# English

## MULTI PJ CAMERA/ Multifunctional Camera System YC-430 User's Guide

- Before using this product, be sure to read the Safety Precautions and ensure that you always use the product correctly.
- The Multi PJ Camera System is used in combination with a projector. See the user documentation that comes with the projector for safety precautions and for details about its operation.
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- The sample screens shown in this manual are for illustrative purposes only, and appear differently from the screens actually produced by the product.

## **Safety Precautions**

Thank you for selecting this CASIO product. Be sure to read these "Safety Precautions" before trying to use it. After reading this User's Guide, keep it in a safe place for future reference.

### About safety symbols

Various symbols are used in this User's Guide and on the product itself to ensure safe operation, and to protect you and others against the risk of injury and against material damage. The meaning of each of the symbols is explained below.

A Danger	This symbol indicates a condition that, if ignored or applied incorrectly, creates the risk of death or serious personal injury.
Marning	This symbol indicates a condition that, if ignored or applied incorrectly, could possibly create the risk of death or serious personal injury.
Caution	This symbol indicates a condition that, if ignored or applied incorrectly, could possibly create the risk of personal injury or material damage.

#### Icon Examples



A triangle indicates a situation against which you need to exercise caution. The example shown here indicates you should take precaution against electric shock.



A circle with a line through it indicates information about an action that you should not perform. The specific action is indicated by the figure inside the circle. The example shown here means disassembly is prohibited.



A black circle indicates information about an action that you must perform. The specific action is indicated by the figure inside the circle. The example shown here indicates you must unplug the power cord from the power outlet.

## 🚹 Warning

#### Smoke, odor, heat, loud noise, and other abnormalities



Should you ever notice smoke, strange odor, or loud noise being emitted by the camera or any other abnormality, immediately stop using it. Continued use creates the risk of fire and electric shock. Immediately perform the following steps.

- 1. Turn off power.
- 2. If you are using the AC adaptor, unplug it from the power outlet. If you are using a battery, remove it from the camera taking care to avoid burn injury to your hands.
- **3.** Contact your original dealer or authorized CASIO service center.

#### Disposal by burning



Never try to dispose of the camera by burning it. Doing so can cause an explosion, which creates the risk of fire and personal injury.

#### • Bright light sources



Never use the camera to look directly into the sun or another source of very bright light. Doing so creates the risk of eye damage.

#### When in motion



Never try to use the camera for recording or look at its monitor screen while operating an automobile or any other type of vehicle, while walking, or while otherwise in motion. Doing so creates the risk of accident and personal injury.

#### Using flash



Never fire the flash in an area where there is the possibility of flammable or explosive gas in the air. Doing so creates the risk of fire and explosion.



Never fire the flash while it is pointed at a person operating a motor vehicle. Doing so can cause momentary loss of vision and create the risk of accident.

#### • AC adaptor



Misuse of the AC adaptor creates the risk of fire and electric shock. Make sure that you always observe the following precautions.

 Use only the AC adaptor that is specified for the stand and cradle.

- Never try to use the supplied AC adaptor to power any other type of device.
- Make sure that you use a power source with the same voltage as that specified for the AC adaptor.
- Do not overload a power outlet.



Misuse of the power cord creates the risk of personal injury, fire and electric shock. Make sure that you always observe the following precautions.

- Never place heavy objects on top of the power cord, and do not expose it to heat.
- Never try to modify the power cord in any way, and do not subject it to excessive bending.
- Never twist or pull on the power cord.
- Should the electrical cord or plug become damaged, contact your original dealer or authorized CASIO service center.



Never touch the AC adaptor while your hands are wet. Water creates the risk of electric shock.



Never allow the AC adaptor to become wet. Water creates the risk of fire and electric shock.



Never place a vase or any other container of liquid on top of the AC adaptor. Water creates the risk of fire and electric shock.

#### Water and foreign matter



Water, other liquid, or foreign matter (metal, etc.) getting into the stand or camera creates the risk of fire and electric shock. Be especially careful when using the camera in the rain or snow, at the seashore, near water, or in a bathroom. Should anything get inside the camera, immediately perform the following steps.

- **1.** Turn off power.
- If you are using the AC adaptor, unplug it from the power outlet. If you are using a battery, remove it from the camera taking care to avoid burn injury to your hands.
- **3.** Contact your original dealer or authorized CASIO service center.

#### Disassembly and modification



Never try to take the stand or camera apart or modify it in any way. Doing so creates the risk of electric shock and burn injury. Be sure to leave all internal inspection, adjustment, and repair up to your original dealer or authorized CASIO service center.

#### Dropping and impact



Continued use of the camera after it has been damaged by dropping or other mistreatment creates the risk of fire and electric shock. Immediately perform the following steps.

- 1. Turn off the stand and camera.
- 2. Unplug the stand and cradle.
  - If you are using the AC adaptor, unplug it from the power outlet. If you are using a battery, remove it from the camera taking care to avoid burn injury to your hands.
- **3.** Contact your original dealer or authorized CASIO service center.

#### Chargeable battery



Use only the specified charger unit to charge the battery. Use of another type of charger creates the risk of battery overheating, fire, and explosion.



Never allow the battery to become wet. Liquid creates the risk of damage to the battery, reduction of its performance, and shortening of its life.



The battery is specially designed for use with a CASIO digital camera. Trying to use it for another type of application creates the risk of damage to the battery, reduction of its performance, and shortening of its life.



Make sure that you always observe the following precautions when using the battery. Failure to do so creates the risk of battery overheating, fire, and explosion.

• Never use or store the battery near fire.



- Never expose the battery to heat or throw it into fire.
- Take care that the battery is oriented correctly when you charge it.
- Never carry or store the battery together with conductive objects (necklaces, pencil lead, etc.)
- Never try to take the battery apart or modify it, never pierce it or subject it to strong impact (by hitting it with a hammer or stepping on it), and never apply solder to the battery. Never put the battery inside of a microwave oven, dryer, highpressure container, etc.



Should a battery start to leak, emit a strange odor, emit heat, change color, change shape, or exhibit any other abnormal behavior while it is being used, charged, or stored, immediately remove it from the camera or charger unit and keep it away from fire.

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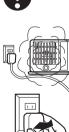
Never use or leave the battery in direct sunlight, inside of a closed vehicle on a hot day, or in any other area where it is very hot. Such conditions create the risk of damage to the battery, reduction of its performance, and shortening of its life.

## Caution

#### AC adaptor



Misuse of the AC adaptor creates the risk of fire and electric shock. Make sure that you always observe the following precautions.



 Never cover the AC adaptor with a blanket while it is in use or locate it next to a heater. Such conditions can interfere with heat radiation, and cause heat to build up in the area of the AC adaptor.

- Never pull on the power cord when unplugging the AC adaptor. Grasp the plug unit.
- Insert the plug into the power outlet as far as it will go.

- Unplug the AC adaptor before leaving on a trip or otherwise leaving it unattended for a long period.
- At least once a year, unplug the power plug and use a dry cloth or vacuum cleaner to clear dust from the area around the prongs of the power plug.
- Never use detergent to clean the power cord, especially the power plug and jack.

#### Chargeable battery



Stop charging after the stipulated charging time, even if the battery is not fully charged. Charging too long creates the risk of battery overheating, fire, and explosion.



Battery fluid getting into your eyes creates the risk of eye damage. Immediately flush your eyes with water and then contact your physician.



Be sure to read all of the applicable camera and charger unit user documentation before using or charging the battery.



Keep the battery out of the reach of small children. Even while using the battery, take steps to ensure that children to not remove it from the camera or charger unit.



Fluid leaking from the battery and getting onto your skin or clothing creates the risk of skin inflammation. Immediately rinse the area with water.

#### Connectors



Attach only the specified bundled accessories to the connectors of the stand and camera. Connecting anything else creates the risk of fire and electric shock.

#### Unstable locations



Never place or leave the stand and camera on a high shelf, or on an unstable or uneven surface. The stand and camera can fall from such a location, creating the risk of personal injury.

#### Location

Do not leave the stand and camera in any of the following locations. Such locations create the risk of fire and electric shock.





- Areas subjected to large amounts of moisture or dust
- In a food preparation area or any other area exposed to oil smoke
- Near a heater, on a heated carpet, in an area exposed to direct sunlight, in a vehicle parked in direct sunlight, or any other location where it is very hot

#### • Unfolding and folding the stand arm



Take care to avoid pinching your fingers when unfolding or folding the arm of the stand.

