PENTAX™

PENTAX PHOTO Browser™ 3
PENTAX PHOTO Laboratory™ 3

(Version 3.10)

Operating Manual

HI-SPEED CERTIFIED USB™

PictBridge

SILKYPIX™
The Excellent digital development technology

DNG™

Mac   Universal

Thank you for purchasing this PENTAX Digital Camera.
This is the manual for "PENTAX PHOTO Browser 3" and "PENTAX PHOTO Laboratory 3" software for your Windows PC or Macintosh for enjoying images created with your camera. Please read the separate camera operating manual and this manual before using your camera, "PENTAX PHOTO Browser 3", or "PENTAX PHOTO Laboratory 3", in order to get the most out of all the features and functions.
Keep the camera operating manual and this manual safe, as they can be valuable tools in clarifying and helping you to understand all the camera's capabilities.

Regarding copyrights
Images taken using this camera that are for anything other than personal enjoyment cannot be used without permission according to the rights as specified in the Copyright Act. Please take care, as there are even cases where limitations are placed on taking pictures even for personal enjoyment during demonstrations, performances or of items on display. Images taken with the purpose of obtaining copyrights also cannot be used outside the scope of use of the copyright as laid out in the Copyright Act, and care should be taken here also.

Regarding trademarks
• PENTAX and smc PENTAX are trademarks of PENTAX Corporation.
• PENTAX PHOTO Browser, PENTAX PHOTO Laboratory, PENTAX REMOTE Assistant are trademarks of PENTAX Corporation.
• ⬝⬝⬝ SD logo and SDHC logo are trademarks.
• All other brands or product names are trademarks or registered trademarks of their respective owners.

Regarding PictBridge
PictBridge allows the user to connect the printer and digital camera directly, using the unified standard for the direct printout of images. You can print images directly from the camera through a few simple operations.

Disclaimer
• PENTAX is not responsible for any damages resulting from the direct or indirect use of this software or repercussive damages, damage to data, programs or other intangible property, loss of profit or anticipated profit, or dispute with a third party resulting from the use of this software.
• The specifications of this software are subject to change without notice.

● Symbols used in this manual have the following meanings:

memo	Gives information that is useful to know.
Caution	Gives cautions and notes about the operation.

The screen pictures shown in this manual may differ depending on the type of computer used.

Contents

Enjoying Your Digital Camera Pictures

You can use a computer to organize and edit the pictures captured with your digital camera.

Direct Print
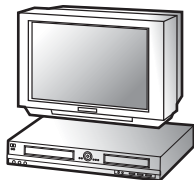
Connect your camera directly to a PictBridge-compatible printer using the USB cable. (Not available on *ist D.)

Your computer is...
• equipped with a standard USB interface.
• using Windows 2000/XP or Mac OS X Ver. 10.2 or later.

View and record images on AV equipment

Connect your camera to a TV, DVD recorder or other audiovisual equipment using an AV cable to view and/or record images.

Connect your camera to a computer using the USB cable to copy the camera images to a computer.

You can transfer your images using a built-in card slot + PC card adapter or a card reader.
• Remove the card from the camera. When transferring images on the card to a computer with another device, make sure to review the user manual accompanying that device.
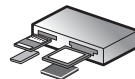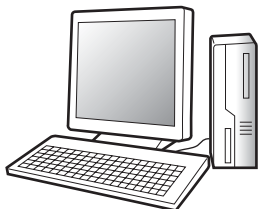
Use your photo shop

You can have prints made from images recorded on your card at a photo shop.
• Set DPOF settings on your camera, and get prints from your photo shop.
• Select the images for prints.

SD

Use your image data

You can use your e-mail software to attach and send images by e-mail, or post the images on your website.

• See the operating manual of your e-mail software for details on how to make attachments to e-mails.
• See the operating manual of the software you are using for details on how to use images on your website.

Use your printer

You can use your printer to print images transferred to your computer.
Some printers can print directly from SD Memory Cards.
• For details, see the operating manual of the printer you are using.

PENTAX PHOTO Browser 3 (p.19 - p.70)
PENTAX PHOTO Laboratory 3 (p.71 - p.102)

• View images • Organize and save images
• Print images • Rename all
• Save all image data
• PENTAX-specification RAW file processing*

Use a commercially-available image editing software to perform image editing operations.

* You can also perform file processing operations for DNG files taken with PENTAX digital cameras, DNG files converted with PENTAX PHOTO Browser 3, and DNG files taken with PENTAX digital cameras and converted with Adobe DNG converter.

Save your image data

Images transferred to the computer can be saved onto a CD-R or other media.

Provided Software

The provided CD-ROM (S-SW55) contains the following software:
- PENTAX PHOTO Browser 3
- PENTAX PHOTO Laboratory 3

> memo This manual describes PENTAX PHOTO Browser 3 and PENTAX PHOTO
> Laboratory 3 with screen images from Windows XP.
> The operation of these software applications is nearly the same on Macintosh
> with the exception of some keys. For information on Macintosh-specific
> instructions, see the sections labeled "For Macintosh" or the online help.

Software Provided

PENTAX PHOTO Browser 3
PENTAX PHOTO Browser 3 is software for viewing, printing and
managing images taken on your digital camera and saved on your
computer.
Files with extensions .bmp (BMP), .jpg (JPEG), .pef (Files recorded in
PENTAX's exclusive digital-camera CCD RAW format. Hereafter "PEF"),
.pct (PICT), .png (PNG), .tif (TIFF) and .dng (DNG) are supported.

PENTAX PHOTO Browser 3 can perform the following tasks:
- Save image files under the same or a new name, change file names and
  file types, copy, cut, paste, rotate and delete.
- Create new folders, change folder names, copy, cut, delete and paste.
- Save image data list.
- Check image data.
- View PEF files and DNG files easily.
- Print images.

You can also start PENTAX PHOTO Laboratory 3 and PENTAX REMOTE
Assistant[*1] from within PENTAX PHOTO Browser 3.

*1: PENTAX REMOTE Assistant can only be used together with $*ist D$.

PENTAX PHOTO Laboratory 3

This application supports a number of image processing functions for use
with PEF and DNG files including data conversion, color adjustment, and
image compensation, and further allows you to save these images in
formats compatible with other commercial image browsing and editing
software. You can also print PEF and DNG files.
PENTAX PHOTO Laboratory 3 can also be run as a standalone application.

> **Caution** You can only perform image processing operations for DNG files taken with
> PENTAX digital cameras and DNG files converted with PENTAX PHOTO
> Browser 3.

> **memo** DNG (Digital Negative) is a general-purpose, publicly-available RAW file
> format designed by Adobe Systems.

System Requirements

We recommend the following system requirements to transfer images
from your camera to a computer and to install and use PENTAX PHOTO
Browser 3 and PENTAX PHOTO Laboratory 3.

Windows System Requirements

● USB Connection
- Computer with Windows 2000/XP (Home Edition/Professional)
  preinstalled.
- USB port must be standard equipment.

● Application Software
< PENTAX PHOTO Browser 3 and PENTAX PHOTO Laboratory 3 >
(9 languages: English, French, German, Spanish, Italian, Russian,
Chinese [traditional and simplified], Korean, Japanese)
- Operating System : Windows 2000/XP (Home Edition/Professional)
- CPU   : Pentium 4 or higher
                 (Pentium 4 2.0 GHz or higher recommended)
- RAM   : 512 MB or more (1.0 GB or more recommended)
- Monitor   : 1024×768 pixels or more (1280×1024 pixels or more
                 recommended) with 24-bit full color (approximately
                 16.77 million colors)
- Free Disk Space : 250 MB or more (500 MB or more recommended)

⚠️ Caution
We recommend using AC adapter (sold separately) when the camera is connected to the computer. If the batteries become depleted during image transfer, the image data or SD Memory Card may be damaged.

Macintosh System Requirements

● USB Connection

- Macintosh with Mac OS X 10.2 or later preinstalled.
- USB port must be standard equipment.
- * Installation of the USB driver is not necessary.

● Application Software

PENTAX PHOTO Browser 3 and PENTAX PHOTO Laboratory 3
(9 languages: English, French, German, Spanish, Italian, Russian,
Chinese [traditional and simplified], Korean, Japanese)

- Operating System: Mac OS X 10.2 or later
- CPU   : PowerPC G4 or higher
                 (Intel Core processor or PowerPC G5
                 recommended. Universal Binary format)
- RAM   : 512 MB or more (1.0 GB or more recommended)
- Monitor   : 1024×768 pixels or more (1280×1024 pixels or more
                 recommended) with 24-bit full color (approximately
                 16.77 million colors)
- Free Disk Space : 250 MB or more (500 MB or more recommended)

⚠️ Caution
We recommend using AC adapter (sold separately) when the camera is connected to the computer. If the batteries become depleted during image transfer, the image data or SD Memory Card may be damaged.

Installing the Software

Here is the procedure for installing PENTAX PHOTO Browser 3 and
PENTAX PHOTO Laboratory 3.
PENTAX PHOTO Browser and PENTAX PHOTO Laboratory can overwrite
earlier versions of this software supplied with *ist D, *ist DS,
*ist DL, *ist DS2, *ist DL2, K100D and K110D.
Make sure to install PENTAX PHOTO Browser 3 and PENTAX PHOTO
Laboratory 3 on the provided CD-ROM (S-SW55) in order to use RAW
files shot with the K10D.
When multiple accounts have been setup in Windows 2000/XP or Mac
OS X, log on with an account that has administrative rights before
installing the software.

When Using Windows

1 Turn your computer on.

Close any other software that is open.

2 Place the provided CD-ROM (S-SW55) into the CD-ROM drive on your computer.

The PENTAX Software Installer screen appears.

- **If the PENTAX Software Installer screen does not appear**
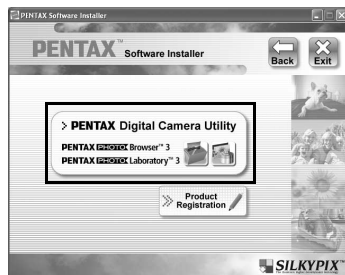 Display the PENTAX Software Installer screen following the steps below.
  1) Click [My Computer] from the start menu.
  2) Double-click the [CD-ROM drive (S-SW55)] icon.
  3) Double-click [Setup.exe].

3 You can choose the languages from the displayed screen.

The software selection screen appears.

4 **Click [PENTAX Digital Camera Utility].**

5 **Select the desired language in the Select Language screen and click [OK].**

memo
Some operating environments select the language automatically. Continue with the installation in step **6**. The installer starts.
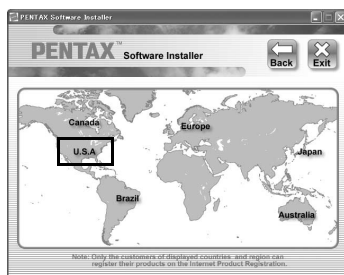
6 **The installer starts. Click [Next].**

Follow the instructions on the screen and continue with the installation.

Product Registration on the Internet

To better serve you, please take a moment to register your software.

Please click [Product Registration] on the software selection screen in step **4** (p.8). A world map for Internet Product Registration is displayed. If your computer is connected to the Internet, click the displayed country or region and then follow the instructions to register your software.

When Using Macintosh

1 Turn on your Macintosh.

Close any other software that is open.

2 Place the provided CD-ROM (S-SW55) into the CD-ROM drive on your Macintosh.

3 Double-click the [CD-ROM drive (S-SW55)] icon.

The contents of the CD-ROM are displayed.

4 Double-click the [PENTAX Installer] icon.

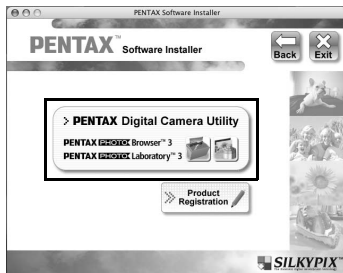The PENTAX Software Installer screen appears.

5 You can choose the languages from the displayed screen.

The software selection screen appears.

6 Click [PENTAX Digital Camera Utility].

Follow the instructions on the screen and continue with the installation.

Product Registration on the Internet

To better serve you, please take a moment to register your software.

Please click [Product Registration] on the software selection screen in step *6*. Next, follow the instructions on the screen to register your software (p.9).

Here is the procedure for saving images captured with your digital camera onto your computer.

This section describes the method for saving images by connecting your camera and computer with the USB cable, as well as other methods.

Saving Images by Connecting Your Camera and Computer (For Windows)

Setting [Transfer Mode] on the Camera to [PC]

K10D is used as an example here. When using *ist**D**, [Transfer Mode] does not need to be set. Go to "Connecting Your Camera to Your Computer" (p.12).

1 Press the MENU button on the camera.

The [✿ Rec. Mode] menu or the [▶ Playback] menu appears.

2 Press the four-way controller (▶) to display the [✗ⁱ Set-up] menu.

3 Use the four-way controller (▲ ▼) to select [Transfer Mode].

4 Press the four-way controller (▶).

A pull-down menu appears.

5 Use the four-way controller (▲ ▼) to select [PC].
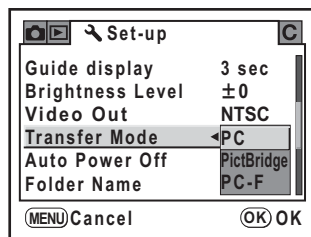
[Transfer Mode] settings depend on the connected device.

When connecting to a computer:

[PC] = USB 2.0 (Hi-Speed USB compatible)

[PC-F] = USB 1.1

When printing with a printer:

[PictBridge] (only for compatible printers)

◻◻ ✎ Set-up	C
Guide display	3 sec
Brightness Level	±0
Video Out	NTSC
Transfer Mode	◀ PC
Auto Power Off	PictBridge
Folder Name	PC-F
MENU Cancel	OK OK

## *6* **Press the OK button on the camera.**

> ⚠️Caution
> • Do not connect the camera to your computer while [PictBridge] is selected for the [Transfer Mode].
> • If the USB transmission speed of the computer is slower than that of the camera, an error may occur when transferring data. If this occurs, set the Transfer Mode to [PC-F]. This sets the transfer speed to the USB 1.1 data transfer rate, thereby reducing the possibility of an error.

Connecting Your Camera to Your Computer

1 **Turn your computer on.**

2 **Turn off your camera and use the USB cable to connect your camera and your computer.**

Confirm that an SD Memory Card is inserted into your camera.
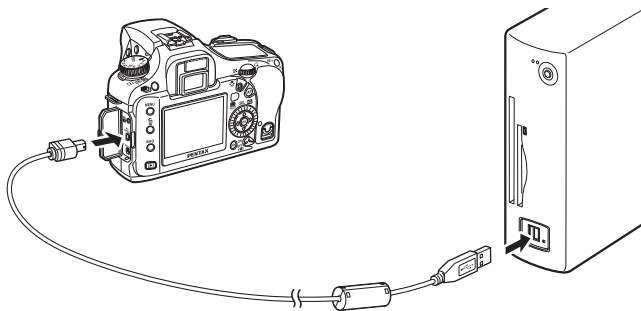
3 **Turn your camera on.**

The camera is recognized as a [Removable Disk] in [My Computer].

> 📝memo
> • If the [Removable Disk Drive] dialog appears in Windows XP, select [Open folder to view files using Windows Explorer] and click [OK]. The window in step **3** on p.13 appears.
> • When using Windows XP, if the SD Memory Card has a volume label, the content of the volume label name appears instead of [Removable Disk]. A new unformatted SD Memory Card may show the manufacturer name or model number.
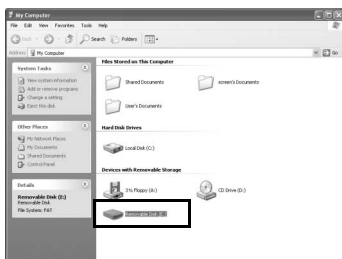
Saving Camera Images on Your Computer

Windows XP is used as an example here.
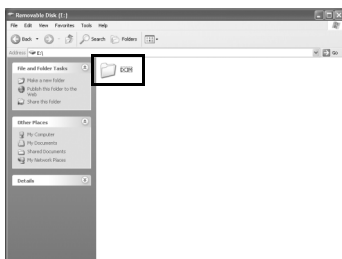
---

1 **Click [My Computer] from the start menu.**

---
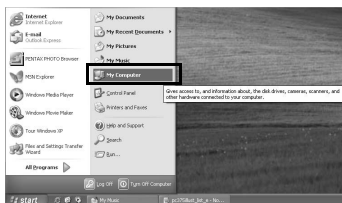
2 **Double-click the [Removable Disk] icon.**

---

3 **Double-click the [DCIM] icon.**

The [xxxPENTX] (xxx is a three-digit number) folder appears.

The camera image files are in this folder.

> memo When the method for assigning folder names is set to [Date], the [xxx_MMDD] folder (where MMDD is the shooting date) appears. (p.178 of the camera Operating Manual)

---

4 **Drag and drop the [xxxPENTX] or the [xxx_MMDD] folder to the desktop or any desired folder, such as the [My Documents] folder.**

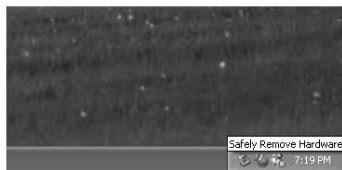The camera images are saved on your computer as an entire folder.
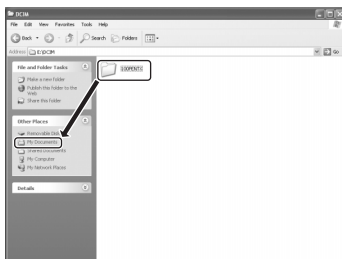
> memo Images can also be saved using the [Easy Image Transfer] function in PENTAX PHOTO Browser 3. (p.31)

Disconnecting Your Camera from Your Computer

Windows XP

1 **Double-click the [Safely Remove Hardware] icon in the task bar.**

The [Safely Remove Hardware] screen appears.

