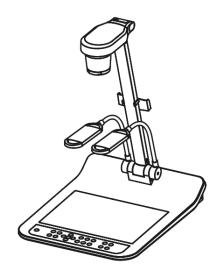


# PS750 Document Camera

#### **User Manual**



#### [Important]

To download the updated quick start guide, multilingual manuals, software, and drivers, please visit Lumens website at http://www.lumens.com.tw/goto.htm



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### **Chapter 1 Precautions**

Always follow these safety instructions when setting up and using the Document Camera:

- 1. Do not place Document Camera in tilted position.
- 2. Do not place the Document Camera on an unstable trolley, stand or table.
- 3. Do not use the Document Camera near water or source of heat.
- 4. Use attachments only as recommended.
- Use the type of power source indicated on the Document Camera. If you are not sure
  of the type of power available, consult your dealer or local electricity company for
  advice.
- 6. Place the Document Camera on a place that it can be unplugged easily.
- 7. Always take the following precautions when handling the plug. Failure to do so may result in sparks or fire:
  - Ensure the plug is free of dust before inserting it into a socket.
  - Ensure that the plug is inserted into the socket securely.
- 8. Do not overload wall sockets, extensions leads or multi-way plug boards as this may cause fire or electric shock.
- 9. Do not place the Document Camera where the cord can be stepped on as this may result in fraying or damage to the lead or the plug.
- Unplug the projector from the wall socket before cleaning. Use a damp cloth for cleaning. Do not use liquid or aerosol cleaners.
- 11. Do not block the slots and openings in the projector case. They provide ventilation and prevent the Document Camera from overheating. Do not place the Document Camera on a sofa, rug or other soft surface or in a built-in installation unless proper ventilation is provided.
- 12. Never push objects of any kind through cabinet slots. Never allow liquid of any kind to spill into the Document Camera.
- 13. Except as specifically instructed in this User Manual, do not attempt to operate this product by yourself. Opening or removing covers may expose you to dangerous voltages and other hazards. Refer all servicing to licensed service personnel.
- 14. Unplug the Document Camera during thunderstorms or if it is not going to be used for an extended period, do not place the Document Camera or remote control on top of heat-emitting equipment or heated objects such as a car and etc.
- 15. Unplug the Document Camera from the wall outlet and refer serving to licensed service personnel when the following situations happen:
  - If the power cable or plug becomes damaged or frayed.
  - If liquid is spilled into it or the Document Camera has been exposed to rain or water.

<Note>: Using an incorrect battery type in the remote control may result in breakdown. Follow your country's instructions on how to dispose of used batteries.



#### ■ Safety Precautions

Warning: To reduce the risk of fire or electric shock, do not expose this appliance to rain or moisture.

This Document Camera has a 3-wire AC line Plug. This is a safety feature to ensure that the plug will fit into the power outlet. Do not try to disable this safety feature.

If the Document Camera will not be used for a long period of time unplug it from the power outlet.



Note

RISK OF ELECTRIC SHOCK



Note: To reduce the risk of electric shock. Do not remove cover (or back). No user-serviceable parts inside. Refer servicing to licensed service Personnel.



This symbol indicates that this equipment may contain dangerous voltage which could cause electric shock.



This symbol indicates that there are important operating and maintenance instructions in this User Manual with this unit.

#### FCC Warning

This equipment has been tested and found to comply with the limits for a Class A or B digital device, pursuant to Part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

#### ■ EN55022 (CE Radiation) Warning

This product is intended for use in a commercial, industrial, or educational environment. It is not intended for residential use.

This is a Class A product. In a domestic environment it may cause radio interference, in which case the user may be required to take adequate measures. The typical use is in a conference room, meeting room or auditorium.

## **Chapter 2 Package Content**

PS750



Download and Safety Instruction



(For download of other language versions, please visit Lumens website)



C-Video Cable





Power Adapter



Audio cable



VGA Cable



**USB** Cable



Power Cord



Appearance may vary with country/region

Remote Control



Microscope Adapter

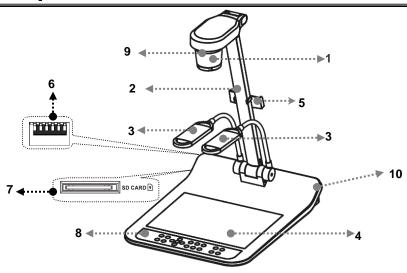


Remote Control Holder





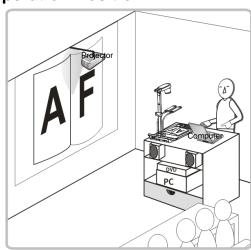
## **Chapter 3 Product Overview**



- 1. Lens
- 3. Auxiliary floodlight and lamp arm
- 5. Remote Control Holder
- 7. SD card slot
- 9. Remote sensor