#### Monitor screen



- Never press the camera's monitor screen or subject it to strong impact. Doing so can crack the glass of the LCD panel.
- Should the glass of the LCD panel crack, never touch the liquid that leaks from inside the panel. Touching the liquid creates the risk of skin inflammation.
- Should liquid leaking from the LCD panel accidentally get in your mouth, immediately rinse your mouth with water and then contact your physician.
- Should liquid leaking from the LCD panel get into your eye or onto your skin, immediately flush the area with clean water for at least 15 minutes, and then contact your physician.

#### • Backing up important data





Always back up important data in camera memory to a computer hard disk. Failure to do so creates the risk of data loss due to camera malfunction, maintenance, etc.

#### Protecting camera memory contents



Make sure you carefully follow the instructions in the User's Guide when replacing the camera battery. Incorrectly replacing the battery can cause data to become corrupted or lost.

#### Using the flash



Do not position the camera too close to a person's face when firing the flash. Sudden brightness can cause eye damage and other problems.





When traveling with the camera, never use it inside of an aircraft or anywhere else where the use of such devices is not allowed. Improper use of the camera creates the risk of accident.

#### Moving the stand and camera

When moving the stand and camera, never pick them up by the arm or by the camera. Doing so puts a very large load on the arm or camera, which can cause disconnection of internal wiring and create the risk of fire and electric shock.

## PJ Camera and PJ Camera Stand

Note that the PJ Camera and the PJ Camera Stand are shipped from the factory as a set, and are intended for sale and use as a set. Proper operation in any other configuration is not guaranteed.

## **PJ Document Stage**

- Never write on the document stage and take care to guard against scratching or otherwise damaging it. Writing or other marks on the document stage can interfere with projection in the Document Camera Mode and scanning in the Scanner Mode.
- External Light Room illumination, sunlight, or light from some other source shining onto the document stage during a Document Camera Mode or Scanner Mode image recording operation can cause white out and other image abnormalities.

### **PJ** Camera

- Never subject the camera to strong impact. Doing so creates the risk of malfunction.
- When mounting the camera onto the camera holder, make sure that it is connected correctly and securely. Incorrectly attaching the camera can cause it to fall, resulting in malfunction. Take care to avoid dropping the camera when removing it from the stand.
- To protect against accidentally dropping the camera, make sure to have the strap around your fingers when removing the camera from the stand.
- Never apply too much force when cleaning the surface of the lens. Doing so can scratch the lens surface and cause malfunction.
- Fingerprints, dust, or any other soiling of the lens can interfere with proper image recording. Never touch the lens with your fingers. You can blow dust particles from the lens surface with a lens blower. Next, wipe the surface of the lens with a soft lens cloth.
- All of the battery operation times shown in the camera manual indicate reference values for how
  long it should take until the camera shuts down under continuous operation when powered by
  the specified special battery under standard temperature (23°C/73°F). They do not guarantee that
  you will be able to achieve the specified battery operation times during normal use. Note that
  battery operation time is greatly affected by temperature, the amount of time the battery spent
  in storage and the storage conditions, and other factors.
- Leaving the camera turned on runs down the battery, which will cause the low power alert to appear. Be sure to turn off the camera when you are not using it.
- The low battery warning indicator will appear just before the camera powers down. Charge the battery as soon as possible when the indicator appears. Continued use of a low battery can cause it to leak, or can result in corrupted image data.
- The camera becomes warm to the touch during use. This is normal and does not indicate malfunction.
- Based on the types of colors in the original and its layout, the PJ Camera automatically determines whether the original is monochrome or color, and then performs one of the following image enhancement processes.
  - Monochrome Original: Enhancement of contrast, etc.
  - Color Original: Correction process with emphasis on color reproduction

Note that faithful color reproduction may not be possible in cases when it is difficult to detect whether the original is monochrome or color, or due to limitations in the document processing operation. This does not indicate malfunction of the PJ Camera.

## Helpful Operation Hints

- If the Adjust Camera Position dialog box appears, adjust the position of the PJ Camera so the cross mark on the document stage is within the yellow frame. When the cross is within the yellow frame, the system will take over and adjust camera position automatically.
- Never touch the PJ Camera or PJ Camera Stand while the automatic camera position adjustment operation is being performed.
- When placing a subject onto the document stage, position it so the cross mark of the document stage is hidden from the camera.
- To avoid problems with trapezoid correction, make sure that none of the edges of the document run along the edges of the document stage. Also make sure that the edges of the document do not run along any of the hinges of the document stage.
- Set up the document stage so the PJ Camera Stand does not cast a shadow onto the subject being recorded.

### Use in an Area Subjected to Strong Radio Waves

• Use of the PJ Camera in an area where there are strong radio waves from a cell phone, wireless device, or other source can cause static noise in recorded images. If this happens, use the PJ Camera in a different location or eliminate the source of the radio waves.

## Multi PJ Startup Mode Precautions

PJ Camera Software has two startup modes: Multi PJ and Business Document. Note the following precautions whenever starting up in the Multi PJ startup mode.

- The table below shows the recommended setup for each type of subject recorded in the Document Camera Mode and Scanner Mode.
  - \* The initial default setup is the one shown for "A4 (210  $\times$  297mm) (8.3  $\times$  11.7inch) Document".

		Recording Condition
Operation Bar	<u>File Edit View Gamera Tools Image PlayList Help</u>	Settings
Operation bai	375 C14435564446684+>8/06662 X	5

Recording Condition Settings	A		6
A4 (210 × 297mm) (8.3 × 11.7inch) Document	ON	OFF	OFF
Newspaper	OFF	OFF	OFF
Business Card	ON	ON	OFF
Large Object	-	OFF	ON
Small Object	_	ON	ON

ON : Recording condition setting on (button depressed)

OFF : Recording condition setting off

- : Recording condition setting not available (dimmed)

If you cannot achieve proper recording while 🛋 is turned on, try turning 🖾 off.

- When performing a Board Area Capture operation, adjust the zoom setting so the board fills the camera's field of view.
- When performing a Projection Area Capture operation, adjust the zoom setting so the projected image fills the camera's field of view.
- All of the images in PJ Camera memory when you created a Camera Image Mode playlist must be present in PJ Camera memory for the playlist to operate correctly. This is true even if the deleted image is not included in the playlist. If one or more image has been deleted from PJ Camera memory, question marks(?) will appear in place of some image thumbnails in the playlist. If this happens, make a new Camera Image Mode playlist.

## Packing the Equipment into the Carrying Bag

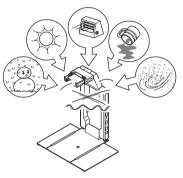
When packing the equipment into the carrying bag, it is best to remove the PJ Camera from the PJ Camera Stand and pack the camera in the special pocket provided for it. This helps to ensure that the PJ Camera is protected against impact during transport.

## **Other Precautions**

The camera and stand are made of precision components. Failure to observe the following precautions can result in inability to correctly save data and malfunction.

## • Never use or store the camera and stand in the following locations. Doing so creates the risk of malfunction of and damage to the camera and stand.

- Locations subjected to electrostatic charge
- Locations subjected to temperature extremes (Operating Temperature Range: 5°C to 35°C/41°F to 95°F)
- · Locations where there is extreme moisture
- Locations subjected to sudden temperature changes
- · Locations where there is a lot of dust
- On a shaky, uneven, or otherwise unstable surface
- Locations where there is the chance of the camera getting wet
- · Locations exposed to direct sunlight
- Locations subjected to vibration or impact (Avoid areas near the engine of a motor vehicle, boat, etc.)
- Near high-voltage power lines, transformers, or motors (which generate electrical interference that can cause problems with system operation)



- Avoid using the system under the following conditions. Such conditions create the risk of malfunction of and damage to system components.
  - Never place heavy objects on any of the system components.
  - Never insert or allow foreign objects to drop into system components.
  - Never place a vase or any other container of water on top of system components.



#### • Clean with a soft, dry cloth.

When very dirty, use a soft cloth that has been dampened in a weak solution of water and a mild neutral detergent. Wring all excess water from the cloth before wiping. Never use thinner, benzene, or any other volatile agent to clean system components. Doing so can remove markings and stain case finishes.

- Always fold up the stand before moving it. Do not subject the stand to strong impact.
- When it comes time to dispose of the stand and/or camera, make sure you do so in accordance with all of the local rules and regulations that apply.

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## Multi PJ Camera System Features

The Multi PJ Camera System is a presentation tool that lets you record images of document, whiteboard contents, and even objects for projection and storage on your computer.

#### Real-time projection of documents and objects

Simply place a document onto the PJ Camera Stand and the PJ Camera automatically records it and projects a clear, high-resolution image.

#### Automatic image correction

Contour extraction and other enhancements are applied automatically to optimize projection of document images.