2 **Confirm that [USB Mass Storage Device] is selected and then click [Stop].**

The [Stop a Hardware device] screen appears.

3 **Select [USB Mass Storage Device] and click [OK].**

A message appears indicating that the hardware can be safely removed.

4 **Click [Close].**

5 **Turn off the camera and disconnect the USB cable from your camera and computer.**
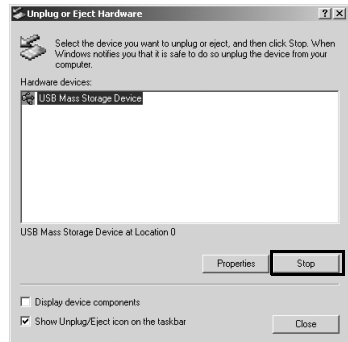
Windows 2000

1 **Double-click the [Unplug or Eject Hardware] icon in the task bar.**

The [Unplug or Eject Hardware] screen appears.

2 **Confirm that [USB Mass Storage Device] is selected and then click [Stop].**

The [Stop a Hardware device] screen appears.

3 **Select [USB Mass Storage Device] and click [OK].**

A message appears indicating that the hardware can be safely removed.

4 **Click [OK].**

5 **Click [Close] and then, turn off the camera and disconnect the USB cable from your camera and computer.**

memo

The USB mass storage device will not stop when the files stored on the removable disk are in use for applications.

Saving Images by Connecting Your Camera and Computer (For Macintosh)

Setting the USB Connection Mode to [PC]

When using K10D, K100D and K110D, set the [Transfer Mode] on the camera to [PC] (p.11).

When using *istD, [Transfer Mode] does not need to be set. Proceed to the following steps.

Connecting the Camera and Macintosh

1 **Turn on your Macintosh.**

2 **Turn off your camera and use the USB cable to connect your camera and your Macintosh.**

Confirm that an SD Memory Card is inserted into your camera.
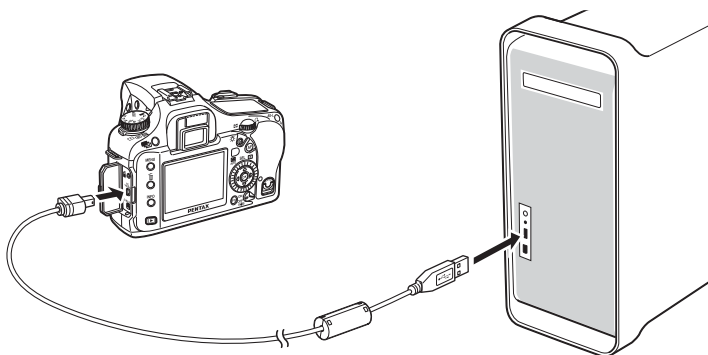
3 **Turn your camera on.**

Your camera is recognized on the desktop as [NO_NAME (or the volume label of the SD Memory Card if one is registered)].

You can change the folder name.

When the iPhoto screen appears, close it.

Saving Camera Images on Your Macintosh

Mac OS X (ver. 10.3) is used as an example here.

1 Double-click the [NO NAME] icon on the desktop.

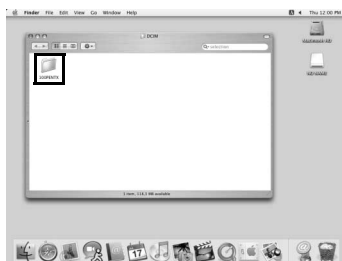## *2* Double-click the [DCIM] icon.

The [xxxPENTX] (xxx is a three-digit number) folder appears.

The camera image files are in this folder.

When the method for assigning folder names is set to [Date], the [xxx_MMDD] folder (where MMDD is the shooting date) appears. (p.176 of the camera Operating Manual)

3 Double-click the [Macintosh HD] icon on the desktop.

This opens the [Macintosh HD] volume.

# 4 Drag the [xxxPENTX] or [xxx_MMD] folder to [Macintosh HD] volume or any other volume or folder.

The complete folder, containing all images, is saved to the destination volume or folder.

memo Images can also be saved using the [Easy Image Transfer] function in PENTAX PHOTO Browser 3. (p.31)

Disconnecting Your Camera from Your Macintosh

1 Drag [NO NAME (or the volume label name on the SD Memory Card)] on the desktop to the trash can.
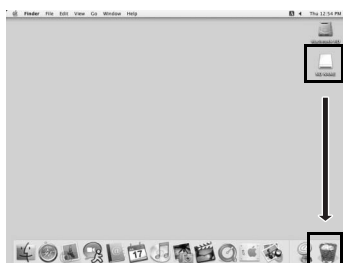
2 Turn off the camera and disconnect the USB cable from your camera and Macintosh.

Other Methods for Saving Images

Use a card reader or card adapter to send image files directly to your computer from an SD Memory Card with saved images without connecting your camera and your computer with a USB cable. (p.31)
For details, please refer to the user's manual for your computer or card reader.

PENTAX PHOTO Browser 3

This section describes opening and closing PENTAX PHOTO Browser 3 and viewing the PENTAX PHOTO Browser 3 window, and explains its functions.

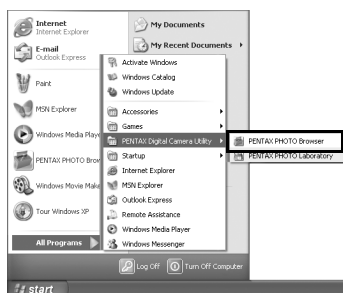## Opening PENTAX PHOTO Browser 3

For Windows

1 **Select the start menu on the desktop.**

2 **Select [All Programs] - [PENTAX Digital Camera Utility] - [PENTAX PHOTO Browser].**

PENTAX PHOTO Browser 3 is opened and the PENTAX PHOTO Browser 3 window appears.

● **Closing PENTAX PHOTO Browser 3**

Select [Exit] from the [File] menu.

For Macintosh

1 **Double-click the [PENTAX Digital Camera Utility] folder in [Applications] on the hard disk.**

2 **Double-click the [PENTAX PHOTO Browser] program icon.**

PENTAX PHOTO Browser 3 is opened and the PENTAX PHOTO Browser 3 window appears.
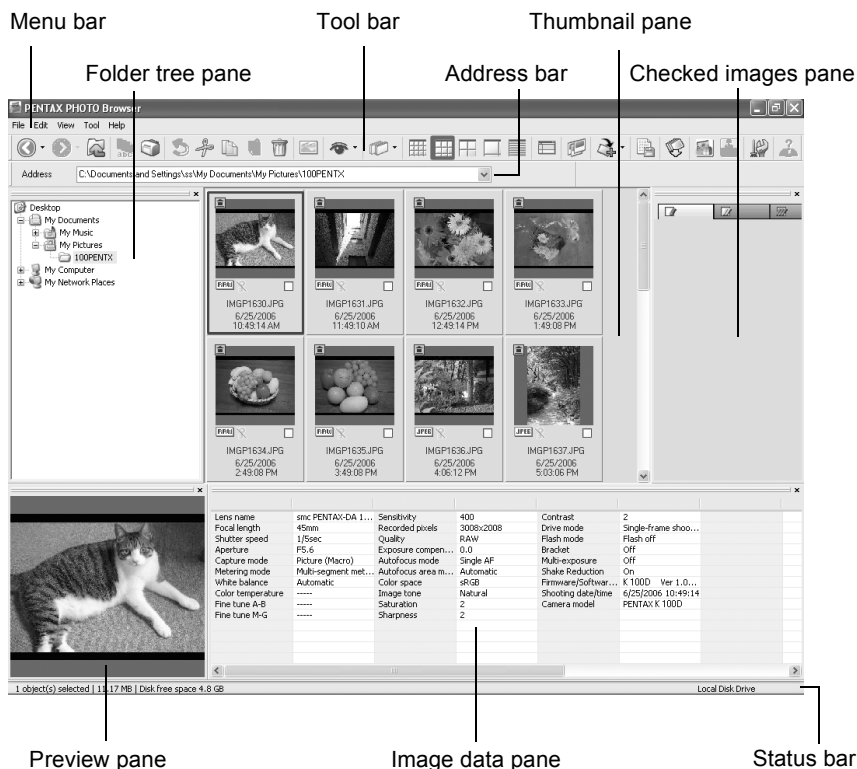
● **Closing PENTAX PHOTO Browser 3**

Select [Quit PENTAX PHOTO Browser] in [PENTAX PHOTO Browser] on the desktop menu bar.

About the PENTAX PHOTO Browser 3 Window

This section explains the PENTAX PHOTO Browser 3 window layout, names and functions.

Menu bar   Tool bar   Thumbnail pane

Folder tree pane   Address bar   Checked images pane

Preview pane   Image data pane   Status bar

● **Menu bar (p.24)**

● **Tool bar (p.28)**

● **Address bar**
The address of the currently displayed folder appears here.

● **Folder tree pane**
Internal data on your computer appears here as a folder tree. Select the folder containing saved image files here.
Also, the Folder tree pane handles operations such as creating new folders, deleting folders and moving/copying folders.

● **Thumbnail pane**

Files in the folder selected in the Folder tree pane appear here. Select from five file display methods. When a thumbnail image is selected in the Thumbnail pane, the image appears in the Preview pane and the image data appears in the Image data pane.

● **Checked images pane**

All images with check marks in the Thumbnail pane are displayed here. Switch between Thumbnails and Details by right-clicking the Checked images pane. When a thumbnail image is selected in the Checked images pane, the image appears in the Preview pane and the image data appears in the Image data pane.

● **Preview pane**

An image selected in the Thumbnail pane appears in this pane.

● **Image data pane**

The image data for the image selected in the Thumbnail pane appears here. Place the cursor over a cell dividing line at the top of the pane and drag it to resize the cell. (For Macintosh, drag at the applicable position to resize the cell.)

The following items appear:

Data	Contents	Example
Lens name	Shows lens type	smc PENTAX-FA 50mmF1.4
Focal length	Focal length (in mm)	50mm
Shutter speed	Shutter speed when shooting (in seconds)	1/250sec
Aperture	Aperture value when shooting	F8.0
Capture mode	Capture mode when shooting	Green mode
Metering mode	Metering mode when shooting	Multi-segment
White balance	White balance mode	Auto
Color temperature	Color temperature (units: Kelvin) [1]	-----
Fine tune A-B	Amber - Blue fine tune [1]	-----
Fine tune M-G	Magenta - Green fine tune [1]	-----
Sensitivity	ISO sensitivity when shooting	200
Recorded pixels	Number of recorded pixels	3872×2592
Quality	Recorded quality	Better
Exposure compensation	Exposure compensation	0.0

[1]: Setting details when shooting with **K10D** or processing details when using PENTAX PHOTO Laboratory 3 appear.

Data	Contents	Example
Autofocus mode	Autofocus mode when shooting	Single AF
Autofocus area mode	Autofocus area mode when shooting	Automatic
Color space	Color space mode	sRGB
Image tone	Photo finish settings	Bright
Saturation	Saturation settings	0
Sharpness	Sharpness settings	0
Contrast	Contrast settings	0
Drive mode	Drive mode settings when shooting	Single-frame shooting
Flash mode	Flash mode settings when shooting	Flash Off
Bracket	Exposure bracket settings when shooting	Off
Extended Bracket	Extended bracket settings when shooting*2	-----
Multi-exposure	Multi-exposure settings when shooting	Off
Shake Reduction	Shake Reduction Setting	On
Firmware/Software version	Version of the software when images were last saved *3	K10D Ver 1.00
Shooting Date/Time	Date and time shot	10/14/2006 10:00:00
Camera model	Camera name	PENTAX K10D

*2: The range of the variable appears after the name of the item, such as [Saturation], set during shooting.
*3: Information on the camera's firmware appears for captured images.

● **Status bar**

The status of PENTAX PHOTO Browser 3 appears.
The following items appear:
- Number of objects in the selected folder, total folder size (not including subfolders) or number of selected objects and total size
- Available disk space for selected drive
- Progress status when loading thumbnails
- Identification of local disk, removable disk and network

Showing/Hiding Panes and Bars

Show/hide panes and bars using the [View] menu (p.25). A check is displayed in the box (☑) in front of the item for currently showing items. Check these to show and uncheck to hide.
Alternatively, click the [Close] button (✕) on the top right of each pane to close.

Removing and Moving the Tool Bar and Address Bar

The Tool bar and Address bar can be removed or moved from the Browser screen.

● **Remove the Tool bar and Address bar**

To remove a bar, double-click the left edge of the bar in the Browser screen. Alternatively, click the left edge of the bar and drag to the Thumbnail pane or Folder tree pane.

The bar is removed from the Browser screen.

● **Add the Tool bar and Address bar in the Browser screen**

Double-click the bar to return the bar to the original location. Alternatively, drag the bar back to the original location.

The bar returns to the Browser screen.

● **Move the Tool bar and Address bar**

Click the left edge of the bar and drag to the new location.
The bar is moved to the new location.

> Caution
>
> The Address bar can only be moved below the Menu bar, next to the Tool bar, or to the top/bottom of the Thumbnail pane.

> memo
>
> Select [Default Position] on the [View] menu or click ▣ (Default Position) on the Tool bar to return the bar to its default position.

Removing and Moving Panes

The Folder tree pane, Preview pane, Image data pane and Checked images pane can be removed from the Browser screen.

● **Remove panes**

To remove a pane, double-click the top edge of the pane in the Browser screen. Alternatively, click the top edge of the pane and drag to the Thumbnail pane.

The pane is removed from the Browser screen.

● **Add a pane in the Browser screen**

Double-click the Title bar of the pane to return to the original location.
Alternatively, click the Title bar and drag the pane back to the original
location.
The pane returns to the Browser screen.

● **Move panes**

To move a pane, select pane and drag to the new location.
The pane is moved to the new location.

> memo Select [Default Position] on the [View] menu or click ▣ (Default Position) on
> the Tool bar to return the bar to its default position.

Menu Bar

This executes functions or sets various settings of PENTAX PHOTO
Browser 3.
For Macintosh, the Menu bar appears at the top of the desktop.

[File] menu	
Create New Folder	This creates a new folder in the location specified on the Folder tree pane. (p.52)
Open	This opens the selected folder. For an image selected in the Thumbnail pane, it displays the image in a new Main image view window.
Close All	This closes all images open in the Main image view windows.
Rename	This changes the name of the selected file or folder. (p.50)
Rename All	This changes the names of all selected files. (p.51)
Page Setup	This sets printing options such as margins, headers/ footers, and number of copies. (p.62)
Print	This prints the selected image file. (p.58)
Properties	The properties of the selected file or folder appear. (p.54)
Exit	This closes PENTAX PHOTO Browser 3. (For Macintosh, select [Quit PENTAX PHOTO Browser] on the [PENTAX PHOTO Browser] menu.)

[Edit] menu	
Undo	This undoes the previous file operation.
Cut	This prepares the selected file or folder to be moved to a different location. (p.48)
Copy	This copies the selected file or folder. (p.48)
Paste	This copies the cut or copied file or folder into the selected folder. (p.48)
Delete	This deletes the selected file or folder. When a folder is deleted, all files in the folder are also deleted. (p.50)
Move to Folder	This moves the selected file to another folder.
Copy to Folder	This copies the selected file to another folder.
Check Selected Image	This checks the selected file. The checked file is displayed in the Checked images pane. (p.34)
Uncheck Selected Image	This unchecks the selected file.
Uncheck All	This unchecks all images.
Select All	This selects all files within the currently open folder.
Invert Selection	This unselects all selected files and selects all unselected files within the currently open folder.

[View] menu	
Tool Bar	This shows or hides the Tool bar.
Folder Tree	This shows or hides the Folder tree pane.
Preview	This shows or hides the Preview pane.
Address Bar	This shows or hides the Address bar.
Status Bar	This shows or hides the Status bar.
Image Data	This shows or hides the Image data pane.
Checked Images	This shows or hides the Checked images pane.
Default Position	This returns each pane to its default position.
Filter	This sets the type of file that appears in the Thumbnail pane. Select from the following four items: PENTAX Images : Images captured with your PENTAX camera Other Images : Images other than those captured with your PENTAX camera (DNG, JPEG, TIFF, BMP, PNG, PICT) Folders : Folders Others : Files that PENTAX PHOTO Browser 3 does not support

[View] menu

Sort by	This specifies the order in which files and folders appear in the Thumbnail pane and specifies ascending or descending order. You can select from File Name, File Size, File Date/Time, File Type, Shooting Date/Time, Image Size, Camera Name, Lens Name, Checkmark and Lock Status.
Thumbnail Caption	This sets the caption of file that appears in the Thumbnail pane. File Name, File Date and File Time appear by default.
Thumbnail (Smallest)	The smallest size thumbnail appears in the Thumbnail pane.
Thumbnail (Small)	A small size thumbnail appears in the Thumbnail pane.
Thumbnail (Medium)	A medium size thumbnail appears in the Thumbnail pane.
Thumbnail (Large)	A large size thumbnail appears in the Thumbnail pane.
Details	Image details appear in the Thumbnail pane without an image.
Detailed View Options	Sets the information displayed in the Thumbnail pane when set to [Details].
Go To	Select [Back] to return to the previously opened folder, [Forward] to move forward one folder, and [Up] to move up one folder in the directory tree.
Slideshow	Selected or checked images appear in order. (p.55) If only one image is selected or no images are selected (click the background of the Thumbnail pane), all images in the current folder are displayed in order.

