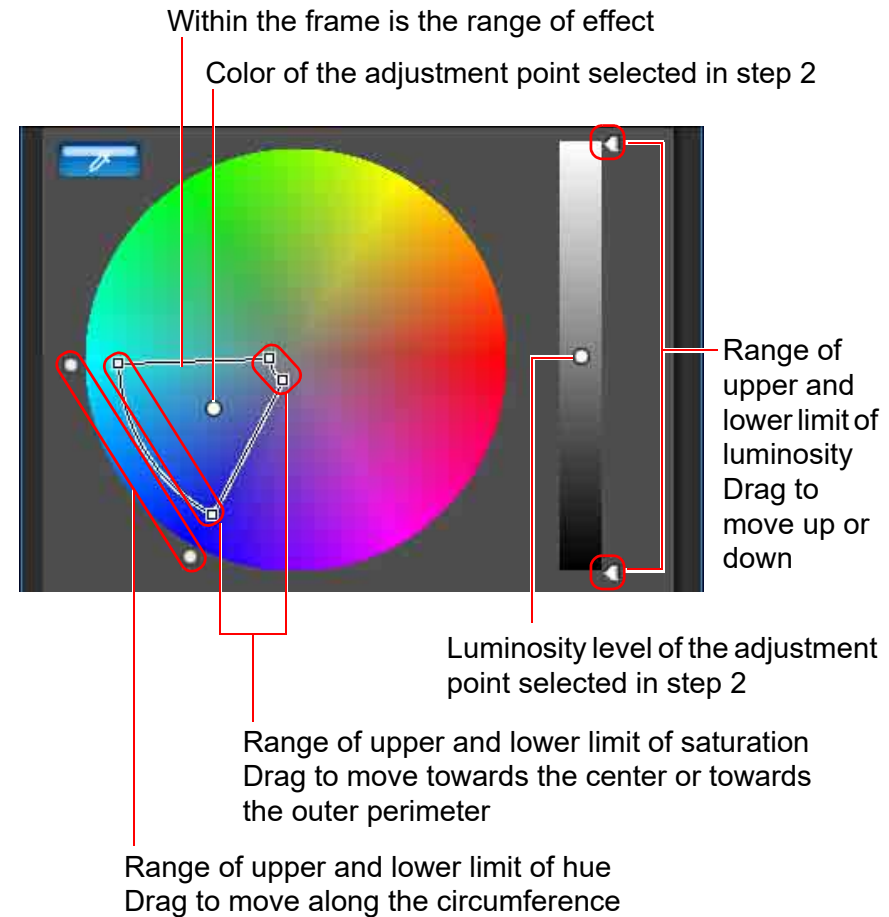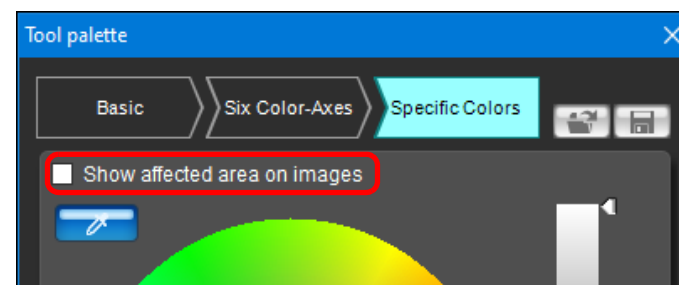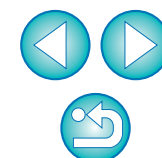## Specifying the Color Directly

In addition to specifying the adjustment point by clicking the color on the image (p.15), you can also specify the color directly on the color wheel or by entering the color value.

### Specifying the Color on the Color Wheel

1 Click the [⟋] button (p.15).

2 Click the color you want to adjust on the color wheel.
→ The selected color is displayed as an adjustment point [○] on the color wheel.

Specifying the Color by Entering the Color Value

1 Select the [Edit] menu ▶ [Specify the numerical values for color adjustment].
→ The [Specify the numerical values for color adjustment] window appears.

2 Enter the color value.
→ The entered color value is displayed as an adjustment point [○] on the color wheel.

Displaying the Adjustment Color List and its Functions

In addition to displaying colors before and after adjustment, the adjustment color list (p.9) shows overlapped range of effect of adjusted colors, and has a checkbox for specifying whether applying adjusted colors or not.