#### Projected image buffering

Projected images are stored temporarily in a buffer, which means you can scroll between them quickly and easily. Buffered images can be saved to permanent files for later recall whenever you need them.

#### Projection Area Capture

Projection Area Capture lets you extract figures and text that are written into an image projected onto a whiteboard, and then combine the handwriting with the original projected image. The resulting combined image is clearer and easier to read than a simple snapshot of whiteboard contents.

#### Camera unit (PJ Camera) can be removed from the PJ Camera Stand and used as a normal digital camera.

The PJ Camera's 3X optical zoom, high-resolution 10-megapixel imaging, macro mode, and business mode provides you with many of the capabilities of today's compact digital cameras. You can take the PJ Camera along anywhere to record images for your presentations.

## Presentations using image files in PJ Camera memory or on a computer's hard disk

Image files in PJ Camera memory or on a computer's hard disk can be projected during a presentation. All operations can be performed from the computer.

## **Conventions Used in this Manual**

- The term "PJ Camera" refers to the camera unit of the Multi PJ Camera System.
- The term "CASIO CD-ROM" refers to the CD-ROM that comes with the MÚLTI PJ CAMERA System.
- PJ Camera Software is basically software for projecting images from a projector. Because of this, the term "projection" is used in this manual to refer to operations that actually cause the image to fill the computer screen (without actually projecting it).

## Multi PJ Camera System User Documentation

The Multi PJ Camera System comes with the following user documentation.

User Documentation Title	Description	Startup Mode*
MULTI PJ CAMERA/ Multifunctional Camera System YC-430 User's Guide (This Manual)	This manual explains basic operation of the Multi PJ Camera System. Reading this manual will provide you with an understanding of the overall concept of the Multi PJ Camera System, and basic information you need to know before setting up and actually projecting document images.	Multi PJ
Camera User's Guide (CASIO CD-ROM)	This manual explains how to use the PJ Camera unit in a stand-alone configuration, and how to use its cradle.	-
PJ Camera Software User's Guide (CASIO CD-ROM)	This manual provides detailed explanations about the features and functions, and operational procedures of the PJ Camera Software that controls the Multi PJ Camera System.	Multi PJ/ Business Document
PJ Camera Software README File (CASIO CD-ROM)	DME File Camera Software on a computer. It includes the	

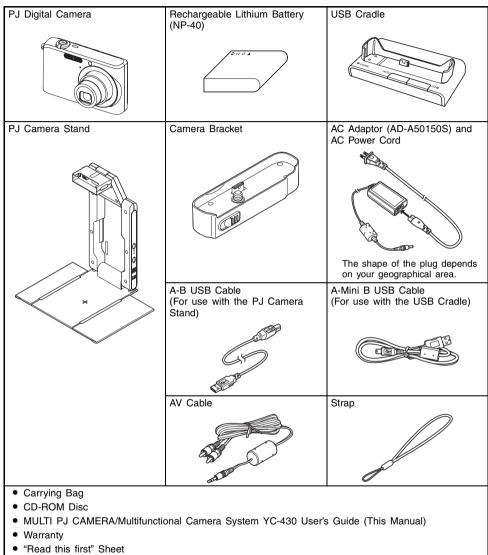
\* PJ Camera Software has two startup modes: the Multi PJ startup mode and the Business Document startup mode. The functions available to you depends on which startup mode is currently selected. This column indicates which startup mode to which each type of user documentation applies. For more information about the PJ Camera Software startup mode, see "Starting Up PJ Camera Software" (page E-31).

#### NOTE

- In addition to the above, the CASIO CD-ROM also includes user documentation for Photo Loader and Photohands. To view the user documentation (PDF format files) on the CD-ROM, insert the CD-ROM into your computer's CD-ROM drive.
- "Using the CASIO CD-RÓM" (page E-15) of this manual also includes information about installing PJ Camera Software on a computer. Make sure that you have completed all of the required installation operations before reading the PJ Camera Software User's Guide.

## Unpacking

As you unpack this product, check to make sure that all of the items listed below are present.



- Serial Number Stickers (2) with Barcode
- Important Handling Precautions!

## Using the CASIO CD-ROM

This section explains how to install the PJ Camera Software from the CASIO CD-ROM that comes bundled with this product. It also tells you how to view the contents of the PDF file user documentation that is also included on the CD-ROM.

### PJ Camera Software

You should install PJ Camera Software on your computer before trying to connect the PJ Camera Stand and the projector to it.

- Minimum Computer System Requirements PJ Camera Software is designed to run under Windows only. For details about the required computer system, see "Minimum Computer System Requirements" on page E-50.
- Uninstalling PJ Camera Software See the PJ Camera Software README file on the CASIO CD-ROM for details on uninstalling PJ Camera Software.

#### Important!

• Selecting a language other than Japanese or German for installation always installs the English version of PJ Camera Software.

#### To install PJ Camera Software

- 1. Start up the computer where you want to install PJ Camera Software, and place the CASIO CD-ROM into its CD-ROM drive.
  - This should cause the installer to start up automatically and display a menu of options.
  - If the menu does not appear on your display automatically, navigate to the CD-ROM drive that contains the CD-ROM, and then double-click "menu.exe". This will start up the installer and display a menu of options.
- 2. Click on the tab for the language you want.

日本語 【English 【Français】Deutsch 【Italiano 【Español 【Svenska】

**3.** After reading the text that appears on the screen, click the PJ Camera Software install button.

#### **NOTE**

- If you are running Windows Vista and the "A program needs your permission to continue" message appears, click [Continue].
- If you are running Windows Vista and the message "Windows can't verify the publisher of this driver software" appears, click "Install this driver anyway".
- You can also use the above procedure to install the other software on the CD-ROM by clicking the applicable software name in step 3.

## User Documentation (PDF)

To read the contents of the PDF format user documentation files, you need to have Adobe<sup>®</sup> Reader<sup>®</sup> installed on your computer. If your computer does not already have Adobe Reader installed, please install it.

You can download a copy of Adobe Reader for free from the following website:

URL http://www.adobe.com/

#### Viewing PDF Format User Documentation

Perform the procedure under "To install PJ Camera Software" on page E-15. In step 3, click the button for the type of user documentation you want to view.

• This starts up Adobe Reader and displays the contents of the User's Guide.

The following user documentation is included on the CD-ROM that comes with the Multi PJ Camera System.

#### PJ Camera Software User's Guide

This manual explains how to use the PJ Camera Software, which controls the system.

#### Camera User's Guide

This manual explains how to use the PJ Camera unit in a stand-alone configuration, and how to use its cradle.

#### Photo Loader User's Guide

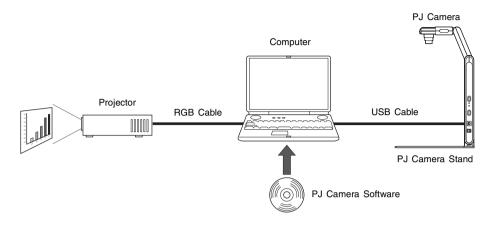
This manual explains how to use Photo Loader, which is software for transferring snapshots recorded with the digital camera to your computer, and for managing images on your computer.

#### Photohands User's Guide

This manual explains how to use Photohands, which is software for retouching, reorienting, and configuring print settings for snapshots on your computer.

## Multi PJ Camera System

The following shows the basic configuration of the Multi PJ Camera System.



#### PJ Camera

The PJ Camera is a versatile digital camera that you can use to record the image of paper documents or of objects, which can then be projected with the projector. PJ Camera operations are controlled mainly using PJ Camera Software. You can also remove the PJ Camera from the PJ Camera Stand for use as a compact digital camera. You can project the images you record and use them in presentations.

#### PJ Camera Stand

The PJ Camera Stand holds the PJ Camera during recording of paper documents or objects. Simply place a document onto the stand, and the PJ camera automatically records its image and stores it on the computer disk. The high-resolution image can then be projected using the projector.

#### PJ Camera Software

PJ Camera Software is a computer application that controls the Multi PJ Camera System. PJ Camera Software comes with a powerful collection of features and functions to suit just about any presentation needs imaginable, including: playlist capabilities, paper document projection, whiteboard content recording, and much more.