[Tool] menu

Save Image Data List	Use the check boxes to save the image data from multiple folders into one CSV format file. If no images are selected or checked, all the image data in the current folder is saved. (p.53)
Rotate	Rotates the selected image 90° left or right. (p.35)
Extract JPEG	Extracts the JPEG data from a selected PEF file or DNG RAW file (shot with **K10D**) and saves it as a separate file.
Save as DNG	Converts a selected PEF file into a DNG RAW file.

[Tool] menu	
Easy Image Transfer	Automatically searches for DCF images recorded in the camera or SD Memory Card connected to the computer and copies the images to the computer. (p.31)
PENTAX PHOTO Laboratory	This starts PENTAX PHOTO Laboratory 3. You can specify the image files to be opened from PENTAX PHOTO Browser 3. (p.80)
PENTAX REMOTE Assistant *1	This starts PENTAX REMOTE Assistant. PENTAX REMOTE Assistant can be used by installing it in the same folder as PENTAX PHOTO Browser 3 and using it together with the *ist D.
Options	This sets various settings for PENTAX PHOTO Browser 3. (p.65)

[Help] menu	
Help Topics	This shows PENTAX PHOTO Browser 3 help contents.
Index	This shows PENTAX PHOTO Browser 3 help index search. (This command is not available for Macintosh.)
What's This?	This shows pop-up tips when an icon or command button is clicked.
About PENTAX PHOTO Browser	This shows PENTAX PHOTO Browser 3 version information. (For Macintosh, select [About PENTAX PHOTO Browser] on the [PENTAX PHOTO Browser] menu.)

*1: PENTAX REMOTE Assistant is not included in the CD-ROM (S-SW55). The latest version can be downloaded from the PENTAX website.
This menu function can be used if PENTAX REMOTE Assistant is already installed.

Tool Bar

Frequently used functions are provided as Tool bar buttons. You can execute these functions easily from the Tool bar.
If, after resizing the Browser screen, part of the Tool bar is not visible, you can click the downward pointing arrow on the right edge of the Tool bar to select a tool that is not displayed.

1 2 3 4 5 6 7 8 9 10 11 12 13

14 15 16 17 18 19 20 21 22 23 24 25 26 27

Number	Icon (button)	Content
1	Back	This opens the previously opened folder. Click the downward pointing arrow to the right of the [Back] icon to display a history of previously opened folders. (For Macintosh, hold down this icon to display the history.)
2	Forward	This opens the folder which was open before using the [Back] button. Click the downward pointing arrow to the right of the [Forward] icon to display a history of previously opened folders. (For Macintosh, hold down this icon to display the history.)
3	Up	This moves up one folder in the directory tree.
4	Rename All	This changes the names of all selected files. (p.51)
5	Print	This prints the selected image file. (p.58)
6	Undo	This undoes the previous file operation.

Number	Icon (button)	Content
7	Cut	This prepares the selected file or folder to be moved to a different location. (p.48)
8	Copy	This copies the selected file or folder. (p.48)
9	Paste	This copies the cut or copied file or folder into the selected folder. (p.48)
10	Delete	This deletes the selected file or folder. (p.50)
11	View Image	The selected image file appears in the Main image view window. (p.32)
12	Filter	Click ▾ to select the type of file that appears in the Thumbnail pane. Select from the following four items: PENTAX Images : Images captured with your PENTAX camera Other Images : Images other than those captured with your PENTAX camera (DNG, JPEG, TIFF, BMP, PNG, PICT) Folders : Folders Others : Files that PENTAX PHOTO Browser 3 does not support
13	Sort by	Click ▾ to select the sort key and ascending/descending order from the pull-down menu. Thumbnails are sorted according to the selected order.
14	Thumbnail (Smallest)	The smallest size thumbnail appears in the Thumbnail pane. (p.32)
15	Thumbnail (Small)	A small size thumbnail appears in the Thumbnail pane. (p.32)
16	Thumbnail (Medium)	A medium size thumbnail appears in the Thumbnail pane. (p.32)

Number	Icon (button)	Content
17	Thumbnail (Large)	A large size thumbnail appears in the Thumbnail pane. (p.32)
18	Details	Image details appear in the Thumbnail pane without an image.
19	Default Position	This returns the window layout of PENTAX PHOTO Browser 3 to the default settings.
20	Slideshow	Selected or checked images appear in order. (p.55)
21	Rotate	This rotates the selected image 90° left or right. (p.35)
22	Save Image Data List	This saves additional file information for specified image files in a single CSV-format file. (Additional file information can be saved only for PENTAX PHOTO Browser 3-compatible image files.) (p.53)
23	Easy Image Transfer	Automatically searches for DCF images recorded in the camera or SD Memory Card connected to the computer and copies the images to the computer. (p.31)
24	PENTAX PHOTO Laboratory	This starts PENTAX PHOTO Laboratory 3. You can specify the image files to be opened from PENTAX PHOTO Browser 3. (p.71)
25	PENTAX REMOTE Assistant	This starts PENTAX REMOTE Assistant. PENTAX REMOTE Assistant can be used by installing it in the same folder as PENTAX PHOTO Browser 3 and using it together with the $*ist D$.
26	Options	This sets various settings for PENTAX PHOTO Browser 3. (p.65)
27	Help Topics	This shows PENTAX PHOTO Browser 3 help contents.

Transferring Images

This function automatically searches for DCF images recorded in the camera or SD Memory Card connected to the computer and transfers the images to the computer.

Transferring Image Files from SD Memory Card

1 **Check that the digital camera, SD Memory Card reader or DCF-compatible removable disk is connected to your computer, and then select [Easy Image Transfer] on the [Tool] menu.**
Alternatively, click the 🔍 icon on the Tool bar.

The digital camera or DCF-compatible removable disk with image files is recognized.

2 **Select the drive with the images you want to transfer and click [Next].**

memo The message [Could not find DCF media.] appears if no digital camera or DCF-compatible removable disk is connected to the computer or the connected device has no image files.

3 **Select the folder with the images you want to transfer and click [Next].**

After selecting [Transfer selected folder(s)], select a folder from the list.
To transfer all images in the selected drive, select [Transfer all images].

4 **Select the destination folder and click [Transfer images].**

To create a new destination folder, select the location where the folder is to be created and click [New Folder].

5 **After the images have been transferred, click [Finish].**

Viewing Images

Display the images saved on your computer in the Preview pane or Main image view window.

Displaying Thumbnail Pane Images in the Preview Pane

1 In the folder tree, select the folder containing the image file to view.

Images in the selected folder appear as thumbnails in the Thumbnail pane.

memo
You can change the size of the thumbnail image. In the [View] menu, select [Thumbnail (Smallest)], [Thumbnail (Small)], [Thumbnail (Medium)], or [Thumbnail (Large)]. Alternatively, click the ▦, ▦, ▦ or ▢ icon on the Tool bar.

2 Select an image in the Thumbnail pane.

The selected image appears in the Preview pane.

When the Preview pane is right-clicked, the following menu appears.

Preview Previous	Shows previous image.
Preview Next	Shows next image.
Auto Size	Fits image to the size of the Preview pane.
Fixed Size	Image appears in a 320-dot window (aspect ratio is maintained).
Life Size	Shows image size at 100% zoom.

memo Images in the Checked image pane (p.21) can also be displayed in the Preview pane.

Displaying Thumbnail Pane Images in the Main Image View Window

Follow the steps below to open the Main image view window.

1 **Select an image in the Thumbnail pane of the Browser screen and click the ▣ icon on the Tool bar.**

The Main image view window opens and the selected image appears.

memo • Multiple images may be selected in the Thumbnail pane and opened in the Main image view window. When multiple images are selected, the Main image view window may be set in [Options] to show all images in one window or multiple windows (p.43). Images are shown in one window by default. Images in the Checked images pane can also be displayed in the Main image view window (p.34).
  • The following methods can also be used to open the Main image view window.
    – Select an image in the Thumbnail pane and then select [Open] on the [File] menu.
    – Select [Main Image View] on the menu after right-clicking an image in the Thumbnail pane. (For Macintosh, display the menu by clicking the image while holding down the control key.)
    – Double-click an image in the Thumbnail pane.
    – Drag and drop the image file from the Desktop to the opened Main image view window.
    – Select [Main Image View] on the menu after right-clicking an image in the Checked images pane. (For Macintosh, display the menu by clicking the image while holding down the control key.)
    – Double-click an image in the Checked images pane.

● **RAW file display**

PENTAX PHOTO Browser 3 allows you to select between [Simple display] and [Auto RAW display] when displaying RAW files in the Main image view window. (p.69)

Simple display   : The compressed data in the RAW file appears. Images can be viewed quickly.

Auto RAW display : The RAW file is processed. It takes time to display the RAW data, but the image quality is superior. Select from three levels for the processing ratio on the [Main Image View] tab of the [Options] dialog. (p.69)

Displaying Images in the Checked Images Pane

Each image thumbnail displayed in the Thumbnail pane (in the left column of the list of thumbnails when [Details] is selected) shows a Check box indicating whether an image is registered to the Checked images pane. When this box is clicked to display a check mark, that image becomes a "checked image".

Each time the Check box is clicked, the check mark group switches among Checkmark 1, Checkmark 2 and Checkmark 3. Alternatively, select an image in the Thumbnail pane and then select a check mark group with [Check Selected Image] on the [Edit] menu.

Checked images are registered to the tab corresponding to the check mark group in the Checked images pane. Images stored in different folders that are tagged with the same check mark are registered to the same tab. The thumbnails in the Checked images pane are color-coded according to the folder where the images are saved. There are seven colors that are used for color-coding the thumbnails, and if there are thumbnails from eight or more different folders with the same check mark, the colors to indicate the folders are repeated. You can select from seven colors using the [Options] dialog on the [Tool] menu.

When the Checked images pane is right-clicked, the following menu appears.

Item	Description
Main Image View	Opens the image in a Main image view window. Multiple images may be opened simultaneously.
Slideshow	Images in the Checked images pane are displayed in Slideshow. Opens the Slideshow screen and Slideshow control panel.
PENTAX PHOTO Laboratory	PENTAX PHOTO Laboratory 3 starts. Select a RAW file in the Checked images pane and click this button to open the image in PENTAX PHOTO Laboratory 3.
Save Image Data List	Saves the image data list of images selected in the Checked images pane in CSV format.
Print	The [Print] dialog appears with various print settings.
Rotate	Rotates the selected image 90° left or right. (p.35)
Sort by	Sets the order of files or folders displayed in the Checked images pane.
Thumbnails	Displays the checked images with thumbnails.
Details	Displays the checked images in a list.*2

Item	Description
Uncheck Selected Image[*1]	Removes the check mark from an image selected in the Checked images pane. This cancels the registration of the image in the Checked images pane.
Uncheck All	Removes check marks from all images in an active check mark group. This cancels the registration of the image in the Checked images pane.
Move to Folder	Moves the image selected in the Checked images pane to another folder.
Copy to Folder	Copies the image selected in the Checked images pane to another folder.
Extract JPEG	Extracts the JPEG data from a PEF file or DNG RAW file (shot with K10D) selected in the Checked images pane and saves it as a separate file.
Save as DNG	Converts a PEF file selected in the Checked images pane into a DNG file.

*1: This can only be selected from the right-click menu after selecting an image.
*2: When [Details] is selected, the checked images are sorted by folder and displayed in a list.

Rotating Images in the Thumbnail Pane or Checked Images Pane

1 Select an image in the Thumbnail pane or Checked images pane.

2 Select [Rotate] from the [Tool] menu.

Select [Rotate (90° Left)] or [Rotate (90° Right)] to rotate the image and save it as the same file or as a new file.

Select [Rotate Display (90° Left)] or [Rotate Display (90° Right)] to rotate the image in the Browser screen (Thumbnail pane, Checked images pane or Preview pane) or Main image view window. [Rotate Display (90° Left)] and [Rotate Display (90° Right)] are available when [Yes] is selected for [Use Image Orientation Information] on the [Browser] tab of the [Options] dialog. This is not available for images that do not have orientation information.)

Alternatively, select [Rotate] on the toolbar, or from the menu displayed after right-clicking the thumbnail in the Thumbnail pane or the Checked images pane.

Main Image View Window

Menu bar   Tool bar

Image data pane   Image view area
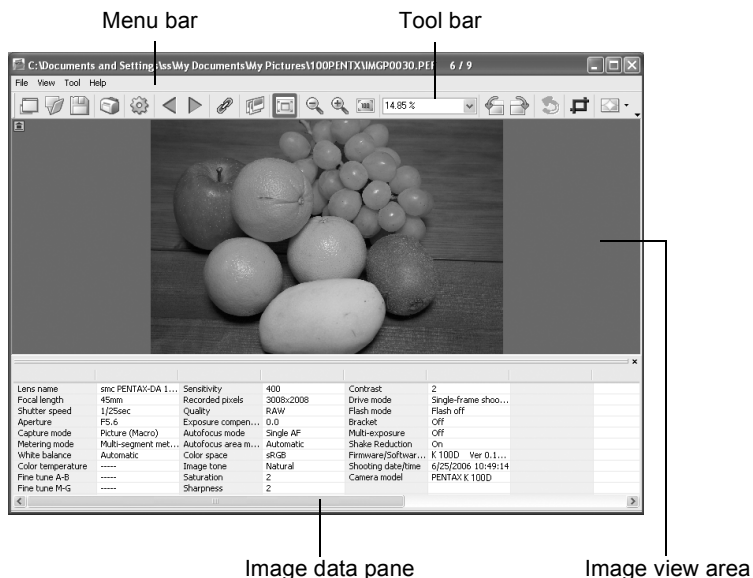
● **Menu bar**

This executes functions or sets various settings of the Main image view window.

[File] menu	
View Browser	This shows the file browsing screen.
Open	This opens the [Open] dialog to select the file to open. If a check mark is next to [Open in new window], a new Main image view window opens and the selected image appears when a file is selected and [Open] is clicked. (p.32)
Save As	This saves the image being viewed in JPEG, TIFF (8-bit or 16-bit), BMP, PNG or PICT format. (p.46)
Page Setup	This sets the page setup information for printing the selected image. (p.62)
Print	This prints the current image. (p.58)
Properties	Image file data appears. (p.42)
Close	Closes the Main image view window.
Close All	Closes all Main image view windows.

[View] menu	
Tool Bar	This shows or hides the Tool bar.
Image Data	This shows or hides the Image data pane.
Previous Image	This displays the previous image when multiple images are displayed in the Main image view window or when a folder contains multiple images. This button cannot be selected if there are no images to view.
Next Image	This displays the next image when multiple images are displayed in the Main image view window or when a folder contains multiple images. This button cannot be selected if there are no images to view.
Synchronous Display	This sets whether to synchronize operations with other Main image view windows.
Slideshow	Selected or checked images appear in order. (p.55)
Fit to Window	This fits the image to the window size. (p.41)
Enlarge	This doubles the view magnification of the image appearing in the image view area. The maximum view magnification is 4 times. (p.41)
Reduce	This halves the view magnification of the image appearing in the image view area. The minimum view magnification is 1/16. (p.41)
Life size	This sets the view magnification of the image appearing in the image view area to life size. (p.41)
Rotate View (90° Left)	This rotates the image 90° left. This does not affect the image file.
Rotate View (90° Right)	This rotates the image 90° right. This does not affect the image file.
Arrange Windows	This arranges multiple Main image view windows.

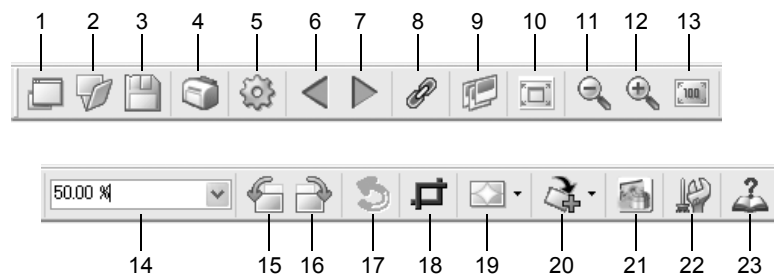| **[Tool] menu**	
Undo	This undoes the previous file operation.
Crop	This cuts a specified area of an image and deletes unnecessary portions.
Auto Image Fix	This automatically adjusts the brightness, contrast and color tone. Select [Strong] or [Slight].
Rotate	This rotates the image 90° left or right. (p.44)
PENTAX PHOTO Laboratory	This starts PENTAX PHOTO Laboratory 3. RAW image files displayed in the Main image view window can be opened in PENTAX PHOTO Laboratory 3. (p.71)
Options	This sets various settings for PENTAX PHOTO Browser 3. (p.65)

[Help] menu	
Help Topics	This shows PENTAX PHOTO Browser 3 help contents. (For Macintosh, select [PENTAX PHOTO Browser Help].)
Index	This shows PENTAX PHOTO Browser 3 help index search. (This command is not available for Macintosh.)
What's This?	This shows pop-up tips when an icon or command button is clicked.
About PENTAX PHOTO Browser	This shows PENTAX PHOTO Browser 3 version information. (For Macintosh, select [About PENTAX PHOTO Browser] on the [PENTAX PHOTO Browser] menu.)

● **Tool bar**

Frequently used functions are provided as Tool bar buttons. You can execute these functions easily from the Tool bar.

Remove the check mark next to [Tool Bar] on the [View] menu to hide the Tool bar.