Color before adjustment

Color after adjustment

Displays overlapped range of effect of adjusted colors
Remove the checkmark to disable the adjustment
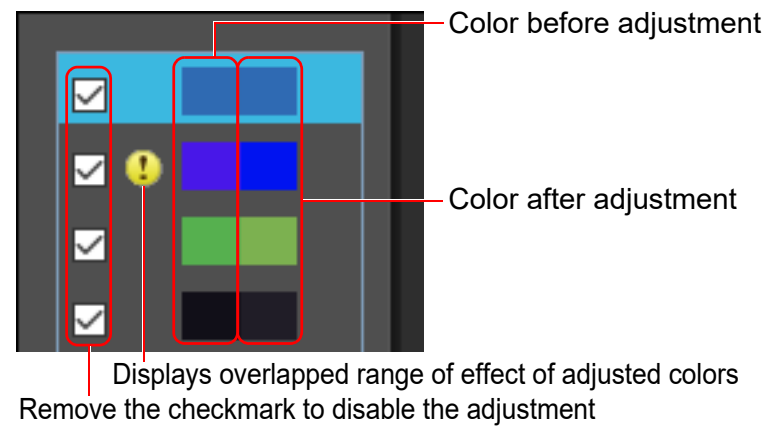
Overlapped Range of Effect of Adjusted Colors

When you select an adjusted color from the list and [⚠] appears, the range of effect of the adjusted color (p.15) is overlapping with the range of effect of other adjusted colors.

Moreover, the overlapped areas will be displayed in gray on the color wheel and an adjustment combining the original adjustments is applied.

To avoid an overlapped ranges of effect, select the subject color with [⚠] and adjust it again so that the range of effect of the hue and saturation no longer overlap.

Deleting an Adjusted Color

Be aware that you cannot recover deleted colors.

From the list, select the adjusted color you want to delete and then press the <Del> key on the keyboard.
→ The selected adjusted color is deleted.

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Color Display Mode

You can select the color display mode which will be the basis for color adjustment from three options (HSL, Lab, or RGB) as well as checking values for adjusted colors.
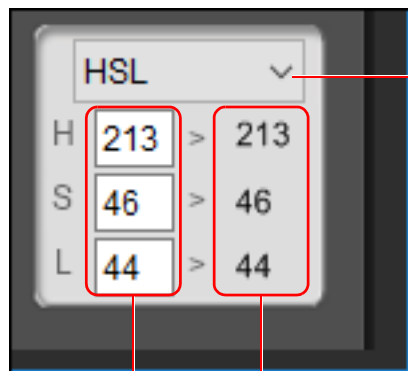
Switches the color display mode

Color value after adjustment

Color value before adjustment

● When "HSL" is selected for the color display mode, you can only change the color value for before adjustment by entering a number.

📓 ● HSL is a color display mode using the three elements of hue (H), saturation (S), and luminosity (L).
● Lab is a color mode developed by the CIE (Commission Internationale d'Eclairage) where L is for lightness, a for color elements from green to magenta, and b for color elements from blue to yellow.
● RGB is a color display mode using red (R), green (G) and blue (B), the three primary colors (additive colors) of the visible light spectrum.

Adjusting the Gamma Characteristic for Luminosity

You can adjust the brightness and contrast for the luminosity of the entire image using the tone curve. To further adjust contrast and brightness after adjusting image characteristics with the [Six Color-Axes] tab sheet or [Specific Colors] tab sheet, use the tone curve in this [Specific Colors] tab sheet.
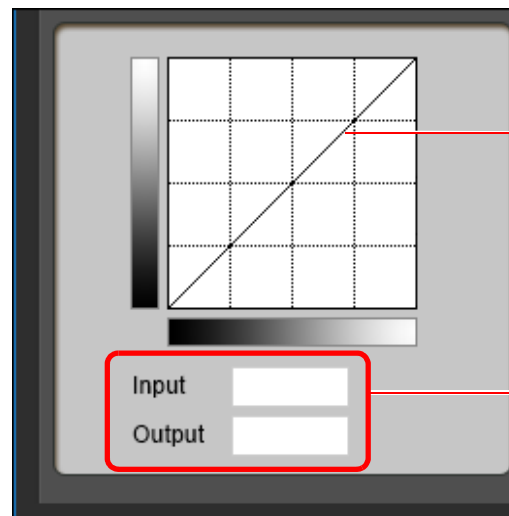
Adjust the brightness and contrast.

Click to add a [ ] (adjustment point) and adjust by dragging

The value of the selected point (you can also enter numerical values)

→ The brightness and contrast of the image change.
● The horizontal axis shows the input level and the vertical axis shows the output level.
● The maximum number of [ ] is 10.
● To delete a [ ], select the [ ] and then either press the <Del> key on the keyboard or double-click on the [ ].

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Saving the Adjustments as a Picture Style File

Adjustments specified in the [Tool palette] (p.11 to p.18) are saved on your computer as an original Picture Style file (extension ".PF2" or ".PF3"). The adjustments are saved as a Picture Style file which is separate from the sample image, and the sample image used to perform the adjustments is not affected at all.