#### **NOTE**

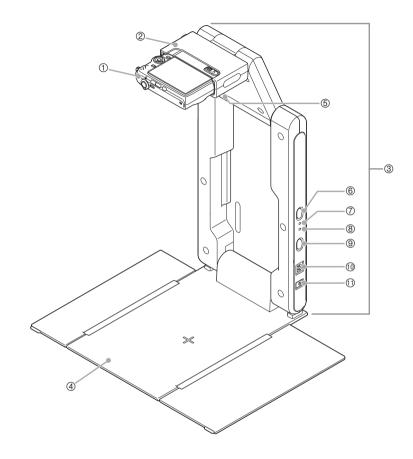
 Certain CASIO products (XJ-S36/XJ-S46 Data Projector, etc.) can be connected directly to a PJ Camera Stand with the PJ Camera installed. PJ Software is not required when using these products.

#### Projector

The Multi PJ Camera System supports the use of a projector that can be connected to a computer.

## General Guide (PJ Camera Stand)

The PJ Camera Stand can be folded into a compact configuration for transport or storage. The following shows the PJ Camera Stand in its unfolded configuration, with the PJ Camera mounted.

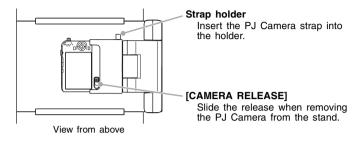


### NOTE

• For information about unfolding and refolding the PJ Camera Stand, and about mounting the PJ Camera onto the stand, see "Setting Up the PJ Camera Stand" (page E-22).

- ① PJ Camera
- ② Camera holder

Attach the PJ Camera to the PJ Camera Stand here.



- \* You must install the camera bracket on the PJ Camera before you can attach it to the camera holder. See page E-24 for more information.
- ③ Arm

Unfold the arm to configure the PJ Camera Stand for operation. You can leave the PJ Camera mounted on the stand when you fold it up for transport.

④ Document stage

Place document pages or other objects when using a projector or when recording image data.

#### Important!

• Never write on the document stage and take care to guard against scratching or otherwise damaging it. Writing or other marks on the document stage can interfere with projection in the Document Camera Mode and scanning in the Scanner Mode.

5 Light (white LED)

This light provides illumination in a dark room, etc.

#### Important!

- If you are recording with the PJ Camera Stand light from a catalog or some other document printed on very high-gloss paper, the image may appear too white. If this happens, turn off the PJ Camera Stand light and use room illumination to record the image.
- Never look directly at the light while it is lit.
- ⑥ [LIGHT] button Turns the light on and off.
- ⑦ [CHARGE] indicator Lights when the PJ Camera battery is charging while the camera is attached to the camera holder.
- IPOWER] indicator Lights when the PJ Camera is turned on while it is attached to the camera holder.
- ⑨ [<sup>(</sup>)] (power) button Turns the PJ Camera on and off while it is mounted on the PJ Camera Stand.
- USB port For connection to a USB port of a computer using the bundled A-B USB cable.
- DC power terminal Connect the bundled AC adaptor here.

## Setting Up the Multi PJ Camera System

This section explains how to set up the Multi PJ Camera System for operation.

## Setting Up the PJ Camera

### First, load the battery into the camera and then charge the battery

- Open the battery cover. While pressing lightly on the cover, slide it in the direction indicated by the arrow to open.
- 2. Load the battery into the camera.
- 3. Close the battery cover.
- 4. Plug the USB cradle into a household power outlet.

5. Place the camera onto the USB cradle.

 Note that the shape of the AC adaptor depends on the area where you purchased the camera.

[CHARGE] lamp
 Red: Charging
 Green: Charged (Full)
 It takes about three hours to achieve a full charge.

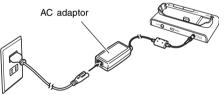
### NOTE

• The battery also can be charged while the PJ Camera is installed on the PJ Camera Stand.

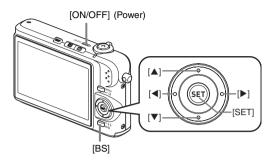








#### Configuring Display Language, Date, and Time Settings



The settings on this page are required the first time you turn on the camera after purchasing it.

- 1. Press [ON/OFF] to turn on the camera.
- **2.** Use  $[\blacktriangle]$ ,  $[\triangledown]$ ,  $[\triangleleft]$ , and  $[\blacktriangleright]$  to select the language you want and then press [SET].
- Use [▲], [▼], [◀], and [▶] to select the area where you will use the camera and then press [SET].
- **4.** Use [▲] and [▼] to select the city where you will use the camera and then press [SET].
- Use [▲] and [▼] to select the summer time (DST) setting you want and then press [SET].
- Use [▲] and [▼] to select the date format and then press [SET]. Example: December 19, 2007

To display the date like this:	Select this option:
07/12/19	YY/MM/DD
19/12/07	DD/MM/YY
12/19/07	MM/DD/YY

7. Set the date and the time.

Use  $[\blacktriangleleft]$  and  $[\blacktriangleright]$  to select the setting you want (year, month, day, hour, minute) and then use  $[\blacktriangle]$  and  $[\blacktriangledown]$  to change the setting.

To switch between 12-hour and 24-hour format, press [BS].

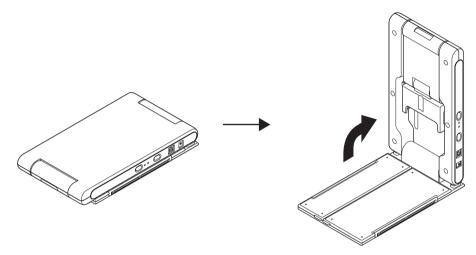
- 8. When all the settings are the way you want, press [SET].
- 9. Press [ON/OFF] to turn off the camera.
  - After finishing this procedure, advance to the procedure on the next page.

## Setting Up the PJ Camera Stand

#### Unfolding the PJ Camera Stand

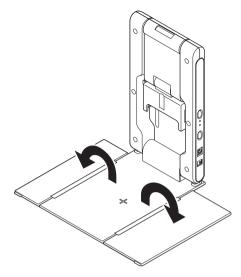
The PJ Camera Stand can be folded into a compact configuration for transport or storage. Use the following procedure to unfold the stand for use.

1. With the folded PJ Camera Stand placed on a flat, stable surface, raise the arm unit until it is at a right angle to the stage unit.

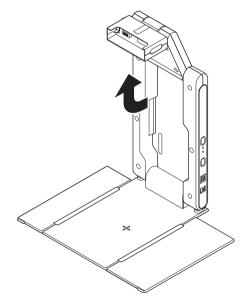


- This will cause the arm unit to lock securely into place.
- Never try to force the stage unit and arm unit to open more than about 90 degrees. Doing so can damage the stand.

2. Open the side panels of the document stage.



 $\ensuremath{\textbf{3.}}$  Unfold the camera holder from the arm unit.



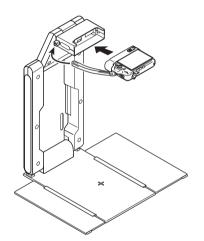
- Open the upper section of the arm unit until it snaps securely into place.
  The camera holder should be parallel with the document stage.

### Mounting the PJ Camera onto the PJ Camera Stand

- 1. Make sure the PJ Camera is turned off.
- 2. Attach the camera bracket to the bottom of the PJ Camera.
  - Use a coin or some similar object to securely tighten the camera bracket screw.



- 3. Attach the PJ Camera to the PJ Camera Stand camera holder.
  - Make sure the lens side of the camera is facing downwards, towards the document stage.
  - Press the PJ Camera against the camera holder until it clicks securely into place.
  - Insert the PJ Camera strap into the strap holder.

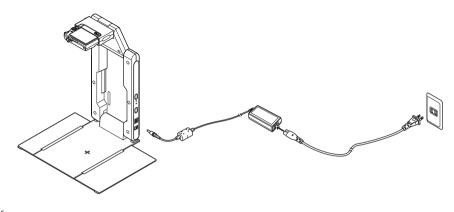


#### Important!

 Make sure the PJ Camera is attached securely to the camera holder. Incorrectly attaching the camera can cause it to fall, resulting in damage and malfunction.

#### Connecting the AC Adaptor to the PJ Camera Stand

Use only the AC adaptor that comes bundled with the Multi PJ Camera System to power it.

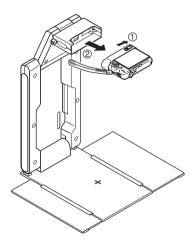


#### NOTE

- When the AC adaptor is connected to the PJ Camera Stand, the battery of the PJ Camera mounted on the stand charges while the camera is turned off. Charging is indicated when the [CHARGE] indicator is lit.
- Be sure to use the AC adaptor to power the PJ Camera Stand.

#### Removing the PJ Camera from the PJ Camera Stand

After making sure that the PJ Camera is turned off, slide the [CAMERA RELEASE] and remove the camera from the stand.