Number	Icon (button)	Content
1	View Browser	This displays the Browser screen.
2	Open	This opens the [Open] dialog to select the file to open. If a check mark is next to [Open in new window], a new Main image view window opens and the selected image appears when a file is selected and [Open] is clicked.
3	Save as	This saves the image being viewed in JPEG, TIFF (8-bit or 16-bit), BMP, PNG or PICT format. (p.46)

Number	Icon (button)	Content
4	Print	This prints the current image. (p.58)
5	Properties	This shows selected file properties. (p.42)
6	Previous Image	This displays the previous image when multiple images are displayed in the Main image view window or when a folder contains multiple images. This button cannot be selected if there are no images to view.
7	Next Image	This displays the next image when multiple images are displayed in the Main image view window or when a folder contains multiple images. This button cannot be selected if there are no images to view.
8	Synchronous Display	Sets whether to synchronize operations with other Main image view windows.
9	Slideshow	Selected or checked images appear in order. (p.55)
10	Fit to Window	This fits the image to the window size. (p.41)
11	Reduce	This halves the view magnification of the image appearing in the image view area. The minimum view magnification is 1/16. (p.41)
12	Enlarge	This doubles the view magnification of the image appearing in the image view area. The maximum view magnification is 4 times. (p.41)
13	Life size	This sets the view magnification of the image appearing in the image view area to life size (1:1). (p.41)
14	15.84 % Zoom	The current view magnification appears. You can also set the view magnification by selecting it from the pull-down list, or by directly inputting the magnification. (p.41)
15	Rotate View (90° Left)	This rotates the image appearing in the image view area 90° to the left (counterclockwise). (p.43)

Number	Icon (button)	Content
16	Rotate View (90° Right)	This rotates the image appearing in the image view area 90° to the right (clockwise). (p.43)
17	Undo	This undoes the previous file operation.
18	Crop	This cuts a specified area of an image and deletes unnecessary portions.
19	Auto Image Fix	Click ⊟ and select ▣ or ▣ to automatically adjust the brightness, contrast and color tone. Select [Strong] or [Slight].
20	Rotate	This rotates the image 90° left or right. (p.44)
21	PENTAX PHOTO Laboratory	This starts PENTAX PHOTO Laboratory 3. Specify the applicable image files within the Thumbnail pane of PENTAX PHOTO Browser 3. (p.71)
22	Options	The PENTAX PHOTO Browser 3 setup screen appears. This sets various settings for PENTAX PHOTO Browser 3. (p.65)
23	Help Topics	This shows PENTAX PHOTO Browser 3 help contents.

● **Image view area**

The image selected in the Thumbnail pane or Checked images pane of PENTAX PHOTO Browser 3 appears.

● **Image data pane**

The image data appears for the image appearing in the image view area. (p.21)

Place the cursor over a cell dividing line at the top of the pane and drag it to resize the cell. (For Macintosh, drag at the applicable position to resize the cell.)

Hiding the Tool Bar and Image Data Pane

You can set whether to show or hide the Tool bar and Image data pane in the Main image view window.

1 Select [Tool Bar] or [Image Data] from the [View] menu in the Main image view window and uncheck the item.

The Tool bar or Image data pane is hidden.

memo To display the Tool bar or Image data pane, select [Tool Bar] or [Image Data] from the [View] menu in the Main image view window and check the item.

Changing the View Magnification

You can change the image view magnification of the image appearing in the image view area.

1 Select [Fit to Window], [Enlarge], [Reduce] or [Life size] from the [View] menu in the Main image view window. Alternatively, click the ▢, 🔍, 🔍 or 🔳 icon on the Tool bar.

The image view magnification can be adjusted from 1/16 to 4 times.

Enlarged view
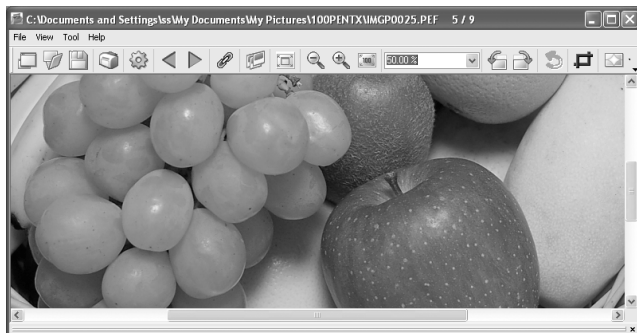
Reduced view

> memo
>
> You can also enlarge or reduce the view by directly inputting the numerical value of the magnification in the View Magnification box ⬚ on the Tool bar.

Displaying Image Properties

You can display file data for the image file appearing in the Main image view window. (p.54)

Synchronizing Multiple Main Image View Windows

Synchronizes up to four Main image view windows. Synchronizes zoom, position and frame advance operations.

1 **Select [Synchronous Display] from the [View] menu in the Main image view windows.**
Alternatively, click the [Synchronous Display] icon on the Tool bar or select [Synchronous Display] on the menu after right-clicking the Image view area.

The zoom, position and frame advance operations for the windows with [Synchronous Display] selected are synchronized.

memo
- When multiple Main image view windows are synchronized, the position of an individual image can be changed by dragging that image while pressing the Alt key.
- If you do not want the same image displayed in multiple Main image view windows at the same time during frame advance with the Main image view windows synchronized, use the settings on the [Options] dialog.

Rotating the Image View

Rotates the image view 90° left or right.

1 **Select [Rotate View (90° Left)] or [Rotate View (90° Right)] from the [View] menu in the Main image view window.**
Alternatively, click the   or   icon on the Tool bar.

The image appears rotated.
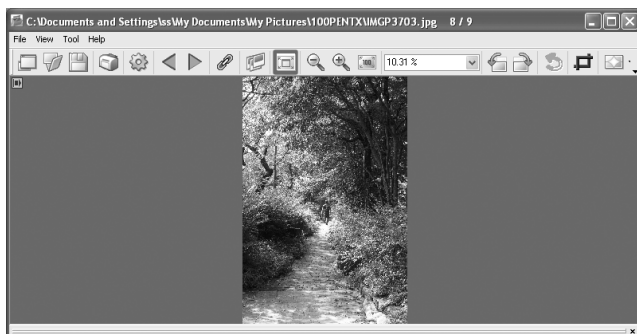
memo
To save the rotated image, use [Rotate] on the [Tool] menu. (p.44)

Saving a Rotated Image

Data of the displayed image is rotated 90° left or right and saved. Rotation of the image may take time depending on the size of the image.
A warning message appears when closing the Main image view window without saving the image or when clicking ◀ ▶.

1 Select [Rotate (90° Left)] or [Rotate (90° Right)] from [Rotate] on the [Tool] menu in the Main image view window.
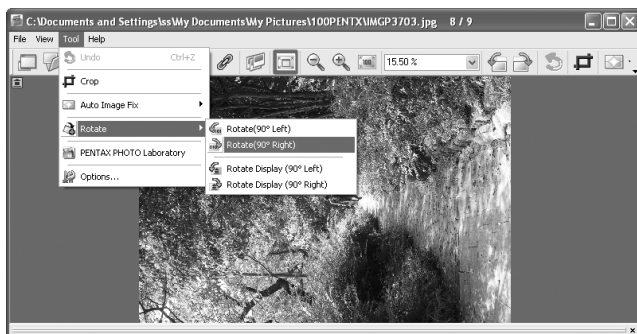
Alternatively, select [Rotate (90° Left)] or [Rotate (90° Right)] from the Tool bar. (p.40)

2 Specify [Save in], [File name] and [Save as type], and then click [Save].

The image is rotated and saved.

memo
• When performing lossless rotation of an unprocessed JPEG image, the [Rotate] dialog opens before the rotated image appears.
• The [Rotate] dialog does not appear for RAW files and processed JPEG images. To save rotated images, select [Save as] from the [File] menu in the Main image view window or click the 💾 icon on the Tool bar.

Cropping an Image

You can cut (crop) portions of an image displayed in the Main image view window.

1 Select [Crop] from the [Tool] menu in the Main image view window.
Alternatively, click the 🗗 icon on the Tool bar.

The [Crop] dialog appears.

2 Set the cropping area.

Item	Description	
Cropping Aspect Ratio	Maintain original aspect ratio:	Maintains aspect ratio of original image.
	Specify paper size	: Uses paper size setting.
	Specify aspect ratio	: Sets desired aspect ratio.
	Do not specify aspect ratio:	Does not set condition for aspect ratio of cropping area.
Cropping Area	Center[*1]	: Centers cropping area in middle of original image.
	Top Left[*1]	: Sets cropping area based on top left coordinates.
	Bottom Right[*1]	: Sets cropping area based on bottom right coordinates.
	Top left coordinates	: Sets top left coordinates of cropping area.
	Cropping Area	: Sets size of cropping area.
	Bottom right coordinates:	Sets bottom right coordinates of cropping area.
	Original size	: Displays number of pixels of original image.

*1: The cropping area is set by specifying the values, not by dragging the mouse. Click [Reset] to return the set values to their initial settings.

3 Click [OK].

Saving an Image

You can save the displayed image using any of the following file formats. RAW files can be saved with any of these formats to view the image with image processing software.

JPEG   : JPEG image with image data
TIFF (8-bit) : TIFF image with image data
TIFF (16-bit) : High quality TIFF image with image data
BITMAP   : BMP image without image data
PNG   : PNG image without image data
PICT   : PICT image without image data

1 **Select [Save as] from the [File] menu in the Main image view window or click the 🖫 icon on the Tool bar.**

The [Save as] dialog appears.
If the RAW file is viewed in Simple display or is reduced, a message appears asking if you wish to return the image to full size. If [No] is selected, the image is saved as it is displayed. The quality is reduced compared to that of an image processed to full size.

2 **Specify [Save in], [File name] and [Save as type], and then click [Save].**
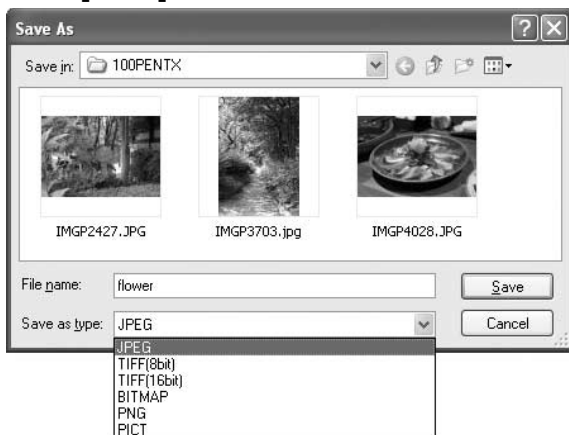
The image is saved.

Managing Image Files and Folders

Extracting a Full-size JPEG File from a RAW File

memo
A preview JPEG file can only be extracted from PEF and DNG files shot with *K10D*.

1 **Select an image for JPEG extraction in the Thumbnail pane or Checked images pane of PENTAX PHOTO Browser 3.**

2 **Select [Extract JPEG] from the [Tool] menu. Alternatively, right-click the image for JPEG extraction and select [Extract JPEG].**

3 **Specify the save destination and file name.**

memo
- To save the file with the file name of the original file, select [Use original file name]. For example, if the original file name is "IMGP0001.pef", the file name of the extracted JPEG file will be "IMGP0001.jpg".
- To save the file with a different file name, select [Rename]. In this case, specify [Base file name] (file name prefix), [Number of digits] (number of digits for number following the base file name) and [Start number] (number following the base file name). When using [Extract JPEG] for multiple images, the file name assigned to each image consists of the [Base file name] and [Start number] in incremental order.
- When using Windows, the options [Use original file name] and [Rename] are available only when using [Extract JPEG] for multiple images.

Converting a PEF File to a DNG File

memo
DNG (Digital Negative) is a general-purpose, publicly-available RAW file format designed by Adobe Systems.

1 **Select a PEF file to convert to a DNG RAW file in the Thumbnail pane or Checked images pane of PENTAX PHOTO Browser 3.**

2 Select [Save as DNG] from the [Tool] menu. Alternatively, right-click the PENTAX RAW image to be converted to a DNG RAW file and select [Save as DNG].

3 Specify the save destination and file name.

memo
- To save the file with the file name of the original file, select [Use original file name]. For example, if the original file name is "IMGP0001.pef", the file name of the converted DNG file will be "IMGP0001.dng".
- To save the file with a different file name, select [Rename]. In this case, specify [Base file name] (file name prefix), [Number of digits] (number of digits for number following the base file name) and [Start number] (number following the base file name). When using [Save as DNG] for multiple images, the file name assigned to each image consists of the [Base file name] and [Start number] in incremental order.
- When using Windows, the options [Use original file name] and [Rename] are available only when using [Save as DNG] for multiple images.

Moving/Copying Image Files

1 In the Thumbnail pane of the PENTAX PHOTO Browser 3 window, select the thumbnail image to move or copy.

2 Select [Cut] or [Copy] from the [Edit] menu. Alternatively, click the 🔏 or 🗎 icon on the Tool bar.
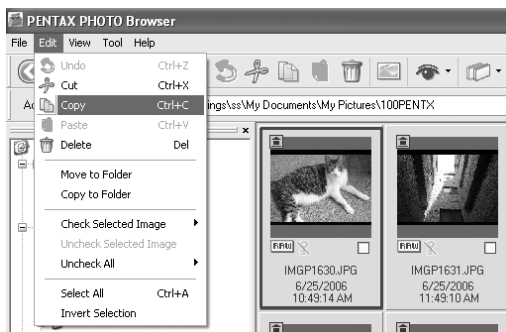
3 Specify the destination folder for moving or copying in the Folder tree pane.

4 Select [Paste] from the [Edit] menu.
Alternatively, click the ⬜ icon on the Tool bar.

The image file is moved or copied to the specified folder.

> memo
> • You can also move an image by dragging and dropping a thumbnail image to the destination folder.
> To copy, hold down the Ctrl key while you drag and drop the file. (For Macintosh, hold down the Option key while you drag and drop the file.)
> • Use the same procedure to move or copy a folder. In the Folder tree pane, specify the folder to move or copy. The specified folder is moved or copied into the destination folder.

Deleting Image Files/Folders

1 **In the Thumbnail pane of the PENTAX PHOTO Browser 3 window, select the file or folder to delete. Alternatively, select the folder to delete in the Folder tree pane.**

2 **Select [Delete] from the [Edit] menu. Alternatively, click the 🗑 icon on the Tool bar.**
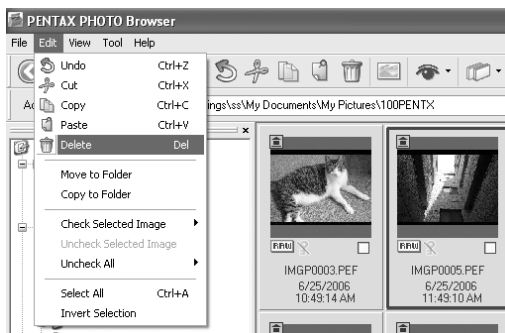
A delete confirmation screen appears.

3 **Click [Yes].**

The file or folder is deleted.

Changing File/Folder Names

1 **In the Thumbnail pane of the PENTAX PHOTO Browser 3 window, select the file or folder to be renamed. Alternatively, select the folder to be renamed in the Folder tree pane.**

2 Select [Rename] from the [File] menu.
Alternatively, directly click the file or folder name in the Thumbnail pane or Folder tree pane.

The file or folder name is ready to be changed.

3 Input the file or folder name.
The image file or folder is renamed.

Renaming All File Names

1 In the Thumbnail pane of the PENTAX PHOTO Browser 3 window, select the thumbnail images to be renamed.

Select [Select All] from the [Edit] menu to select all images in the Thumbnail pane. However, files not supported by PENTAX PHOTO Browser 3 and folders cannot be renamed. Images from more than one folder cannot be selected.

2 Select [Rename All] from the [File] menu.
Alternatively, click the icon on the Tool bar.

The [Rename All] dialog appears.
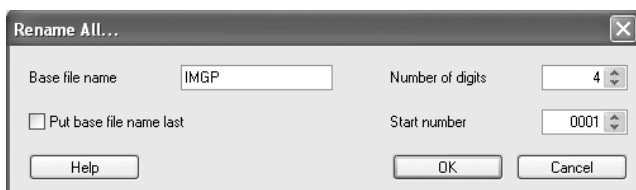
3 Confirm the content, and input information as needed.

Item	Description
Base file name	Specify name to add to file names. "IMGP" is added by default.
Number of digits	Specify the number of digits to add to file names. 1 to 5 digits can be specified. 4 digits are specified by default (example: IMGP1234.pef). When files exist in the folder with the specified base file name, the number of digits increases if the maximum number of files is exceeded.
Put base file name last	When this option is checked, the file name specified for [Base file name] comes after sequential file numbering (example: 0123IMGP.pef). Base file name is added to the beginning by default.
Start number	Sets the start number. When files exist in the folder with the same specified base file name, the numbering automatically starts from the number next to the highest number of the existing file. If there is no file with the specified base file name, numbering starts at 1.

4 Click [OK].

All files are renamed to the specified name.

Creating a New Folder

1 In the Folder tree pane of the PENTAX PHOTO Browser 3 window, select the folder where to create a new folder. Alternatively, select the Thumbnail pane.

2 Select [Create New Folder] from the [File] menu.

A new folder is created under the specified folder or in the Thumbnail pane.

Saving a List of Image Data

- When saving image data from the Thumbnail pane, the image files in the current folder displayed in the pane can be saved (selectable).
- When saving image data from the Checked images pane, the images in the active tab displayed in the pane can be saved. You can save the image data from multiple folders into one CSV format file.

In both cases, you can also save only image data for the selected files.

1 Select [Save Image Data List] from the [Tool] menu in the PENTAX PHOTO Browser 3 window or click the icon on the Tool bar.

The [Save Image Data List] dialog appears.
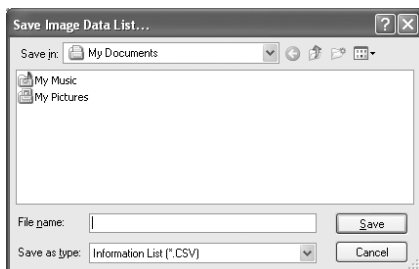
2 Specify the file name and save destination, and then click [Save].