1 Click the [💾] button.
➜ The [Save Picture Style file] window appears.

2 Specify the file name and save destination and then click the [Save] button.
- Only one-byte characters can be entered in the [File name], [Caption], and [Copyright] boxes.
- If you do not want to show the settings adjusted in PSE, checkmark [Disable subsequent editing] and save, so that the file cannot be opened again in PSE.
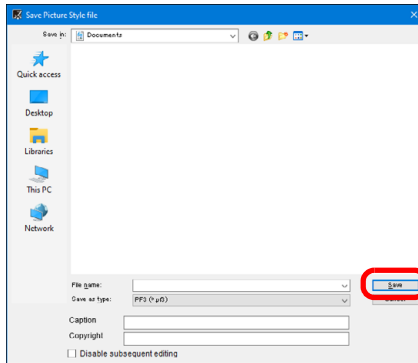
➜ The file is saved as a Picture Style file in the specified save destination.

⚠ Results of the following adjustments are not saved if saved in PF2 file format. Be sure to save results in PF3 file format.
- Adjustments made with [Fineness] or [Threshold] for [Sharpness] in the [Basic] tab sheet
- Adjustments made with the tone curve in the [Basic] tab sheet
- Adjustments made with the [Six Color-Axes] tab sheet

📝 Even if you checkmark [Disable subsequent editing] and save, you can use the Picture Style file the same way as the Picture Style file without chekmarking and saved (p.20). However, you will no longer be able to open the Picture Style file in PSE. For this reason, we recommend that you save separately beforehand the Picture Style file without checkmarking [Disable subsequent editing].
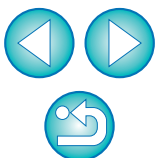
Using a Picture Style File

Saved Picture Style files can be registered in the camera and applied to shot images. They can also be applied to RAW images using DPP.

Registering a Picture Style File to the Camera

Picture Style files saved on your computer can be registered to the "Camera that has a Picture Style function settings" (For information on whether your camera is equipped with the Picture Style function, refer to the camera's Instruction Manual.) using EOS Utility and applied to shot images.

Refer to "Applying Picture Style Files to the Camera" in "EOS Utility Instruction Manual" (PDF electronic manual) for details on operation.

⚠ Picture Style files created with [Base Picture Style] set to [Fine Detail] cannot be registered to the cameras which do not have [Fine Detail] as a preset Picture Style.

Using a Picture Style File with DPP

Picture Style files saved on your computer can be applied to RAW images using DPP.

Refer to "Using a Picture Style File" in "Digital Photo Professional Instruction Manual" (PDF electronic manual) for details on operation.
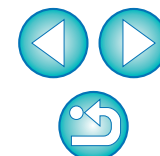
Preferences

You can perform color management settings such as specifying the work color space for the sample image displayed in the main window, or setting the profile for the monitor.

1 **Select the [Tools] menu ▶ [Preferences].**
➜ The [Preferences] window appears.

2 **Specify the required settings and then click the [OK] button.**

➜ The settings are applied.

Exiting PSE

In the main window, select the [File] menu ▶ [Exit].
➜ PSE exits.
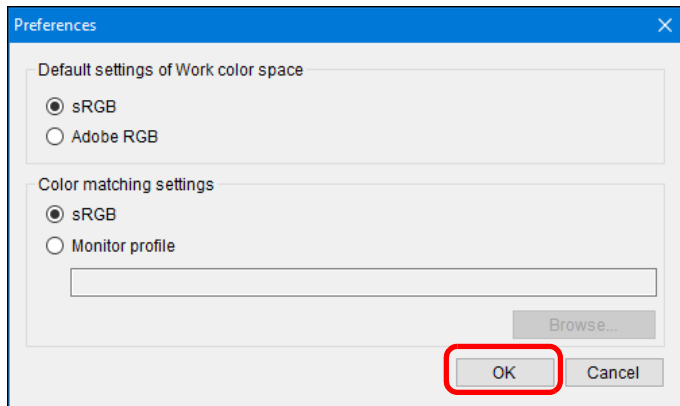
📝 If you have changed the work color space during the adjustment process, the adjustment point on the color wheel may move in conjunction with the selected work color space.

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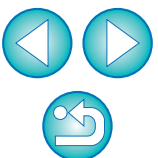
Reference

Troubleshooting

If PSE is not operating correctly, refer to the items below.

Installation could not be completed correctly

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

PSE does not work

● PSE does not operate correctly on a computer if its system requirements are not met. Use PSE on a computer with compatible system requirements (p.2).
● Even if your computer has the RAM capacity (memory) described in the system requirements (p.2), if other applications are running at the same time as PSE, you may not have sufficient RAM (memory). Exit any applications other than PSE.

Images do not display properly

● Sample images that are not supported by PSE (p.3) do not display.

Deleting the Software (Uninstalling)

● Exit any applications before uninstalling the software.
● Log in under an administrator-level privilege when uninstalling the software.
● 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.

Windows 10, Windows 8.1

● Uninstall the software according to the OS software uninstalling method.
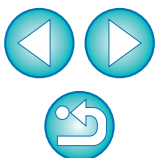
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