#### Important!

- Take care to avoid dropping the camera when removing it from the stand.
- To protect against accidentally dropping the camera, make sure to have the strap around your fingers when removing the camera from the stand.

#### Folding Up the PJ Camera Stand

Perform the steps below to fold up the PJ Camera Stand for transport or storage. Note that you can fold up the PJ Camera Stand without removing the PJ Camera.

**1.** Make sure the PJ Camera is turned off, and that the stand light is off. Disconnect the USB cable and AC adaptor from the PJ Camera Stand.

#### Important! \_

- Folding up the PJ Camera Stand while the lens of the PJ camera is extended can damage the camera.
- 2. Remove the PJ Camera from the PJ Camera Stand, if you want.
- **3.** Fold the camera holder and the upper section of the arm unit into the lower section of the arm unit.
  - Take care to avoid impact to the PJ Camera when folding the arm with the camera installed. Be sure to fold the upper section of the arm unit first.
- 4. Close the side panels of the document stage.
- 5. Fold the arm unit onto the document stage.

### Installing PJ Camera Software on a Computer

Before connecting the PJ Camera Stand and a projector to your computer, you need to install PJ Camera Software from the CASIO CD-ROM that comes bundled with the Multi PJ Camera System.

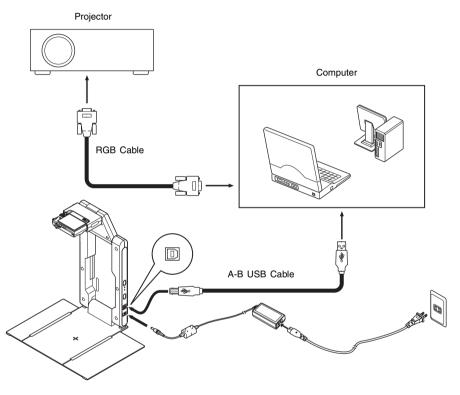
For more information, see "Using the CASIO CD-ROM" on page E-15.

## Connecting Multi PJ Camera System Components

#### Important!

• Make sure that PJ Camera Software is installed on your computer before trying to perform the following procedure.

After you install PJ Camera Software on the computer, connect the PJ Camera Stand, computer, and projector as shown below.



- Normally, it is a good idea to have all of the components turned off when connecting or disconnecting them.
- You can leave components turned on when connecting or disconnecting a USB cable. However, disconnecting a USB cable while data transfer is in progress can cause corruption of the data or malfunction of the equipment.

#### **NOTE** .

 Certain CASIO products (XJ-S36/XJ-S46 Data Projector, etc.) can be connected directly to a PJ Camera Stand with the PJ Camera installed. See the user documentation that comes with each product when connecting one of them to the YC-430.

### Testing the Multi PJ Camera System

After installing PJ Camera Software and connecting all of the components, you can perform the following steps to test the Multi PJ Camera System for proper operation.

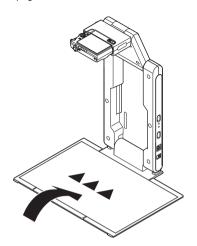
- **1.** Start up the computer.
  - After the computer starts up, check to make sure that the PJ Camera Software icon is in the Windows taskbar.



- PJ Camera Software icon

- Configure your computer monitor's resolution setting for XGA (1024 × 768) or SVGA (800 × 600). Using any other resolution setting will cause an error message to appear when you try to start up PJ Camera Software.
- 2. Turn on the projector.
  - After the projector finishes its warm up process, it should start projecting the contents of the computer screen.
- 3. If there is anything on the PJ Camera Stand's document stage, remove it.
  - Do not place anything on the document stage during up to step 6 of this procedure.
- **4.** On the PJ Camera Stand, press the [(U)] (power) button.
  - This turns on the PJ Camera and causes the PJ Camera Stand [POWER] indicator to light.
  - If you are running Windows XP, the "Found New Hardware Wizard" dialog box will appear. Select "No, not this time" on the dialog box, and then click [Next]. On the next screen that appears, select "Install the software automatically (Recommended)" and then click [Next].
  - If the "CASIO MULTI PJ CAMERA has not passed Windows logo testing" dialog box appears, click [Continue Anyway]. If the "Digital Signature Not Found" dialog box appears, click [Yes].
  - After installation is complete, a USB connection will be established between the computer and PJ Camera, and PJ Camera Software will start up automatically on the computer. This will cause the "Startup Mode" dialog box (page E-32) to appear.
- 5. Select "Multi PJ", and then click the [OK] button.
  - This displays the camera position adjustment dialog box. If the PJ Camera is aimed correctly, camera position adjustment will be performed and the dialog box will close automatically.
  - If the PJ Camera is not aimed correctly, a message will appear prompting you to adjust it. Aim the camera as instructed.

6. Place the document you want to project onto the PJ Camera Stand's document stage.
When placing a landscape orientation document onto the document stand, the top of the page should face towards the arm.



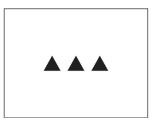
#### Important!

- Take care to make sure that the entire document is within the area of the document stage.
- For more information, see "Precautions when Using the PJ Camera Software" in the PJ Camera Software User's Guide, which is on the CASIO CD-ROM.

After PJ Camera Software starts up, it projects the document on the document stage. At first
the image is a relatively rough monitor image, but this is replaced after a short while with the
high-resolution recorded image.

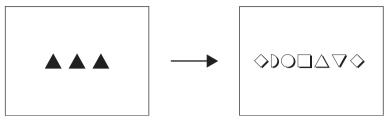


Rough (monitor) image



Full-resolution recorded image

7. Replace the document on the document stage with the next one you want to project.
 The currently projected image is replaced by the new image.



Current document camera image

New document camera image

- A copy of each image you project is stored automatically in a folder on your computer's hard disk, where it remains until you quit PJ Camera Software. This makes it possible to scroll back and re-display a previous image in your presentation, without re-recording that image.
- 8. To scroll back to a previous image, move the mouse pointer to the top center of your computer screen.
  - This will cause the PJ Camera Software operation bar to appear.



- **9.** On the operation bar, select [Back] on the [View] menu.
  - This displays the full-resolution recorded version of the previously projected image.
- 10. This completes the Multi PJ Camera System test.

To quit PJ Camera Software, display the operation bar and then select [Exit] on the [File] menu.

• This exits PJ Camera Software and automatically turns off the PJ Camera.

- Pressing the [U] (power) button in step 10 of the above procedure will turn off the PJ Camera without quitting PJ Camera Software.
- See the PJ Camera Software User's Guide for other operations you can perform with PJ Camera Software.

NOTE

This section provides an overview of PJ Camera Software functions and operations.

- Before performing the operations described here, use the procedures under "Setting Up the Multi PJ Camera System".
- The explanations here assume that the "Multi PJ" (which is the initial default setting) is selected for the PJ Camera Software startup mode. For more information about the startup mode, see "PJ Camera Software Startup Modes" below.
- See the PJ Camera Software User's Guide on the CASIO CD-ROM for details about PJ Camera Software operations.

## Starting Up PJ Camera Software

#### PJ Camera Software Startup Modes

PJ Camera Software has two startup modes: a Business Document startup mode and a Multi PJ startup mode. The startup mode you should use depends on the type of operations you want to use, as described below.

Business Document Startup Mode:	This startup mode simplifies PJ Camera Software operation for those who want to use the document camera functions only. This easy-to-use, easy- to-understand mode is also the perfect choice for those who are using the PJ Camera Software for the first time.
Multi PJ Startup Mode:	This startup mode enables all of the PJ Camera Software's functions. Select this mode when you need the full power of PJ Camera Software to record images, save image files to your computer's hard disk, project images from your computer's hard disk, etc.

For details about using the functions available in each startup mode, see the "PJ Camera Software User's Guide" on the CASIO CD-ROM.

### Starting Up PJ Camera Software

Turning on PJ Camera Stand power starts up PJ Camera Software automatically. It makes it possible for you to control the PJ Camera System from your computer. Perform either of the following operations to startup PJ Camera Software in the startup mode that was being used when you last exited the software.

- On the Windows [Start] menu, select [Programs], [CASIO], and then click [PJ Camera Software].
- In the Windows task tray, click the PJ Camera Software icon (page E-28), and then select "PJ Camera Software" on the menu that appears.

PJ Camera Software will be in the Presentation Mode if you start it up from your computer. For more information about the PJ Camera Software modes, see "Using PJ Camera Software Modes" (page E-33).

#### Selecting the Startup Mode

You can select the startup mode on the Startup Mode dialog box that appears when you start up PJ Camera Software.



Clicking the [OK] button starts up PJ Camera Software in the startup mode that is currently selected on the dialog box.