The image data is saved in CSV format.

Displaying Properties of Image Files/Folders

> memo
> The contents of the [Properties] dialog depends on the version of the operating system currently running. Refer to Help in the operating system for details on the [Properties] dialog settings.

1 **In the Thumbnail pane of the PENTAX PHOTO Browser 3 window, select the thumbnail image for which properties are to be shown.**
Alternatively, in the Folder tree pane, select the folder for which properties are to be shown.

2 **Select [Properties] from the [File] menu.**

The [XXX Properties] ([XXX Info] for Macintosh) dialog appears.

IMGP0025.PEF Properties	**IMGP0003.PEF Info**
General / Summary	▼ General:
IMGP0025.PEF	IMGP0003.PEF
Type of file: PENTAX Raw File	Kind: PENTAXPHOTOBrowser PEF Document
Opens with: PENTAX PHOTO Brows [Change...]	Size: 11.1 MB on disk (11,715,501 bytes)
Location: C:\Documents and Settings\ss\Desktop\PENTAX	Where: Desktop:
Size: 10.7 MB (11,317,894 bytes)	Created: Friday, June 9, 2006 4:50 PM
Size on disk: 10.7 MB (11,321,344 bytes)	Modified: Thursday, July 13, 2006 1:49 PM
Created: Wednesday, June 28, 2006, 2:29:51 AM	☐ Stationery Pad
Modified: Monday, July 16, 2006, 1:49:10 PM	☐ Locked
Accessed: Today, September 10, 2006, 7:29:32 PM	▶ Name & Extension:
Attributes: ☐ Read-only ☐ Hidden [Advanced...]	▶ Open with:
	▶ Preview:
	▶ Ownership & Permissions:
[OK] [Cancel] [Apply]	▶ Comments:
For Windows	For Macintosh

3 **Confirm the content.**

4 **Click [OK].**

The [Properties] dialog closes.
For Macintosh, click ⊗ to close the [Info] dialog.

Continuous Image Playback in a Slideshow

This section explains how to set up and operate the slideshow.

1 **Select an image or folder in the PENTAX PHOTO Browser 3 window.**

2 **Select [Slideshow] from the [View] menu or click the icon on the Tool bar.**

The Slideshow screen and Slideshow control panel open.

Slideshow screen

Slideshow control panel   1 2 3 4 5 6 7 8
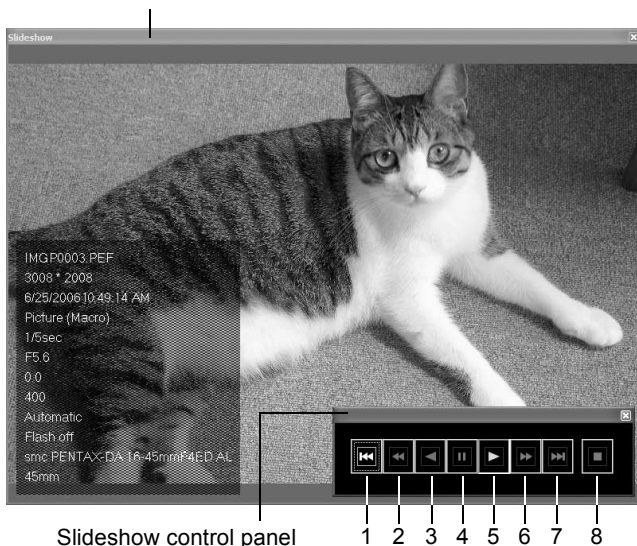
Number	Icon (button)	Content
1	First Image	Returns to the first image. When this is pressed during a slideshow, the first image appears and the slideshow pauses.
2	Rewind	Rewinds slideshow. When this is pressed during a slideshow, the next image appears and the slideshow pauses.
3	Previous Image	Slideshow is played in reverse order.
4	Pause	Pauses slideshow.
5	Play	Plays slideshow.
6	Fast Forward	Fast-forwards slideshow. When fast-forwarding during a slideshow, the next image appears and the slideshow pauses.
7	Last Image	Shows last image. You can use this during a slideshow. The last image appears and the slideshow pauses.
8	Stop	Stops slideshow.

3 Press the [Play] button.

The slideshow starts.

Slideshow Settings

When viewing the slideshow, select between a single window and a dual window. Additionally, view the slideshow in single full screen or dual full screen mode (only if the computer is compatible with dual screen display).

Slideshow display settings and the image data displayed for each image in the slideshow can be modified from the [Browser] tab in the [Options] dialog. You can choose whether to display the image data during the slideshow by checking the radio button [Yes] or [No] for [Display Image Data During Slideshow]. (p.67)
The order in which frames are advanced during the slideshow is determined by the current [Sort by] setting in the [View] menu.

Select from one of the four display patterns below.

Single window

A

Single full screen

A

Dual window

A   **B**

Dual full screen

A   **B**
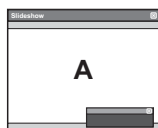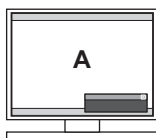
● **Image display order for dual window**

When using dual window or dual full screen in PENTAX PHOTO Browser 3 slideshow, you can select the display method for images to be displayed on the primary and secondary monitors.

Advance in order

Primary (A)

| n | → | n+1 | → | n+2 | → | n+3 |

Secondary (B)

| n+1 | → | n+2 | → | n+3 | → | n+4 |

Advance alternate

Primary (A)

| n | — | n | | n+2 | — | n+2 |

Secondary (B)

| n-1 | | n+1 | — | n+1 | | n+3 |
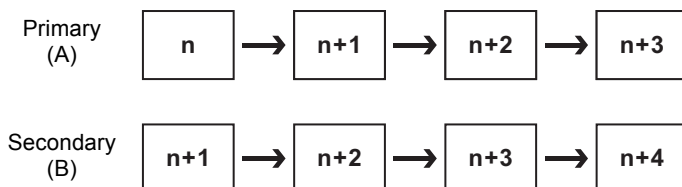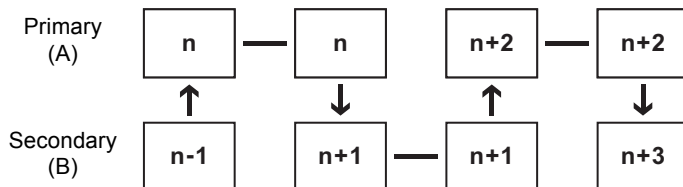
Advance two frames
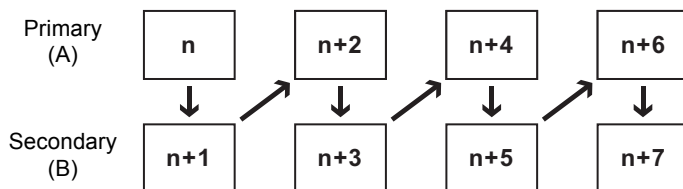
Fix image to primary monitor
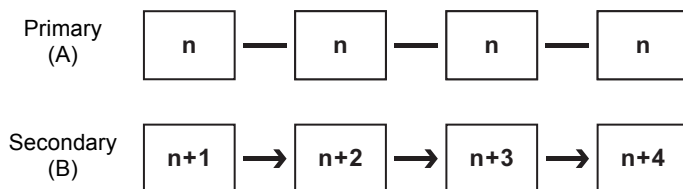
Printing an Image

When printing image files, select between [Print Index] and [Print photo].

Print Index : Prints thumbnails and their image data.

Print photo : Prints a high-quality print of an image. You can print multiple images on one page or print one large image on multiple pages using partition printing.

Using Print Index

1 **In the Thumbnail pane of the PENTAX PHOTO Browser 3 window, select the images to print.**

2 **Select [Print] from the [File] menu.**
   Alternatively, click the 🖾 icon on the Tool bar.

The [Print] dialog appears.

3 Select the [Print Index] tab.

4 Make the layout and caption settings.

Item	Description
Preview	This displays a preview using the specified settings.
Layout	Select from three layout patterns.
Number of images per page (W × H)	From the list, specifies the number of images to print on one page.
Print borders	Selects whether to display print borders for each image.
Caption	The caption settings are explained below. The contents that appear depend on the selected layout.
Position	Selects the image caption position from the list.
Contents	Specifies the data that may be printed from the list.
Font	Selects a font from the list. The default setting is the standard system font.
Size	Selects a font size from the list.
Information labels	Sets whether to print information label.
Printer	The name of the printer to be used appears here.

memo
- The image size is calculated automatically from the margins, number of images, and caption size.
- Click the [Page Setup] button to make the page settings. (p.62)
- Click the [Printer Settings] button to make the printer settings. (p.63)

5 Click [OK].

Printing starts.

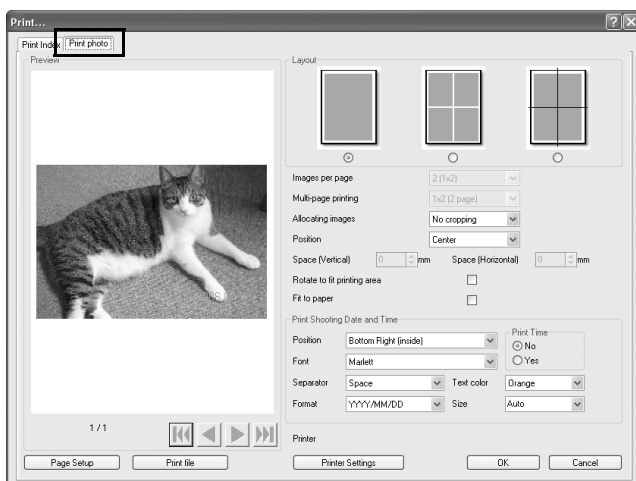### Using Print Photo

1 In the Thumbnail pane of the PENTAX PHOTO Browser 3 window, select the images to print.

2 Select [Print] from the [File] menu. Alternatively, click the ⬛ icon on the Tool bar.

The [Print] dialog appears.

3 Select the [Print photo] tab.

4 Make the layout and caption settings.

Item	Description
Preview	This displays a preview using the specified settings.
Layout	Select from three layout patterns. Layout 1 : Normal printing Layout 2 : Layout printing Layout 3 : Partition printing[*1] (printing one image on multiple pages)
Images per page	From the list, selects the number of images to print on one page.
Multi-page printing	Selects the number of partitions per page from the list.
Allocating images	Selects processing options from the list when printing area and image size differ. No cropping : The image does not exceed the printing area. Cropping : The entire printing area is used and any part exceeding the printing area is deleted.
Position	Selects the position of the image in the printing area from the list.
Space (Vertical)/ Space (Horizontal)	Sets the vertical and horizontal space in mm or inches.
Rotate to fit printing area	This setting uses the printing area most effectively. Check this to allow the image to be rotated 90° as needed to fit the printing area and then printed.
Fit to paper	Sets the printer to print using the maximum printing area. This can be set when [Layout 1] (Normal printing) or [Layout 3] (Partition printing) is selected.
Print Shooting Date and Time	Sets the Shooting Date/TIme print settings. Position : Selects position to print Shooting Date/Time. Font : Selects a font from the list. The default setting is the standard system font. Print Time : Select from No (Default) or Yes (HH:MM:SS, 24-hour format only). Separator : Sets dividers in text. Format : Sets date format. Text color : Sets the font color. Size : Selects a font size from the list.
Printer	The name of the printer to be used appears here.

*1: When [Layout 1] (Normal printing) or [Layout 3] (Partition printing) is selected, the [Fit to paper] checkbox is displayed. Check [Fit to paper] to ignore margin settings and print images to the maximum print area of the printer.

memo
- The image size is calculated automatically from the margins, spacing, and number of images.
- The printing orientation of the date/time depends on the image data (for Windows only). The printing position is in a relative position to the image data.
- Click the [Page Setup] button to select the page settings. (p.62)
- Click the [Printer Settings] button to select the printer settings. (p.63)
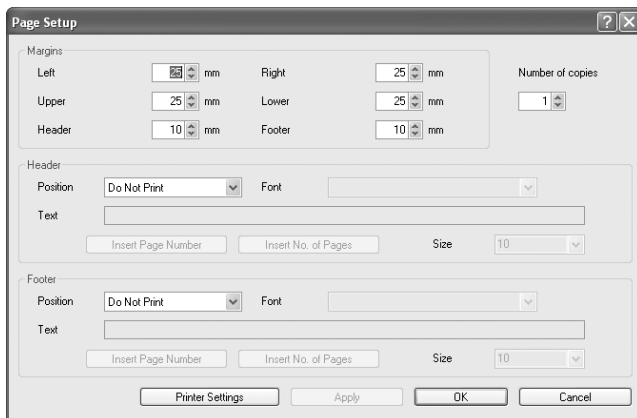
5 Click [OK].

Printing starts.

Using Page Setup

Use Page Setup to set printing options such as margins, headers/footers, and number of copies.

1 Select [Page Setup] from the [File] menu in the PENTAX PHOTO Browser 3 window or click [Page Setup] on the [Print] dialog.

The [Page Setup] dialog appears.

2 Make the settings.

Item		Description
Margins	Left, Right, Upper, Lower	The default setting is 25 mm (1 inch) for paper larger than A4, and 10 mm (0.5 inches) for smaller.
	Header/ Footer	The default setting is 15 mm from the top and bottom edges.
Number of copies		Specifies the number of copies to print.
Header/ Footer	Position	Sets header/footer position. Select from Do Not Print (Default), Align left, Align center, and Align right.
	Font	Selects a font from the list. The default setting is the standard system font.
	Text	Enter text to print for the header/footer.
	Insert Page Number	When this is clicked, [# Page number] is inserted at the cursor location in the Text field.
	Insert No. of Pages	When this is clicked, [# Number of pages] is inserted at the cursor location in the Text field.
	Size	Selects a font size from the list. The default setting is 10 point.

3 Click [OK].

The page setup information is set.

Using Printer Settings

Check the printer settings and change the settings as needed.
Refer to the printer user's manual for details on printer settings.

memo This section describes the printer settings for Windows. For Macintosh, the printer setting screen is dependent on the OS.

1 Click [Printer Settings] on the [Print] or [Page Setup] dialog.

The [Print Setup] dialog appears.
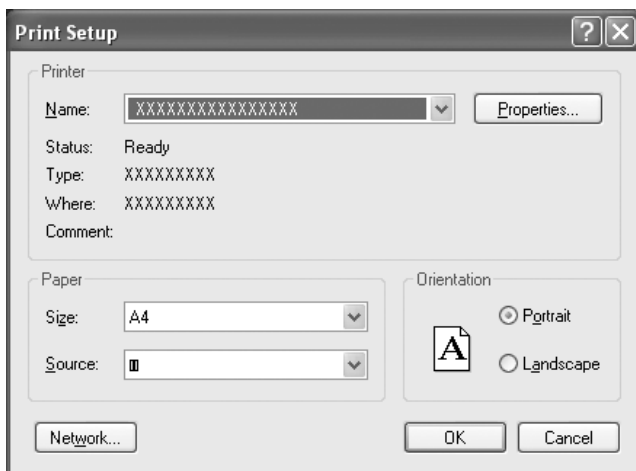
2 Make the settings.

Item		Description
Printer		Selects the printer to use from the [Name] list. Click [Network] to select a printer on the network. Click [Properties] to make advanced printer settings.
Paper	Size	Selects paper size.
	Source	Selects paper feeding method.
Orientation		Sets printing direction. Select [Portrait] or [Landscape].

3 Click [OK].

The printer setup information is set.

Changing the PENTAX PHOTO Browser 3 Settings

Here, you can set the PENTAX PHOTO Browser 3 settings, such as the program launch or exit settings, the initial image view size, thumbnail caption viewing, and RAW file view format.

1 Select [Options] from the [Tool] menu in the PENTAX PHOTO Browser 3 window.
Alternatively, click the 🛠 icon on the Tool bar.

When the [Options] dialog appears, select the tab with the setting you want to change.
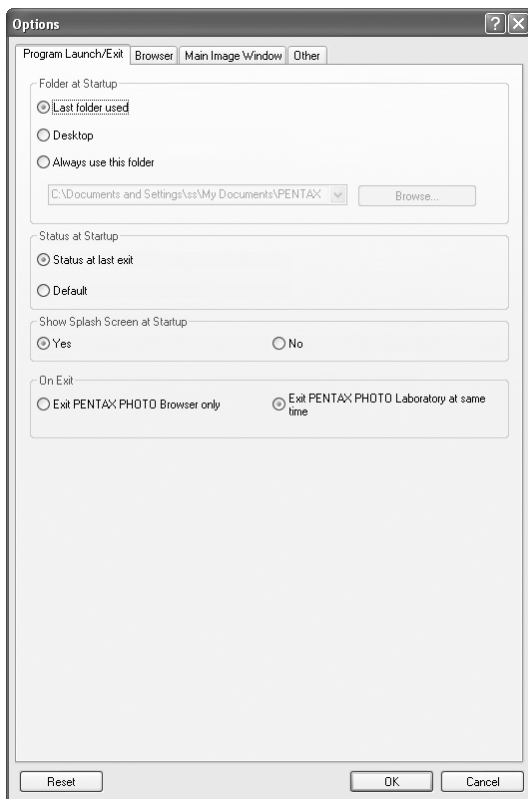
2 **After making your selections, click [OK].**

The options are set and the [Options] dialog closes.
Click [Reset] to return all options to default settings.

> Caution When [Reset] is clicked, all tab settings including the settings of the currently open tab are returned to default settings.

[Program Launch/Exit] tab settings
Change the following settings for PENTAX PHOTO Browser 3 in the [Program Launch/Exit] tab.