#### NOTE

- To change the startup mode after PJ Camera Software is already running, display the operation bar. Next, click [Tools] and then [Operating Environment]. For details, see "Operating Environment Settings" in the "PJ Camera Software User's Guide" on the CASIO CD-ROM.
- If you select the "Don't show this dialog box again" check box and then click [OK], the Startup Mode dialog box will not appear any more when you start up PJ Camera Software.

## **Operation Bar**

In some cases, you will not see a window or even a menu bar on you computer screen while PJ Camera Software is running. In such a case, you can display the PJ Camera Software operation bar by moving your mouse pointer to the top center of the computer screen. The operation bar combines a menu bar and tool bar, as shown below.



Menu bar

This bar contains various menus for performing PJ Camera Software operations.

Toolbar

This bar contains buttons for performing PJ Camera Software operations. These buttons provide one-click access to frequently used menu commands.

NOTE

• In some modes, a PJ Camera Software window remains on the screen with a menu bar and toolbar continuously displayed at the top. You do not need to use the operation bar to perform menu and toolbar operations in this case.

## PJ Camera Software Modes and Windows

#### **Using PJ Camera Software Modes**

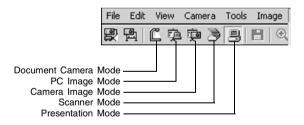
PJ Camera Software has five modes, which are described below.

Mode Name	Description
Document Camera Mode	Use this mode to record the image of a paper document or object placed on the PJ Camera Stand with the PJ Camera, and project the resulting image.
Scanner Mode	With this mode, you can place a document on the PJ Camera Stand and record its image with the PJ Camera.
PC Image Mode	Use this mode for conducting a presentation using images stored on the computer's hard disk.
Camera Image Mode	Use this mode for conducting a presentation using images stored in camera memory.
Presentation Mode	Use this mode to conduct a presentation using images created using PowerPoint or other applications. You can use the PJ Camera Software's Projection Area Capture* and Board Area Capture* functions in this mode.

\* For more information, see "Using Projection Area Capture and Board Area Capture" (page E-39).

#### Selecting a PJ Camera Software Mode

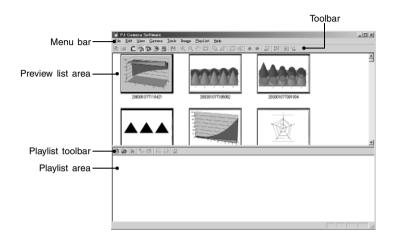
Click the toolbar button for the mode you want to select.



If the PJ Camera Software window is not displayed, move the mouse pointer to the top center of your computer screen to display the operation bar. After that, click the button for the mode you want on the toolbar.

#### Using the PJ Camera Software Window

The PJ Camera Software window remains on your computer screen in the Scanner Mode, PC Image Mode, and Camera Image Mode. The following shows the PC Image Mode window, and indicates the window components that are included in all PJ Camera Software windows, regardless of mode.



The following explains the main functions of PJ Camera Software window components.

Preview list area

This area shows thumbnails of images that can be used in the current mode. You can select a thumbnail to project its image or to add the image to a playlist.

Playlist area

A playlist is a group of images selected for playback in a specific sequence. A playlist can be saved to a playlist file for later recall when it is needed. The playlist area shows the thumbnails of all of the images that are included in the currently open playlist.

- Menu bar
   The menu bar is identical to the end
  - The menu bar is identical to the one that appears on the operation bar (page E-32).
  - Toolbar

The toolbar is identical to the operation bar toolbar (page E-32).

Playlist toolbar

These buttons provide one-click access to frequently used [Playlist] menu commands.

## **Exiting PJ Camera Software**

Perform either of the following operations to exit PJ Camera Software.

- On the PJ Camera Software menu bar, select [File] and then [Exit].
- On the PJ Camera Software toolbar, click X

Quitting PJ Camera Software also will turn off PJ Camera power automatically.

# Using the PJ Camera Stand Like an OHP Projector (Document Camera Mode)

Use the Document Camera Mode when you want to project documents placed on the PJ Camera Stand, just like an OHP projector. There are two different methods you can use for projection in the Document Camera Mode.

Auto	With auto recording, projection starts automatically when you place a document onto the document stand. When you place a document onto the PJ Camera Stand, PJ Camera Software automatically detects when it stops moving, records its image, and then projects it.
Manual	With manual recording, you need to manually trigger the operation that records and projects the image of the document or object on the PJ Camera Stand. The projected image does not change until you release the shutter button.

- Note that the initial default setting for the Document Camera Mode is auto projection.
- For information about how to use auto projection, see "Testing the Multi PJ Camera System" (page E-28).

### Scanning Images (Scanner Mode)

In the Scanner Mode, images of documents placed onto the PJ Camera Stand are recorded and stored in image files. There are two different methods you can use for scanning in the Scanner Mode.

Auto	With auto scanning, image recording starts automatically when you place a document onto the document stand. When you place a document onto the PJ Camera Stand, auto scanning automatically detects when it stops moving, and records its image.
Manual	With manual scanning, you need to trigger the scan operation manually for each document or object.

 Auto scanning is the initial default setting for the Scanner Mode. The following is the procedure when using auto scanning.

#### Scanning a Document Using Auto Scanning

- Display the operation bar, and then select [Scanner] on the [File] menu or click >> on the toolbar.
  - If the dialog box for adjusting camera position appears, point the PJ Camera downwards at the document stage, and make sure there is no document on the stage.
  - Entering the Scanner Mode displays a scanner window, like the one shown nearby. The image area of the scanner window shows a rough (monitor) image of the document on the document stage of the PJ Camera Stand.
- Place the document you want to scan onto the document stage of the PJ Camera Stand.
- **3.** Use the scanner window to configure PJ Camera settings.
  - To change the zoom setting, click the [Wide] or [Tele] button. You can select a zoom factor in the range of 1X to 3X. The initial default zoom setting is 1X.
  - To adjust focus, display the operation bar and then select [Camera] and then [Refocus], or press the computer keyboard's [F2] function key. If the currently selected zoom factor is larger than 1.8X when you press the [F2] function key, it will change to 1.8X. You can also focus manually using the four buttons to the right of the [Refocus] button.

To do this:	Click this button:
Make a relatively large change in the focus setting	[<<] or [>>]
Make a fine adjustment of the focus setting	[<] or [>]

- 4. When you are ready to start auto scanning, click the [Start] button on the scanner window.
  - This causes the [Start] button to change to a [Stop] button, and starts auto scanning.
  - An image of the document you placed onto the document stage in step 2 is recorded automatically, and a preview image box appears. The preview image box will close automatically after a few seconds.
  - After an image file of the scanned document is created, its thumbnail is added at the top of the preview list area.
- **5.** After confirming that the preview image box of the previous image is no longer displayed, replace the document on the document stage with the next one you want to scan.
  - Scanning is performed each time you replace the current document with another one. After the preview image box appears, the thumbnail of the new document is added to the top of the preview list area.
  - Repeat step 5 to record all of the pages that you want.



- 6. When you are finished auto scanning, click the [Stop] button on the scanner window.
  - This causes the [Stop] button to change back to a [Start] button, and stops auto scanning.
- 7. To quit scanning, display the operation bar and then select [Exit] on the [File] menu.
  - This exits PJ Camera Software and turns off the PJ Camera.

### Using Files Created in the Scanner Mode

You can use image files you create in the Scanner Mode for projection in the Scanner Mode or the PC Image Mode. See the following section for details about projecting image files stored on the computer (PC Image Mode).

# Projecting Image Files Stored on the Computer (PC Image Mode)

With the PC Image Mode, you can create a projector presentation using image files recorded in the Scanner Mode and saved on your computer's hard disk.

### Projecting a Specific Computer Image File

- Display the operation bar, and then select [PC Image] on the [File] menu or click so on the toolbar.
  - This enters the PC Image Mode and displays its preview list area and playlist area.
  - The preview list area shows the thumbnails of image files on your computer's hard disk, in accordance with current PC Image Mode settings.
- 2. In the preview list, select the thumbnail of the file whose image you want to project.
- 3. Select [Full Screen] on the [View] menu or click 🕎 on the toolbar.
  - This projects the image whose thumbnail is selected in the preview list.
- **4.** Here, you could scroll forward or back through the files whose thumbnails are in the preview list.
  - To scroll back to the image whose thumbnail comes before the current image in the preview list, select [Back] on the [View] menu or click on the toolbar.
  - To scroll forward to the image whose thumbnail comes after the current image in the preview list, select [Forward] on the [View] menu or click on the toolbar.
- 5. To stop projecting, select [Full Screen Off] on the [View] menu or click 🔛 on the toolbar.