Item	Description
Folder at Startup	From the following, select the folder to open when starting the program. Last folder used: This opens the folder that was last used in PENTAX PHOTO Browser 3. Desktop: This opens the desktop. Always use this folder: Click [Browse] to specify a folder.
Status at Startup	Sets PENTAX PHOTO Browser 3 status at startup. Status at last exit: When the next session of PENTAX PHOTO Browser 3 is started, the settings from the previous session are used. Default : The default screen appears.
Show Splash Screen at Startup	Sets splash screen when PENTAX PHOTO Browser 3 starts. Yes : Splash screen is shown. No : Splash screen is not shown.
On Exit	Sets operation when exiting PENTAX PHOTO Browser 3. Exit PENTAX PHOTO Browser only: Exits PENTAX PHOTO Browser 3 only even if PENTAX PHOTO Laboratory 3 is also open. Exit PENTAX PHOTO Laboratory at same time: Exits PENTAX PHOTO Laboratory 3 at the same time as PENTAX PHOTO Browser 3 without displaying a confirmation message.

[Browser] tab settings

Sets the Browser screen display and slideshow settings in the [Browser] tab.

Item	Description
Thumbnail Date/Time	Sets the thumbnail date and time displayed in the Thumbnail pane and Checked images pane. Date/Time file was last modified: Displays the date and time the file was last modified (after the shooting date). Date Exif information modified (Shooting date): Displays the date and time the file was created (shooting date).
Use Image Orientation Information	Sets whether to use information indicating image orientation in the image file on the Browser screen and Main image view window display. Yes : Uses image orientation information. No : Does not use image orientation information. When [No] is selected, the thumbnail display does not change even if [Rotate Display (90° Left)] or [Rotate Display (90° Right)] is selected from [Rotate].
Display Orientation of Images	Sets whether to display an icon indicating the image display orientation on the Browser screen and Main image view window. Yes : Image display orientation is indicated with an icon. No : Image display orientation is not indicated with an icon.
Indicate Changes in Image Data During Frame Advance	Sets whether to indicate changes in image data in red from one file to the next during frame advance in the Main image view window. Yes : Changes in image data from one file to the next are indicated in red. No : Changes in image data from one file to the next are not indicated in red.
Color Coding of Checked Image Thumbnail Border	Sets the color of the thumbnail border in the Checked images pane according to the image file location (path). Select from seven colors.
Slideshow Settings	Sets the pattern when viewing slideshows. Single window: View slideshow in a single window. Dual window: View slideshow in two windows (primary and secondary). Single full screen: View slideshow full-screen on a single monitor. Dual full screen: View slideshow full-screen on two monitors.

Item	Description
Frame Advance During Dual View	Sets the refresh method when viewing two images simultaneously (p.57). Advance in order: Frames advance in order. The secondary window shows one image ahead of the primary window. Advance alternate: At each frame advance interval, images are shown alternately on the primary and secondary windows. With the first image starting at zero, even number images are shown on the primary window and odd number images are shown on the secondary window. Advance two frames: Frames advance in twos. Fix image to primary monitor: The primary window shows a fixed image. The secondary window shows images, which advance in order.
Interval	Sets interval for frame advance during slideshow. Second(s): Sets interval (in seconds) for frame advance.
Loop view	Sets the repeat view setting. No : When all of the images have been shown, the slideshow ends. Yes: The slideshow repeats until ended.
Display Image Data During Slideshow	Sets whether to display image data during slideshow. Also selects information to display. Yes: Displays image data during slideshow. No : Does not display image data during slideshow.

[Main Image Window] tab settings
Changes the Main image view window settings in the [Main Image Window] tab.

Item	Description
Image Data Pane Height	Sets the height of the Image data pane that appears when the Main image view window opens. Last size specified: Sets Image data pane height to be the same as the previous height when the Main image view window opens. Auto : The height is automatically adjusted. Fixed: The number of lines can be specified.

Item	Description
Window Size for Main Image	Sets the window size of the Main image view window. Last size specified: Opens the Main image view window to the last window size specified. Default : Opens the window to the default size. Set size : Specifies the size of the Main image view window in pixels.
Display File Path in Title Bar	Sets whether to display the file path in the title bar of the Main image view window. Yes : Displays the file path in the title bar. No : Does not display the file path in the title bar.
Display Number of Images in Title Bar	Sets whether to display "Display order/Total number of images" when displaying multiple images in one Main image view window. Yes : Displays the display order and total number of images in the title bar. No : Does not display the display order and total number of images in the title bar.
Showing Multiple Images	When multiple images are selected in the Thumbnail pane, select the viewing method in the Main image view window. Single window: Images appear in one Main image view window. Click the ◁ ▷ icon on the Main image view window Tool bar to switch the image view. Separate window: Images appear in multiple Main image view windows.
Main Image View for RAW File	Sets view when opening a new RAW file. Simple display: The compressed image data in the RAW file appears. The image data appears more quickly, but there is quality loss due to the high compression rate. Therefore, this function is not recommended for checking image details. Auto RAW display: The actual RAW file appears. (Full Auto Processing) Size (Ratio): Select the processing ratio for Auto RAW display from [1:4], [1:2], or [Life size]. When emphasizing speed, select [1:4]. When emphasizing quality, select [Life size].
View Attributes to Maintain	Selects view attributes to maintain during frame advance. Multiple attributes may be selected. Zoom : View magnification is maintained. Position : Position is maintained. Direction : Direction is maintained.

Item	Description
Synchronous Display Frame Advance	Sets whether to show all images for each synchronized Main image view window when advancing frames during synchronous display of multiple Main image view windows. In order : Shows all images. Skip : Skips images displayed in other synchronous display windows.

[Other] tab settings

Change the display alert and color management settings in the [Other] tab.

Item	Description
Display Alerts	Sets whether to display alerts. Yes : Displays alerts. (The "In the future, do not show this message." check box is not checked for all alerts.) No : Does not display alerts. (The "In the future, do not show this message" check box is checked for all alerts.)
Working Color Management	Sets color management method during image display. Normal Display: Displays the image with the color management set for the image. Disable Color Management: Color management is disabled. Simulated wide gamut display: Expressive range of Adobe RGB is compressed to sRGB expressive range and displayed. As the sRGB gamut is narrower than the Adobe RGB gamut, color reproduction is not completely accurate. However, you can confirm colors in the Adobe RGB gamut that cannot be expressed by the sRGB gamut.
Color Management During Printing	Sets profile to use when printing. Use printer settings: Uses printer settings for profile when printing. Select color profile: Selects profile to use when printing from the [Profile] drop-down list. Disable Color Management: Disables color management and does not use a profile when printing.
Units	mm : Sets units of length displayed in dialogs to millimeters (mm). in. : Sets units of length displayed in dialogs to inches.

PENTAX PHOTO Laboratory 3 supports a number of image processing functions for use with PEF and DNG files, including data conversion, color adjustment, and image compensation. The processing of these files enables images to be viewed on non PEF and DNG compatible commercially-available image viewing and editing software.

This section describes opening and closing PENTAX PHOTO Laboratory 3 and viewing the PENTAX PHOTO Laboratory 3 window, and explains its functions.

> **Caution**
> You can only perform image processing operations for DNG files taken with PENTAX digital cameras and DNG files converted with PENTAX PHOTO Browser 3.
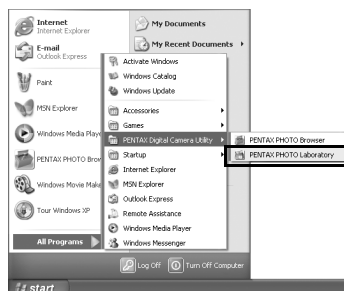
Opening PENTAX PHOTO Laboratory 3

For Windows

1 **Select the start menu on the desktop.**

2 **Select [All Programs] - [PENTAX Digital Camera Utility] - [PENTAX PHOTO Laboratory].**

PENTAX PHOTO Laboratory 3 is opened, and the PENTAX PHOTO Laboratory 3 window appears.

● **Closing PENTAX PHOTO Laboratory 3**

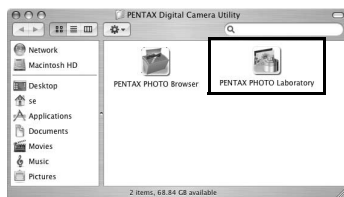Select [Exit] from the [File] menu on the PENTAX PHOTO Laboratory 3 window.

> **memo**
> PENTAX PHOTO Laboratory 3 can also be started from within PENTAX PHOTO Browser 3. (p.27)

For Macintosh

1 **Double-click the [PENTAX Digital Camera Utility] folder in [Applications] on the hard disk.**

2 **Double-click the [PENTAX PHOTO Laboratory] program icon.**

PENTAX PHOTO Laboratory 3 is opened, and the PENTAX PHOTO Laboratory 3 window appears.

● **Closing PENTAX PHOTO Laboratory 3**

Select [Quit PENTAX PHOTO Laboratory] in [PENTAX PHOTO Laboratory] on the desktop menu bar.

memo PENTAX PHOTO Laboratory 3 can also be started from within PENTAX PHOTO Browser 3. (p.27)
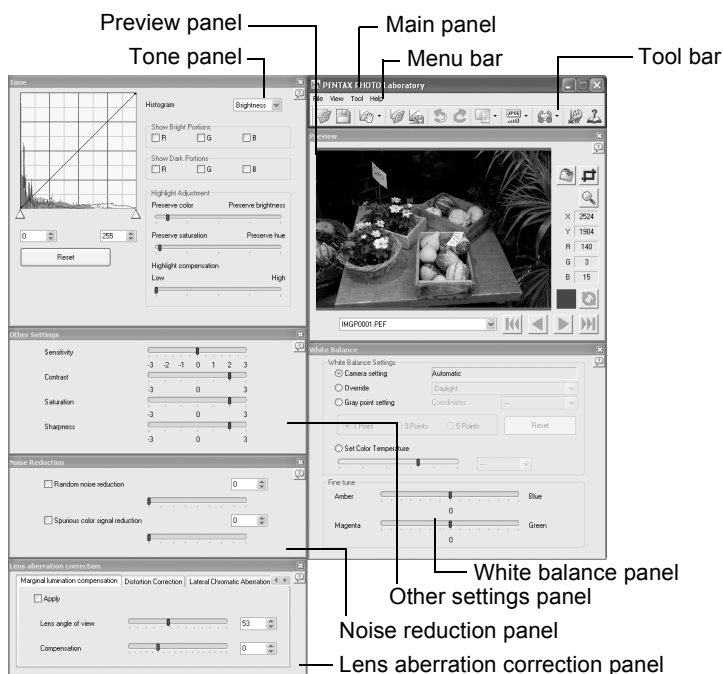
About the PENTAX PHOTO Laboratory 3 Window

This section explains the PENTAX PHOTO Laboratory 3 window layout, names, and functions.

PENTAX PHOTO Laboratory 3 is made up of seven panels.

The control panels are independent and can be repositioned anywhere on the screen. Select [Arrange Windows] from the [View] menu to align the panels.

Six panels, not including the Main panel, can be hidden or shown.

Preview panel — Main panel
Tone panel — Menu bar — Tool bar

White balance panel
Other settings panel
Noise reduction panel
Lens aberration correction panel

Caution
- When the processing mode is set to 🔲 (Full Auto Processing), the White Balance panel, Tone panel, Other Settings panel, Noise Reduction panel, and Lens aberration correction panel are not displayed (p.77). In addition, the 🔲 and 🔲 buttons in the Preview panel are not available.
- When a RAW file is not selected, the preview image does not appear. (p.78)

● **Main panel**

This executes functions or sets various settings of PENTAX PHOTO Laboratory 3.

For Macintosh, the Main panel only contains the Tool bar. The Menu bar appears at the top of the desktop.

● **Preview panel**

You can preview adjustments made for a selected RAW file in the panels. You can also enlarge part of the RAW file.

View adjustments in real time or by clicking the [Refresh] button. (p.78)

● **White balance panel**

Selects white balance or sets color temperature. Adjust the image color tone, such as when the image appears bluish or yellowish. (p.86)

● **Tone panel**

Displays tone curve and histogram information of displayed image. (p.87) Adjusts the image tone using the tone curve.

● **Other settings panel**

Adjusts characteristics such as sensitivity, contrast, color depth, and edges. (p.88)

● **Noise reduction panel**

Removes and reduces random noise and spurious color signals peculiar to digital cameras (color moire). (p.88)

● **Lens aberration correction panel**

Corrects marginal lumination, distortion and lateral chromatic aberration due to lens aberration. (p.89)

● **Menu bar**

This executes functions or sets various settings of PENTAX PHOTO Laboratory 3.

[File] menu	
Open	This selects the image file for processing in PENTAX PHOTO Laboratory 3. Only applies when the software is started as standalone. This cannot be used when PENTAX PHOTO Laboratory 3 is started within the PENTAX PHOTO Browser 3 window. (p.80)

[File] menu

Save	This performs RAW file data processing and saves it with the specified format. The available save formats are JPEG (5 compression rates), TIFF-8, and TIFF-16. Use [Save Mode] on the [Tool] menu to specify the save format. (p.90)
Recall Adjustment	Use this function to load previously saved settings for the various panels. (p.92)
Save Adjustment	Use this function to save the settings currently used in the various panels. (p.91)
Print	The [Print] dialog appears with various print settings.
Exit	This closes PENTAX PHOTO Laboratory 3. (For Macintosh, select [Quit PENTAX PHOTO Laboratory] on the [PENTAX PHOTO Laboratory] menu.)

[View] menu

Full Auto Processing	Each RAW file is processed according to the settings applied with shooting. All panels, except the Preview panel, are hidden. (p.84)
Custom Processing	This performs processing using the processing condition settings specified by the user. The processing conditions are set using the White balance panel, Tone panel, Other settings panel, Lens aberration correction panel, and Noise Reduction panel. (p.85)
First Image	When multiple images are selected, the preview of the first image in order of registration appears.
Previous Image	When multiple images are selected, the preview of one image ahead in order of registration appears.
Next Image	When multiple images are selected, the preview of one image back in order of registration appears.
Last Image	When multiple images are selected, the preview of the last image in order of registration appears.
Refresh Preview	When real-time preview is not enabled, the preview is refreshed using the current settings.
Preview	This shows or hides the Preview panel.
White Balance	This shows or hides the White balance panel.
Tone	This shows or hides the Tone panel.
Other Settings	This shows or hides the Other settings panel.
Noise Reduction	This shows or hides the Noise reduction panel.
Lens aberration correction	This shows or hides the Lens aberration correction panel.
Arrange Windows	This arranges the displayed panels.

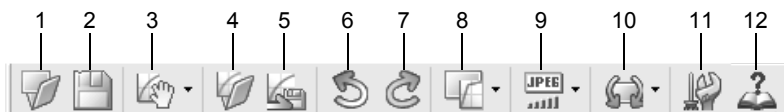| **[Tool] menu**	
Undo	When in Custom Processing mode, use this function to cancel the previous operation. You can undo up to five operations.
Redo	When in Custom Processing mode, use this function to redo an operation that was cancelled with the [Undo] button.
Image Tone	Select a type of photofinishing. In Custom Processing mode, the [Natural] and [Bright] options are available. This function is not available in Full Auto Processing mode or when working with RAW images captured with the *ist D.
Save Mode	This sets the quality when saving processed images. Save images in JPEG format with one of five different compression rates or in TIFF format with one of two bit types. The default setting is JPEG (Highest Quality).
Rotate	Rotates the Preview panel view 90° left or right. The rotated image is saved without changing the RAW file.
Crop/Resize	The dialog for cropping and resizing the image appears.
Options	This sets various settings for PENTAX PHOTO Laboratory 3. (p.99)

[Help] menu	
Help Topics	This shows PENTAX PHOTO Laboratory 3 help contents. (For Macintosh, select [PENTAX PHOTO Laboratory Help].)
Index	This shows PENTAX PHOTO Laboratory 3 help index search. (This command is not available for Macintosh.)
What's This?	This shows pop-up tips.
About PENTAX PHOTO Laboratory	This shows PENTAX PHOTO Laboratory 3 version information. (For Macintosh, select [About PENTAX PHOTO Laboratory] on the [PENTAX PHOTO Laboratory] menu.)

Tool Bar

This executes functions or sets various settings of PENTAX PHOTO Laboratory 3.

1 2 3 4 5 6 7 8 9 10 11 12

Number	Icon (button)	Content
1	Open	This selects the image file for processing in PENTAX PHOTO Laboratory 3. Only applies when the software is started as standalone. This cannot be used when PENTAX PHOTO Laboratory 3 is started within the PENTAX PHOTO Browser 3 window. (p.80)
2	Save	This performs RAW file processing and saves it with the specified save mode and image size. (p.90)
3	Full Auto Processing	This appears when Full Auto Processing is set. Performs processing using the processing conditions set in the RAW file. Click ▾ to select �e or 🔅 from the pull-down menu.
	Custom Processing	This is displayed when Custom Processing is set. This performs processing using the processing condition settings specified by the user. The processing conditions are set using the White balance panel, Tone panel, Other settings panel, Lens aberration correction panel and Noise Reduction panel. (p.85)
4	Recall Adjustment	When in Custom Processing mode, this recalls a saved adjustment file. (p.92)
5	Save Adjustment	This saves the processing conditions set in Custom Processing mode as an adjustment file. (p.91)
6	Undo	When in Custom Processing mode, use this function to cancel the previous operation. You can undo up to five operations.

Number	Icon (button)	Content
7	 Redo	When in Custom Processing mode, use this function to redo an operation that was cancelled with the [Undo] button.
8	 Image Tone	This displays the current Image tone. You can choose [Natural] or [Bright] by clicking ◄ in Custom Processing mode. This function is not available in Full Auto Processing mode or when working with RAW images captured with the *istD. (p.84)
9	JPEG Save Mode	This displays the current Save mode. Click ◄ to select the save format for the processed image file. (p.90)
10	 Rotate	This rotates the Preview panel view 90° left or right. RAW files are processed according to the selected direction.
11	 Options	This is used to change the PENTAX PHOTO Laboratory 3 settings. (p.99)
12	 Help Topics	This shows PENTAX PHOTO Laboratory 3 help contents.

Preview Panel

This shows a preview of the RAW file.

Number	Icon (button)	Content
1	Rotate/Shift	Rotates the image based on the baseline or shifts it in a vertical or horizontal direction.
2	Crop/Resize	Crops portions of an image and changes the image output size.
3	Enlarge Area	When this is turned on, a red frame appears in the preview area. The Enlarge area window appears and the magnification can be selected.
4	Refresh	Click this to refresh the preview using the current settings when [Refresh Preview] becomes the [Refresh] button on the Options settings of PENTAX PHOTO Laboratory 3.
5	002IMGP.pef	Shows the file name of the image currently displayed in the Preview panel. When multiple images are selected, select the image to display from the list.
6	First Image	When multiple images are selected, the preview of the first image in order of registration appears.
7	Previous Image	When multiple images are selected, the preview of one image ahead in order of registration appears.
8	Next Image	When multiple images are selected, the preview of one image back in order of registration appears.
9	Last Image	When multiple images are selected, the preview of the last image in order of registration appears.

Selecting a RAW File to Process

1 Select a RAW file in the PENTAX PHOTO Browser 3 window.

2 Select [PENTAX PHOTO Laboratory] on the [Tool] menu of PENTAX PHOTO Browser 3 or click the ![icon] icon.

A RAW file appears in the Preview panel of the PENTAX PHOTO Laboratory 3 window.

Select multiple image files to open multiple images at the same time.

Click the ![], ![], ![], or ![] button on the Tool bar to preview the desired image.

memo
- To select multiple image files, hold down the Ctrl key and click on thumbnail images in the Thumbnail pane or the Checked images pane (For Macintosh, hold down the command key and click on image files). Selected thumbnail images are indicated by a blue border.
- When PENTAX PHOTO Laboratory 3 is launched with the Checked images pane selected but no thumbnails in the active group specified (none of the thumbnails are displayed with a blue border), all RAW images in the active group will be opened in PENTAX PHOTO Laboratory 3.
- When a file selected in PENTAX PHOTO Browser is opened and edited with PENTAX PHOTO Laboratory and another file is selected in PENTAX PHOTO Browser, the "The image has been modified. Do you want to save changes?" dialog is displayed.
  Click [Cancel] to retain changes made with PENTAX PHOTO Laboratory and select another image in PENTAXPHOTO Browser.
 Select the "In the future, do not show this message" checkbox and click [Cancel]. The confirmation dialog will no longer be displayed. Changes made in PENTAX PHOTO Laboratory will be retained and operations in PENTAX PHOTO Browser will be enabled.
  Select [No] in "Display Alerts" of the "Options" dialog in PENTAX PHOTO Laboratory and select [OK]. Then, select [Yes] in "Display Alerts" and click [OK] to turn on the dialog again.

Opening a RAW File in PENTAX PHOTO Laboratory 3

1 **Click the ⬚ icon in the PENTAX PHOTO Laboratory 3 window.**

The [Open] dialog appears.
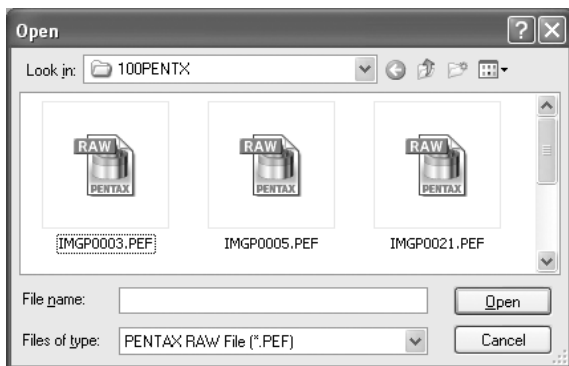
2 **Select RAW files to display and click the [Open] button.**

Select images with holding down the Ctrl key (Windows) or command key (Macintosh) in the [Open] dialog to open multiple files simultaneously.

A RAW file appears in the Preview panel of the PENTAX PHOTO Laboratory 3 window.

Rotate/Shift Settings

1 **Click the ⬚ icon in the PENTAX PHOTO Laboratory 3 window.**

The Rotate/Shift panel appears.

2 **Check the [Apply] check box and adjust the parameters to rotate or shift the image.**

When [Real time] is selected for [Refresh Preview] in the [Options] dialog, the changes to the parameters are immediately applied to the preview. When [Refresh button] is selected for [Refresh Preview], click the [Refresh] button on the Preview panel or select [Refresh Preview] on the [View] menu.

Item	Description	
Rotate	Degrees	: Adjusts the angle of rotation.
	Baseline	: Rotates the image until the line you marked on the preview image is vertical or horizontal.
Shift	Vertical shift	: Shifts the image vertically.
	Horizontal shift	: Shifts the image horizontally.
	Lens angle of view	: Necessary information for shifting the image. This is accurately set based on the image file information by default; however, this can be changed to alter the vertical-horizontal shift ratio.

Crop/Resize Settings

1 Select [Crop/Resize] from the [Tool] menu. Alternatively, click the ⬚ icon on the Preview panel.

2 Set the cropping area and image output size on the Crop/Resize panel.

Click [Reset] to return the set values to their initial settings.

Item	Description
Cropping Aspect Ratio	Maintain original aspect ratio: Maintains aspect ratio of original image. Specify paper size: Uses paper size setting. Specify aspect ratio: Specifies desired aspect ratio. Do not specify aspect ratio: Does not set condition for aspect ratio of cropping area.
Cropping Area	Center : Centers cropping area in middle of original image. Top Left: Sets cropping area based on top left coordinates. Bottom Right: Sets cropping area based on bottom right coordinates. Top left coordinates: Sets top left coordinates of cropping area. Cropping size:Sets size of cropping area. Bottom right coordinates: Sets bottom right coordinates of cropping area. Original size : Displays number of pixels of original image.

Item	Description
Image Size	Do not resize: Select this to not change the image output size. Specify image size: Select this to specify the number of pixels (by width and height) for the image output size. Enter the number of horizontal and vertical pixels in [W] and [H] for [Specify image size] on the right side. Specify resolution: Select this to specify the resolution (in dpi) for the image output size. Enter the resolution (dpi) and horizontal and vertical size (in mm or inches) in [Specify resolution] on the right side of [Specify image size]. When [Specify paper size] is specified in [Cropping Aspect Ratio] for [Crop/Resize], select the paper size specified as the output size.

3 Click [OK].

The image is cropped.

The cropping area remains on the image in the preview panel, and the ⬜ icon is selected. After the image is processed, the cropping area is saved with the specified pixels.

To cancel cropping, click the ⬜ icon again to undo the cropping area.

Easily Modifying RAW Files

In Custom Processing mode, simple image processing suited to your shooting intent is possible with selection of an Image tone with PENTAX PHOTO Laboratory 3.
Select from the following two Image tones when using *ist DS, *ist DL, *ist DS2, *ist DL2, K100D, K110D, K10D:

|		
	Natural	Elaborates images with natural colors.
	Bright	Elaborates sharp, bright images.

memo

When in Full Auto Processing mode, RAW files are processed using the Image tone selected at the time of shooting. This setting cannot be changed in PENTAX PHOTO Laboratory 3.

Setting RAW File Processing Conditions

Set individual processing conditions to create unique image modifications.

1 Select [Custom Processing] from the [View] menu, or click ⏷ on the icon on the Tool bar and then click (Custom Processing) on the drop-down list.

The Main panel, Preview panel, White balance panel, Tone panel, Other settings panel, Lens aberration correction panel, and Noise Reduction panel appear.
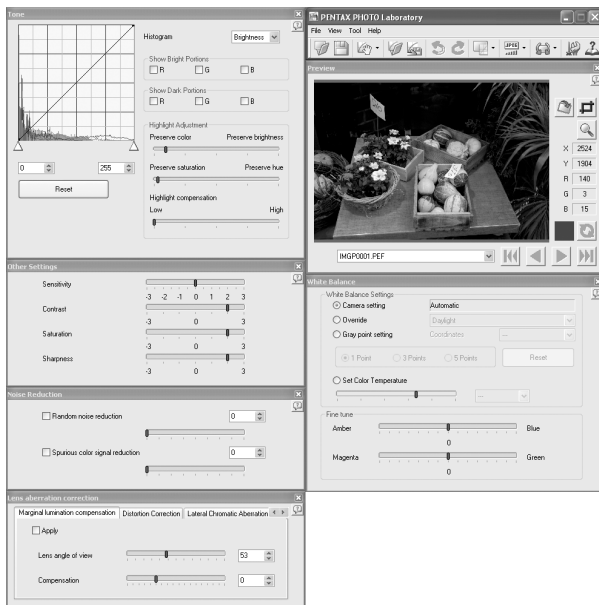
> memo
> • To close the White balance panel, Tone panel, Other settings panel, Lens aberration correction panel, or Noise Reduction panel, select [Full Auto Processing] from the [View] menu, or click ⏷ on the icon on the Tool bar and then click (Full Auto Processing) on the drop-down list. The image is processed using the Image tone set at the time of shooting, and the settings cannot be changed in PENTAX PHOTO Laboratory 3.
> • When multiple RAW files are selected, the same processing conditions are applied to all selected files. Use the Queue list to set different processing conditions for each file and to process all the files at once. (p.91, p.102)

2 Enter settings in each setting panel.

The settings are reflected in the Preview panel. Settings can be applied in one of two methods, determined by the setting in the [Options] dialog. (p.99)

- **Reflect the settings immediately in real time.**
- **Reflect the settings when clicking the ⟳ icon on the Preview panel.**

● **Setting the White balance**

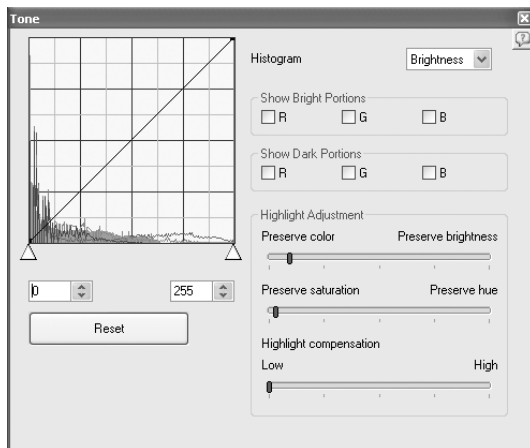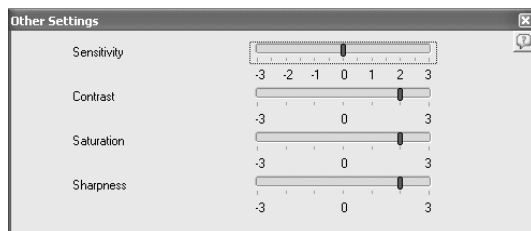| Item	Description
White Balance Settings	Select from the following: Camera setting: 　Apply the white balance setting used on your camera. Override: 　Select the white balance to apply from [Daylight], [Shade], [Cloudy], [Daylight fluorescent], [Neutral white fluorescent], [Cool white fluorescent], [Tungsten lamp], or [Flash]. Gray point setting: 　Select the point in the preview image to turn gray. Specify using the pointer for the most appropriate white balance setting. Select from [1 point], [3 points], or [5 points]. When shooting a gray card to set the Gray point setting, a more accurate white balance may be achieved. Click [Reset] to delete the selected gray points. Set color temperature: 　The white balance is set according to the color temperature setting. Slide the bar to set the color temperature or select the value from the list. Select from between 2500K to 10000K (in Kelvin).
Fine tune	Use the slide bars to adjust the white balance of Amber and Blue, and Magenta and Green to your liking. (Set up to seven steps for all directions of colors.) Adjust White Balance mode (Camera setting, each Override option, Gray point setting, Set color temperature) for white balance settings for each image.

● **Setting the Tone curve/Histogram**

Item	Description
Tone curve	Adjusts the tone curve to make precise adjustments to the density and contrast. Change the tone curve using the pointer. Move the curve up to brighten and move the curve down to darken the image. Click a point on the tone curve to fix the curve at that point. A black dot appears. The black dot may be dragged and moved. Right-click to erase the black dot. (For Macintosh, hold down the control key while you click the black dot.)
Histogram	Brightness shows the distribution of luminosity when combining RGB, R (Red), G (Green) and B (Blue).
Show Bright Portions/ Show Dark Portions	When all [Show Bright Portions] check boxes are selected, the bright portions of the image are shown in flashing gray. When all [Show Dark Portions] check boxes are selected, the dark portions of the image are shown in flashing white. You can check bright portions with the flashing complementary color for each color, and the dark portions with the flashing of each color.
Reset	Deletes the tone curve settings, and returns to a straight line.
Highlight Adjustment	Adjusts the highlight areas. Place priority either on color or brightness and on saturation or hue, and use the [Highlight compensation] slider to compensate for bright portions.

● **Setting the Sensitivity/Contrast/Saturation/Sharpness**

Set these using the Other settings panel.

Item	Description
Sensitivity	Adjusts the sensitivity. + : The image becomes brighter. – : The image becomes darker.
Contrast	Adjusts the contrast between light and shadow. + : Increases contrast between light and shadow. – : Decreases contrast between light and shadow.
Saturation	Adjusts the strength of the colors. + : The colors become stronger. – : The colors become weaker.
Sharpness	Adjusts the sharpness of the edges. + : Image contour is enhanced. – : Image contour is softened.

● **Setting the Noise Reduction**

Set using the Noise reduction panel.

Item	Description
Random noise reduction	Reduces random noise (especially electrical noise visible in dark areas).
Spurious color signal reduction	Each pixel in a single-chip image sensor, such as a CCD or CMOS, represents red, green or blue, and when photographing a subject adjacent to clear lines or fine patterns, these pixels may appear to generate colors not in the original image (spurious color signals). This function reduces spurious color signals.

● **Setting the Lens Aberration Correction**

Set using the Lens aberration correction panel.
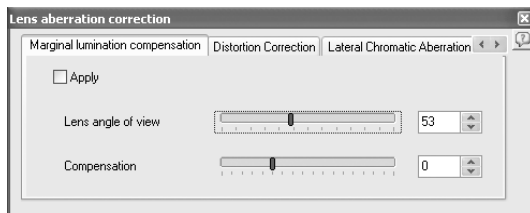
[Marginal lumination compensation] tab
Adjusts marginal lumination of the image.

Item	Description
Lens angle of view	Sets the viewing angle of the lens used when shooting. Slide to the left to make the marginal lumination linear at the center portion of the lens, and slide to the right to correct the outer portions of the lens.
Compensation	The slider sets the compensation level. Set the compensation level between –50 and +120. Slide towards – for darker and + for brighter compensation.

[Distortion Correction] tab
Corrects distortions (lens aberration that photographs straight lines as curved lines).

Item	Description
Correction balance	The slider adjusts the distortion correction level between the center and margins of the image. (Slide to the right to widen the range.)
Compensation	The slider sets the compensation level.

[Lateral Chromatic Aberration Correction] tab
Corrects lateral chromatic aberration in which there is a difference in the image magnification and image size due to different color wavelengths at the image margins.

Item	Description
Red compensation	The slider adjusts the magnification of red light.
Blue compensation	The slider adjusts the magnification of blue light.

Saving Image Files

You can save the image files which have been Full Auto processed or Custom processed. Specify the save format and image size when saving image files. Save images in JPEG format with one of five different compression rates, or in TIFF-8 or TIFF-16 format.
As the compression rate increases, the file size decreases, but the quality also deteriorates.

1 Select [Save Mode] from the [Tool] menu, or click ▼ on the right of the ▦▾ icon to select the save format.

Select the quality and file format when saving RAW files.

For JPEG files, image data is compressed and saved. Select from Highest Compression, High Compression, Medium Quality, High Quality, and Highest Quality. Select High or Highest Compression to make the file size smaller by lowering quality. Select High or Highest Quality to maintain high quality by keeping the file size large.

Select TIFF-8 or TIFF-16 to avoid quality loss due to compression. Although selecting TIFF-16 leads to a larger file size, quality loss is minimized when modifying the file with other image editing software.
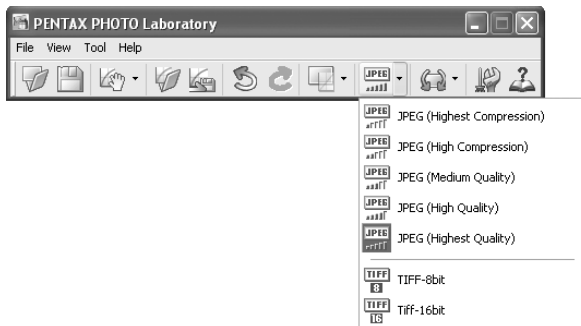
2 Select [Save] from the [File] menu or click the 🖫 icon on the Tool bar.

The [Save] dialog appears.