# Projecting Image Files Stored in PJ Camera Memory (Camera Image Mode)

The Camera Image Mode lets you use PJ Camera Software to control direct projection of images recorded with the PJ Camera and stored on the memory card loaded in the PJ Camera (or in PJ Camera built-in memory). Since the Camera Image Mode lets you project images without transferring them to a computer, you can incorporate new images into your presentations as soon as you record them with the camera.

### Projecting a Specific PJ Camera Image File

- Display the operation bar, and then select [Camera Image] on the [File] menu or click menu or click menu or the toolbar.
  - This enters the Camera Image Mode and displays its preview list area and playlist area.
  - The preview list area shows the thumbnails of PJ Camera image files, in accordance with current Camera Image Mode settings.
- 2. For the remainder of this procedure, perform the steps starting from step 2 under "Projecting a Specific Computer Image File" (page E-37).

### Using a Playlist to Project Images

With a playlist, you can prepare your presentation by specifying which images you want to appear as well as the sequence they should appear. After creating a playlist, you can save it to a file for later recall when you need it. When you recall a playlist and play it, its images are projected in the sequence they are arranged in the playlist. You can create and play playlists in the Scanner Mode, PC Image Mode, and Camera Image Mode.

For full details about creating playlists and using playlists for projection, see the PJ Camera Software User's Guide.

### Using the Presentation Mode

The Presentation Mode lets you keep PJ Camera Software running in the background when projecting with Microsoft PowerPoint or some other software. This makes PJ Camera Software instantly available during the presentation whenever you need it.

### **Entering the Presentation Mode**

Display the operation bar, and then select [Presentation] on the [File] menu or click 🧾 on the toolbar.

### Functions Available in the Presentation Mode

You can use Projection Area Capture and Board Area Capture in the Presentation Mode. See the following section for more information about Projection Area Capture and Board Area Capture.

## Using Projection Area Capture and Board Area Capture

Projection Area Capture and Board Area Capture can be performed in all modes except for the Document Camera Mode and the Scanner Mode.

Projection Area Capture

Projection Area Capture extracts text and graphics that are handwritten within the projection image area on the whiteboard. It then combines this with the original projection image, providing a clear view of both the projection image and the handwritten information.

- Projection Area Capture does not record handwritten text and graphics that are on the whiteboard outside of the projection image area.
- Use Projection Area Capture when the handwritten text and graphics you want to record are located within the projection area.
- Board Area Capture

Board Area Capture extracts the entire whiteboard area, including the projected image as well as handwritten text and graphics both inside and outside the projection area, and stores it as an image.

- Use Board Area Capture when the handwritten text and graphics you want to record are located outside of the projection area.
- The whiteboard area is extracted and repositioned so it is straight. You can also correct the brightness of the image to make text more legible.

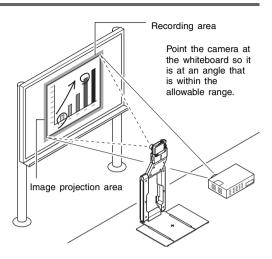
### Performing a Projection Area Capture Operation

Use the following procedure in the PC Image Mode, Camera Image Mode, or Presentation Mode after text and/or graphics have been handwritten into a projected image.

- Display the operation bar, and then select [Projection Area Capture] on the [File] menu or click e on the toolbar.
  - This displays the Projection Area Capture dialog box.



- Point the PJ Camera at the whiteboard.
- **3.** While watching the PJ Camera's monitor screen, use the camera's zoom buttons to compose the image.
- After the image is composed the way you want, click the [Shutter] button on the Projection Area Capture dialog box.
  - The extracted whiteboard contents produced by Projection Area Capture is combined with the original projection image, and the result is stored as an image file.



### **Projection Area Capture Image Files**

Image files created with Projection Area Capture are saved in the folder at the directory path shown below.

Folder (Initial Default):

Windows 2000/XP C:\Documents and Settings\All Users\Documents\CASIO\PJ\_System\Projection\_Area\_Capture

Windows Vista

C:\Users\Public\Documents\CASIO\PJ\_System\Projection\_Area\_Capture

File Name:

File names are generated automatically in accordance with the recording date. Example: 20070218T104525.JPG (Year: 2007; Month: 2; Day: 18; Time: 10:45:25)

Image Resolution:

XGA (1024 × 768)

800  $\times$  600 when an SVGA computer screen is being used.

### Performing a Board Area Capture Operation

Use the following procedure in the PC Image Mode, Camera Image Mode, or Presentation Mode while an image is being projected onto a whiteboard.

- 1. Display the operation bar, and then click [Camera] on the [File] menu or click 📇 on the toolbar.
  - This displays the Board Area Capture dialog box.
- 2. Point the PJ Camera at the whiteboard
- 3. While watching the PJ Camera's monitor screen, use the camera's zoom buttons to compose the image.
  - Zoom the image until the projection area on the whiteboard fills the monitor screen as much as possible.
- **4.** After the image is composed the way you want, click the [Shutter] button on the Board Area Capture dialog box.
  - This records the image on the whiteboard and stores it as an image file

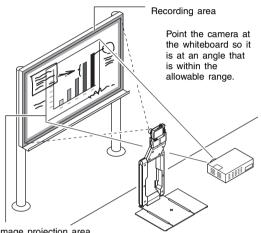


Image projection area

### **Board Area Capture Image Files**

Image files created with Board Area Capture are saved in the folder at the directory path shown below.

Folder (Initial Default):

Windows 2000/XP

C:\Documents and Settings\All Users\Documents\CASIO\PJ System\Board Area Capture

Windows Vista

C:\Users\Public\Documents\CASIO\PJ System\Board Area Capture

File Name:

File names are generated automatically in accordance with the recording date. Example: 20070218T104525.JPG

(Year: 2007; Month: 2; Day: 18; Time: 10:45:25)

Image Resolution:

In accordance with PJ Camera setup.

# **PJ Camera Overview**

The PJ Camera can also be used as a stand-alone digital camera. This section provides an overview of PJ Camera operations. See the Camera User's Guide on the CASIO CD-ROM for details about PJ Camera operations.

#### Important! \_

 Before using the PJ Camera for the first time, be sure to read "Setting Up the PJ Camera" (page E-20). Also you will need to charge the PJ Camera's battery and configure certain settings before using the PJ Camera.

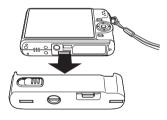
### Using a Memory Card

### Loading a Memory Card into the Camera

When a memory card is loaded, the camera stores images you shoot on the card.

#### **NOTE**.

- Though the camera has built-in memory, using a memory card provides additional capacity you can use to store more images, high-quality and large-size images, and longer movies.
- The camera will store images in its built-in memory if there is no memory card loaded. If you prefer to use built-in memory, skip this procedure and go to "Shooting a Snapshot" on page E-44.
- If the camera bracket is attached to the camera, remove it before mounting the camera onto the cradle.
  - Store the camera bracket in the carrying bag to ensure that it does not become soiled with dirt, dust, etc.

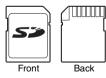


 Open the battery cover. While pressing lightly on the cover, slide it in the direction indicated by the arrow to open.



 Load a memory card into the camera.
 With the front of the memory card facing upwards (towards the monitor screen side of the camera), slide it into the card slot and press until it clicks securely into place.





4. Close the battery cover.

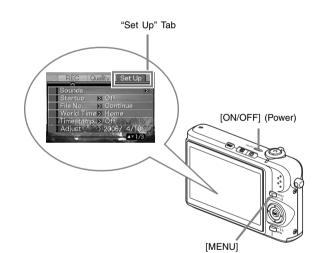
### Formatting a Memory Card

Before you can use a memory card with your camera, you must format it.

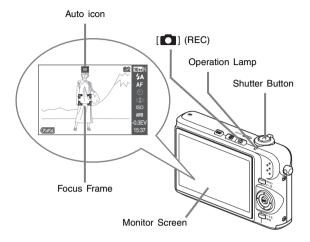
#### Important!

- Formatting a memory card that already has snapshots or other files on it, will delete its contents. Normally you do not need to format a memory card again. However, if storing to a card has slowed down or if you notice any other abnormality, re-format the card.
- Be sure to perform the following procedure on the camera to format the memory card.
- 1. Press [ON/OFF] to turn on the camera.
- 2. Press [MENU].
- **3.** Use  $[\blacktriangleleft]$  and  $[\blacktriangleright]$  to select the "Set Up" tab.
- **4.** Use  $[\mathbf{\nabla}]$  to select "Format" and then press  $[\mathbf{b}]$ .
- **5.** Press [▲] to select "Format" and then press [SET].

 To cancel formatting, select "Cancel" and then press [SET].
 Wait until the "Busy... Please wait..." message disappears from the monitor screen before doing anything else.



# Shooting a Snapshot

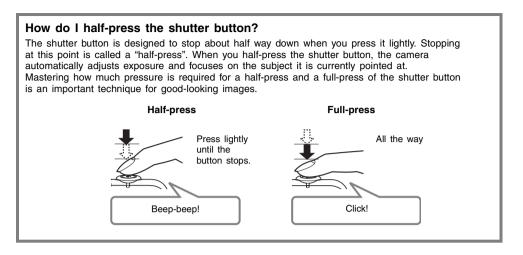


- 1. Press [1] to turn on the camera. This enters the REC mode and displays "[1]" (Auto icon) on the monitor screen.
- 2. Point the camera at the subject.
- **3.** While taking care to keep the camera still, half-press the shutter button. When the image is in focus, the camera will beep, the operation lamp will light green, and the focus frame will turn green.
- 4. Continuing to keep the camera still, press the shutter button all the way down. The recorded image will remain on the display for about one second, and then it will be stored in memory. After that, the camera will be ready to shoot the next image.

#### Snapshot Image Size and Image Quality

Your camera lets you select from among various image size and quality settings. Note that image size and quality settings affect how many images can be stored in memory.

• You can change the image size and quality settings as required to shoot a smaller or lowerresolution image for attachment to an e-mail message, for publishing on a website, etc. You can also select an image size that suits the size of paper you plan to use for printing your images.



### **Viewing Snapshots**

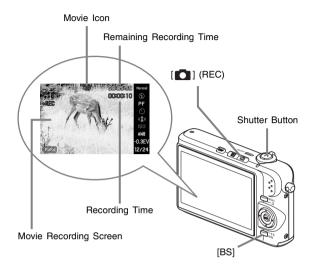


 Press [▶] to enter the PLAY mode. If there are multiple images in memory, use [◄] and [▶] to scroll through them.

### To return to the REC mode

Press [

# Shooting a Movie



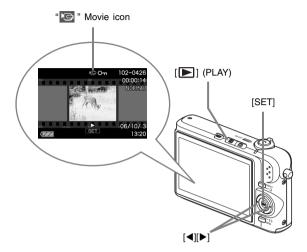
- 1. Press [
- 2. Press [BS] (BEST SHOT).
- 3. Use [▲], [▼], [◀], and [▶] to select the "ເ€" (Movie) scene and then press [SET]. "ເ€" (movie icon) remains on the monitor screen.
- 4. Press the shutter button to start shooting the movie.Audio is also recorded during movie recording.
- **5.** Press the shutter button again to stop recording.

#### **Movie Image Quality**

Your camera lets you select from among three image quality settings (HQ, Normal, LP) for movies. For best camera performance, use the "HQ" (High Quality) setting for movie recording. Movie quality is a standard that determines the detail, smoothness, and clarity of the image during playback. Reducing image quality let's you shoot longer, so you can switch to "Normal" or "LP" conserve remaining memory capacity if you start to run low. Each movie can be up to 10 minutes long. Movie recording stops automatically after 10 minutes of recording.

# Viewing a Movie

The film-like frame that appears on the monitor screen indicates that this is an image from a movie.



- 1. Press [**b**] to enter the PLAY mode.
- Use [◄] and [▶] to select the movie you want to play. When scrolling through images, a movie is displayed on the monitor screen by showing its first frame.
- 3. Press [SET] to start playback.

The monitor screen will return to the image selection screen in step 2 after the end of the movie is reached.

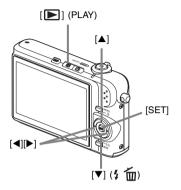
 During movie playback, you can adjust volume, skip forward and back, and perform other operations.

### To return to the REC mode

Press [

# Deleting a File

You can use the following procedure to delete files you have transferred to your computer's hard disk, images you have printed, or files you simply no longer need. This frees up memory for recording more images.



- 1. Press []].
- **2.** Press [▼] (½ 👘).
- 3. Use  $[\blacktriangleleft]$  and  $[\blacktriangleright]$  to select the snapshot or movie you want to delete.
- **4.** Press [▲] to select "Delete".
  - To cancel the delete operation, select "Cancel".
- 5. Press [SET].
  - This deletes the selected snapshot or movie.
  - If you want to delete more, repeat the above procedure from step 3.
  - To quit the delete operation, press [MENU].

# Troubleshooting

The following explains what you should do when you experience problems with using the Multi PJ Camera System.

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- For information about the messages that appear on the PJ Camera monitor screen and other troubleshooting procedures, see the "Reference" section of the Camera User's Guide.
- You can find more troubleshooting information in the FAQ of PJ Camera Software help.

Problem	Cause and Required Action
Nothing works.	The USB cable, AC adaptor, and/or power cord is not connected correctly. → Check each connection and make sure it is correct and secure.
	The computer is not turned on. $\rightarrow$ Start up the computer.
	The software or driver is not installed correctly. → Correctly install the software and driver.
No image is projected.	<ul> <li>There is something wrong with the system setup.</li> <li>→ Check the following.</li> <li>Is the AC power cord plugged into an electrical outlet?</li> <li>Is the AC power cord connected to the AC adaptor?</li> <li>Is the AC adaptor DC plug connected securely to the [DC-IN] terminal of the PJ Camera Stand?</li> <li>Is the [Ú] (power) button turned on?</li> <li>Is the USB cable connected securely to the USB port of the PJ Camera Stand?</li> <li>Is PJ Camera Software installed on your computer?</li> </ul>
PJ Camera Software will not start up.	The computer does not conform to the necessary system requirements. → Check the "Minimum Computer System Requirements" on page E-50.
Failure to record camera images properly in the Document Camera Mode.	The document stage is not set up correctly. → Use the procedure under "Setting Up the PJ Camera Stand" on page E-22 to set up the document stage correctly.
Light shining in a camera image in the Document Camera Mode.	Fluorescent lighting or sunlight is shining onto the document stage. → Take the action required to keep the unwanted light from shining onto the document stage.
The projected image is dark.	Insufficient illumination when recording the image. → Provide more illumination.

# **Product Specifications (PJ Camera Stand)**

#### \* For PJ Camera specifications, see the PJ Camera User's Guide on the CASIO CD-ROM.

Power Requirements:	100V to 240V AC, 50/60Hz
Rated Voltage:	5.0V
Power Consumption:	5.2W
<b>Connection Terminal:</b>	USB (USB 2.0 Full-Speed compatible) $\times$ 1
Approximate Dimensions:	$\begin{array}{l} 168(W) \times 44(H) \times 296(D) \text{ mm (excluding projections)} \\ (6.6 \times 1.7 \times 11.7 \text{ inches)} \\ \text{During Use: } 327(W) \times 404(H) \times 264(D) \text{ mm} \\ (12.9 \times 15.9 \times 10.4 \text{ inches)} \end{array}$
Approximate Weight:	1.7kg (3.75 lbs)

# Minimum Computer System Requirements

The following are the minimum system requirements for a computer to run PJ Camera Software.

#### **Operating System**

Microsoft<sup>®</sup> Windows Vista<sup>™</sup>, Windows<sup>®</sup> XP SP2/2000 Professional SP4

#### Computer

IBM PC/AT or compatible that conforms to the following conditions.

- Windows Vista, Windows XP or 2000 Professional pre-installed
- 800 MHz Pentium<sup>®</sup> III or higher CPU
- USB port

#### Memory

At least 64MB

#### Hard Disk

At least 15MB available for software installation, and at least 500MB additional disk space for running the software

#### Display

Color monitor (16-bit color or greater, Full Color recommended) with a resolution of  $1024 \times 768$  dots or  $800 \times 600$  dots, that supports connection to your computer and operation under Windows Vista, Windows XP or 2000 Professional.

#### Input Device

Keyboard and Pointing Device (Mouse or compatible device supported by above operating systems)

- \* In addition to the above, the system should conform to the recommendations of the operating system being used.
- \* Normal operation may not be possible under certain hardware configurations.
- \* Operation is not supported on a computer running Windows 3.1, 95, 98, 98SE, Me or NT, or on a Macintosh running a MacOS.
- \* Operation on a computer upgraded to Windows Vista, Windows XP or 2000 Professional from another operating system is not supported.
- <sup>6</sup> Operation *is not* supported on a computer running one of the follwing operation systems.
  - Windows Vista 64-bit version.
  - Windows XP Professional x64 Edition