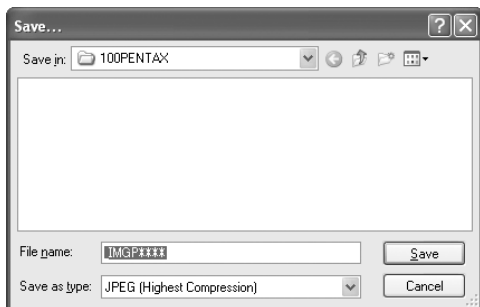| Save...	? X
Save in: 🗀 100PENTAX ▼ ❍ ♪ ▷ 🖽▼	
File name: IMGP ****	Save
Save as type: JPEG (Highest Compression) ▼	Cancel

> memo
>
> When multiple images are selected, the [Save] dialog is not displayed. The images will be saved, with their original file names, to the [Folder to Use] specified in [Options] (p.99) (file extensions will be modified automatically according to the specified file format).

3 Specify the file name and save destination, and then click [Save].

The image file is saved.

> memo
>
> When [Use queue list] is set in [Options], adjustment is added as a job to the [Image Processing Queue List] dialog for batch processing to be performed later. (p.102)

Saving Image File Adjustment

All current adjustment combinations can be saved as a parameter file. Saved adjustment can then be applied to other RAW files for processing.

1 Click [Save Adjustment] from the [File] menu on the Main panel or click the 🖳 icon.

The [Save Adjustments] dialog appears.
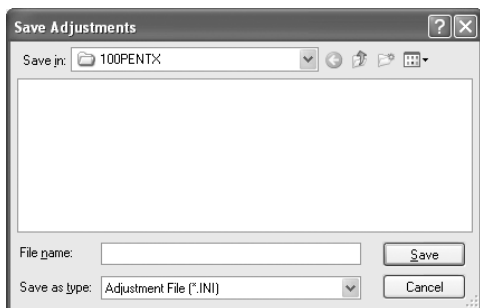
2 Specify the file name and save destination, and then click [Save].

The current settings are saved as an adjustment setting file (*.ini).

Recalling Image File Adjustment

1 Display a RAW file in the Preview panel.

2 Click [Recall Adjustment] from the [File] menu on the Main panel or click the icon.

The [Open Adjustment File] dialog appears.

3 Select a folder and parameter file name, and then click [Open].

The settings saved in the parameter file are reflected in the parameters of the RAW file.

Printing

You can print the currently displayed RAW file. Print image files using [Print Bracketing] or [Enlarge image].

[Print] dialog

Set the print layout, captions, and other settings in the [Print] dialog.

● **Using the [Print] dialog**

Select [Print] on the [File] menu to open the [Print] dialog.

● **[Print] dialog settings**

The [Print Bracketing] and [Enlarge image] setting tabs appear in the [Print] dialog.

[Print Bracketing] tab

Print bracketing is a function that prints an image several times on one
page with automatically adjusted parameters within a set parameter
range, enabling you to view the printed results of different parameters at
the same time. Printing the image on your printer with this function is useful
for determining the optimal parameters for that image.
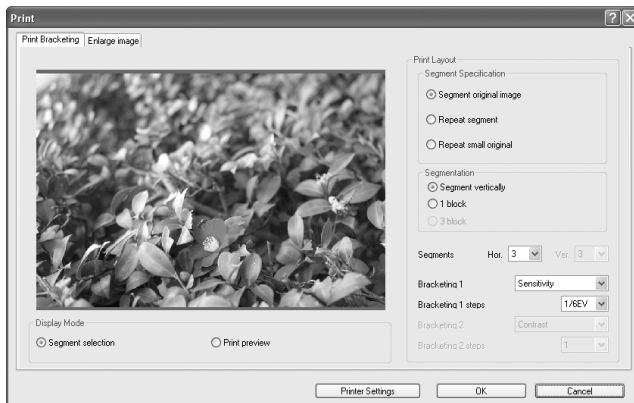
Display Mode

Sets preview method.

Item	Description
Segment selection	Switches to window for selecting image area for print bracketing.
Print preview	A preview of the print layout is displayed.

Print Layout

Sets print bracketing settings.

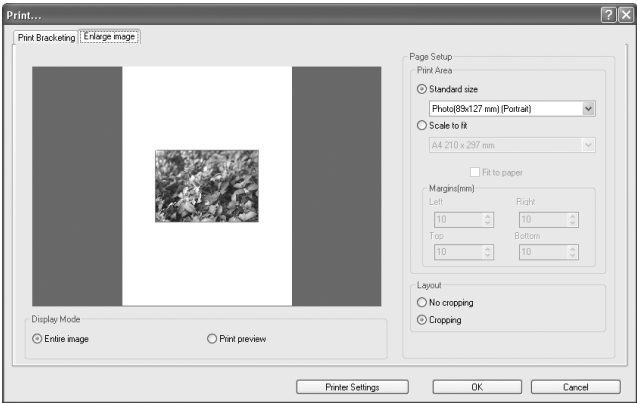| Item	Description
Segment Specification	Selects image area setting method for print bracketing. Select from the following three settings.
	Segment original image: Divides entire image into equal sections and allocates bracketing variations for each section. This is useful for reviewing the changes in set parameters while previewing the entire image.
	Repeat segment: Cuts part of image and prints several repeating tiles with different bracketing parameters. This is useful for reviewing the optimal settings for the most important area in the image. When this setting is selected (and [Segment selection] is selected for [Display Mode]), you can select the area repeatedly printed in the preview.
	Repeat small original: Reduces entire image size and prints several repeating tiles with different bracketing parameters. This is useful for verifying the effects of varying parameters on the entire image.
Segmentation	Sets segmentation method of print area. Select from the following three settings.
	Segment vertically: Divides area vertically. Only one bracketing parameter can be changed.
	1 block : Divides area into multiple horizontal and vertical sections. Two bracketing parameters can be changed.
	3 blocks: Divides area into multiple horizontal and vertical sections fixed at three vertical positions. One bracketing parameter can be changed, but prints three areas of image.
Segments	Sets number of horizontal and vertical divisions. Selectable value depends on selected segmentation method.
Bracketing 1	Selects bracketing parameter to be changed horizontally. Choose from six parameters: Sensitivity, Contrast, Saturation, Sharpness, Fine tune A-B and Fine tune M-G. (The same parameter cannot be selected for Bracketing 1 and Bracketing 2.)

Item	Description
Bracketing 1 steps	Selects variable step of bracketing parameter to be changed horizontally. The range of the variable step depends on the selected bracketing parameter.
Bracketing 2	Selects bracketing parameter to be changed vertically. The parameters that can be selected are the same as those for Bracketing 1. (The same parameter cannot be selected for Bracketing 1 and Bracketing 2.)
Bracketing 2 steps	Selects variable step of bracketing parameter to be changed vertically. The range of the variable step depends on the selected bracketing parameter.

[Enlarge image] tab
Enlarge image refers to printing the entire image with the current settings. After reviewing the parameters with print bracketing, use this tab to make the settings for the actual print.

Display Mode
Sets preview method.

Item	Description
Entire image	Displays entire area of image to be printed and overlaps paper area and print area.
Print preview	Displays only area of image to be printed.

Page Setup

Sets the paper size, margins and other settings.

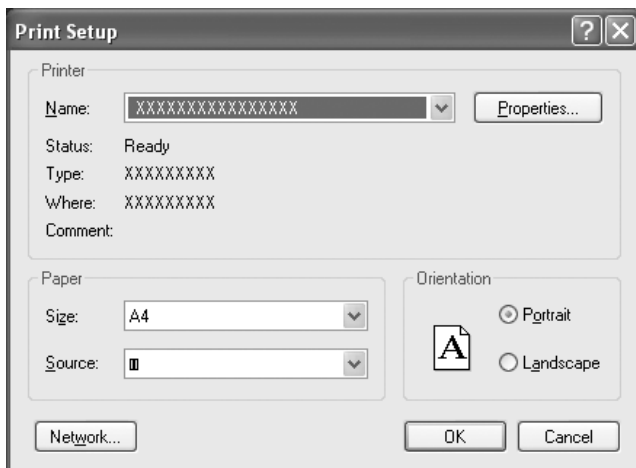| Item	Description	
Print Area	Sets the paper size and margins.	
	Standard size :	Sets the paper size (Photo (89 × 127 mm)/ (3.5 × 5 in.), Postcard (102 × 152 mm)/(4 × 6 in.), Photo (127 × 178 mm)/(5 × 7 in.), Photo (203 × 254 mm)/(8 × 10 in.), Photo (254 × 305 mm)/(10 × 12 in.)). The image size for printing is automatically adjusted according to the selected paper size.
	Scale to fit :	Sets paper size according to paper used by printer. [Margins (mm)/(in.)] can be set. The image size for printing is automatically adjusted according to the selected paper size and margins. Alternatively, select [Fit to paper] to ignore the [Margins (mm)/(in.)] settings and adjust the image size for printing to the maximum print area of the printer.
	Margins (mm)/(in.):	Sets top, bottom, left and right margins in units of mm or inches when [Scale to fit] is selected.
Layout	Sets segmentation method of print area. Select from the following two settings.	
	No cropping :	Prints entire image. Margins are added to sides or top and bottom depending on print area and aspect ratio.
	Cropping :	Prints image without margins. Sides or top and bottom of image may be cut depending on print area and aspect ratio.

[Print Setup] dialog

Verify printer settings when necessary using the [Print Setup] dialog. Refer to the printer user's manual for details on printer settings.

● **Using the [Print Setup] dialog**
Follow the steps below to open the [Print Setup] dialog.
Click [Printer Settings] on the [Print] dialog.
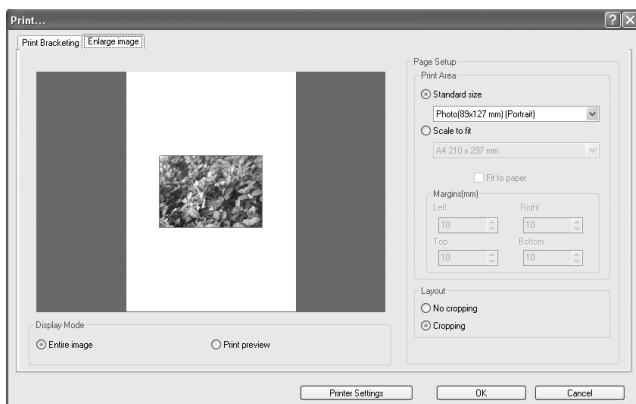
The [Print Setup] dialog appears.

● **Settings in [Print Setup] dialog**

The following settings appear in the [Print Setup] dialog.

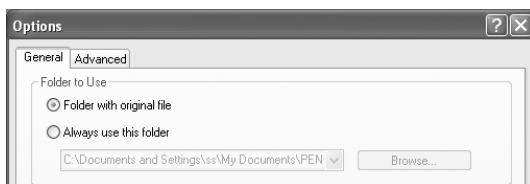| Item	Description
Name	Click [Properties] for printer settings.
Paper	Size : Selects paper size. Source: Selects paper feeding method.
Orientation	Sets printing direction to portrait or landscape orientation. Select [Portrait] or [Landscape].

Changing the PENTAX PHOTO Laboratory 3 Settings

1 Select [Options] from the [Tool] menu on the Main panel or click the 🖳 icon on the Tool bar.

The [Options] dialog appears.

2 Click the [General] tab.

Change the settings as needed.

Item	Description
Folder to Use	Select from one of two folders to use. Folder with original file: The folder with the RAW file is used. Always use this folder: Click [Browse] to display the [Browse for Folder] dialog, and then select the folder to use.

Item	Description
Status at Startup	Select the status at startup. Status at last exit: 　　　Maintains the settings last used when the application was closed. This switches to [Arrange All] when, for example, the settings last used cannot be restored due to a difference in the number or type of monitors. Arrange All: 　　　All panels to be used are arranged. Display size is set to Small (default setting), and other settings are displayed with the status at last exit. Default : The status for each panel is returned to the default status.
Show Splash Screen at Startup	Sets splash screen when PENTAX PHOTO Laboratory 3 starts. Yes　 : Splash screen is shown. No　　: Splash screen is not shown.
Arrange Panels	Specify the positioning of panels with automatic arrangement. Align right: 　　　Panels are aligned along the right side. Align left:Panels are aligned along the left side. Put in Secondary Monitor Except Preview: 　　　The White Balance panel, Tone panel, Other Settings panel, Lens aberration correction panel, and Noise Reduction panel are aligned in a secondary monitor while only the Preview panel is displayed in the primary monitor.
Initialize Parameters when Creating a New File	In PENTAX PHOTO Laboratory 3, sets whether to initialize all Custom Processing parameters when opening a new image file. Yes　 : Resets parameters. No　　: Does not reset parameters.
Display Alerts	Sets whether to display alerts. Yes　 : Displays alerts. (The "In the future, do not show this message" check box is not checked for all alerts.) To change the display setting for individual alerts, set this to [Yes] and then check the "In the future, do not show this message" check box for the alerts you do not want to show. No　　: Does not display alerts. (The "In the future, do not show this message" check box is checked for all alerts.)

3 Click the [Advanced] tab.

Change the settings as needed.

Item	Description
Working Color Space	In PENTAX PHOTO Laboratory 3, sets working (preview) color space (color management). Select from the following settings.
	Normal Display : Displays the image with the color management set for the image.
	Simulated wide gamut display: Select this option to preview tonal expression, available only with the Adobe RGB gamut, in an sRGB environment. The expressive range of AdobeRGB, which has a wider color range than that of sRGB, is compressed to an sRGB area, which has a narrower color range than that of AdobeRGB, and is displayed with lower overall saturation.
Color Space	Sets the color space used when processing an image with PENTAX PHOTO Laboratory 3.
	RAW file setting : Images are processed with the color management set for the image.
	sRGB : Processes the image using sRGB.
	AdobeRGB : Processes the image using AdobeRGB.

Caution: When viewing images processed with AdobeRGB in an sRGB environment, the saturation may appear lower than when processed with sRGB.

Item	Description
Processing	Select from starting processing jobs immediately or creating a queue list and starting jobs later. Start immediately: Jobs are started immediately. Other operations cannot be performed until processing is completed. Use queue list : Jobs are added to a queue list. Jobs may be added or deleted before or during processing.
Refresh Preview	Real time : Set this to apply processing conditions to the preview image upon each change made to [Custom Processing] settings. Refresh button: Set this to apply processing conditions to the preview image after all changes are made to [Custom Processing] settings, upon clicking the [Refresh] button.
Saving Multiple Files	Select the saving method when processing multiple images, from the following choices: [Original file name + new extension], [Numbered files] and [Save one at a time]. Select [Numbered files] to specify the base file name and the number of following digits.
Units	mm : Sets units of length displayed in dialogs to millimeters (mm). in. : Sets units of length displayed in dialogs to inches.

4 After setting each item, click [OK].

The options are set, and the dialog closes.

Click [Reset] to return all options to default settings.

When [Reset] is clicked, all tab settings including the settings of the currently open tab are returned to default settings.

AdobeRGB

This color space is recommended for commercial printing and document creation by Adobe Systems. Its color reproduction range is larger than sRGB and adequately covers the color reproduction range for printing. Therefore, color data only reproducible on a printer are not lost when editing on a computer. Note that using AdobeRGB with unsupported software causes colors to appear faint.

CCD RAW file

CCD stands for Charge Coupled Device, a semiconductor device that converts optical information into electrical signals. RAW image data is raw data recorded from CCD output. This data can be transferred to a computer, and manipulated into image data with unique settings such as JPEG and TIFF using supplied software.

CSV format

This data format lists recording fields and separates them with a comma (,). Generally, character strings are indicated with double quotation marks in CSV format. Some software include data input and output functions in CSV format as part of a multipurpose format.

DNG RAW File

DNG (Digital Negative) RAW is a general-purpose, publicly-available RAW file format designed by Adobe Systems. When images captured in proprietary RAW formats are converted to DNG format, support and compatibility for the images increase significantly.

Exif-JPEG format

Exif stands for Exchangeable Image File Format. This image file format is based on the JPEG image data format, and allows thumbnail images and image properties to be embedded into the data. Software that does not support this format processes the image as a regular JPEG image.

Exif-TIFF format

Exif stands for Exchangeable Image File Format. This image file format is based on the TIFF image data format, and allows thumbnail images and image properties to be embedded into the data. Software that does not support this format processes the image as a regular TIFF image.

JPEG
An image compression format. Although the image quality deteriorates a little, images can be compressed to a smaller file size than with TIFF and other formats.

Lossless rotation
Because JPEG uses irreversible compression (data is lost during compression), the quality of JPEG images deteriorates when uncompressed, rotated and then saved. Lossless rotation, however, can be used to rotate JPEG images without recompressing the data. Exif and other data are maintained. Images for which lossless rotation is performed are processed as separate files; the rotated image appears after the image file is saved.

PNG format
Images saved using this format can be compressed to a small file size, but the reversible compression of this format makes the file size larger than JPEG. This format is for use with full-color images and prevents quality loss even when re-edited. PNG files, however, cannot be viewed on older browsers (Internet Explorer 3.0 or earlier or Internet Explorer 4.5 on Macintosh). In addition, thumbnail images and image properties cannot be embedded in the data.

Spurious Color Signal
Occurring in the vicinity of clearly defined lines or fine patterns, this signal results in the appearance of colors that are not a part of the original subject or scene. This phenomenon occurs because each individual pixel on single-plate image sensors (CCD, CMOS, etc.) is capable of reproducing just one color (Red, Green, or Blue).

sRGB (standard RGB)
An international color space standard defined by IEC (International Electrotechnical Commission). This is defined from color space for computer monitors and is also used as the standard color space for Exif.

TIFF-8
A file format for saving image data. Each image is recorded with 8-bit RGB data for each color. The image is not compressed leaving the file size large, but no deterioration of image quality occurs.

TIFF-16
Although TIFF images are usually 8-bit, this is a 16-bit TIFF. More computations are required when image processing as the dynamic range is larger.

Memo

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• Specifications and external dimensions are subject to change without notice.