- 2. Camera arm
- 4. Backlight
- 6. DIP Switch Settings
- 8. Control Panel
- 10. Input/output port

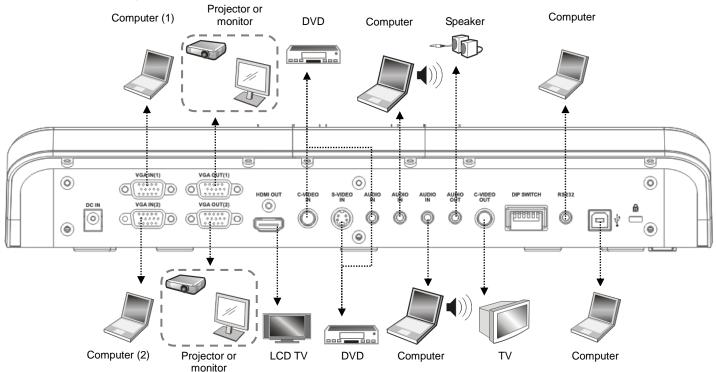
#### 3.1 Relative Operation Position





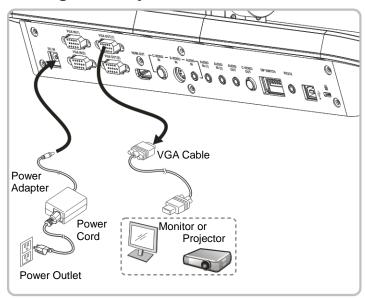
## **Chapter 4 Installation and Connections**

#### 4.1 System Diagram

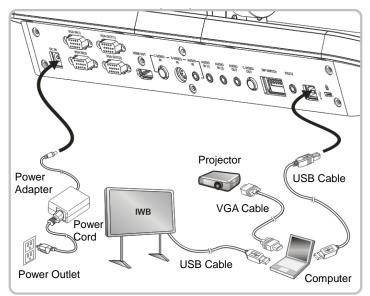




#### 4.2 Connecting to a Projector or Monitor



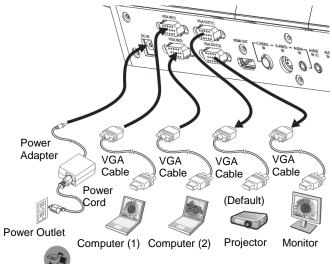
# 4.3 Connecting to a Computer and Use Lumens Software or an Interactive Whiteboard (IWB)



• Drivers and software can be downloaded from the Lumens website.

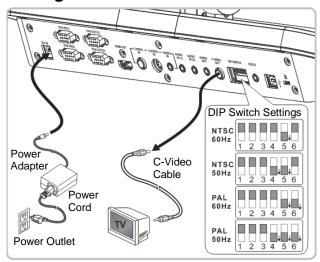


# 4.4 Connecting to a Projector, 2 PCs, and a Monitor at the Same Time



- Press button to switch the image sources.
- For VGA 1 setting, refer to 8.3 I would like to switch image sources.
- For VGA 2 setting, refer to 8.2 I would like to set the image source of VGA OUT2.

#### 4.5 Connecting to a TV



- NTSC: U.S.A., Taiwan, Panama, Philippines, Canada, Chile, Japan, Korea, and Mexico.
- PAL: Countries/regions not listed above.
- Please adjust it to be suitable for the local voltage frequency of 50/60Hz. For the frequency in actual use, please refer to the manual. (Attachment 1)
- You must re-start for DIP switching configuration to take effective.

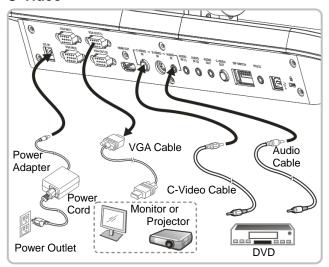


#### 4.6 Connecting to DVD and display DVD images

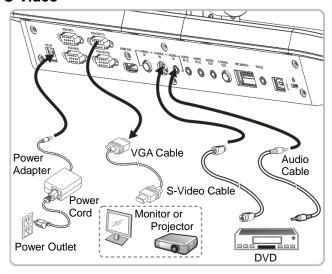
Press button to switch the image source.

- For VGA 1 setting, refer to 8.3 I would like to switch image sources.
- For VGA 2 setting, refer to 8.2 I would like to set the image source of VGA OUT2.

#### 4.6.1 C-Video

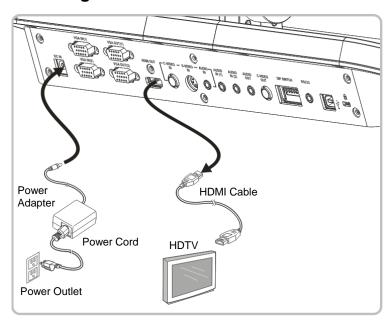


#### 4.6.2 S-Video

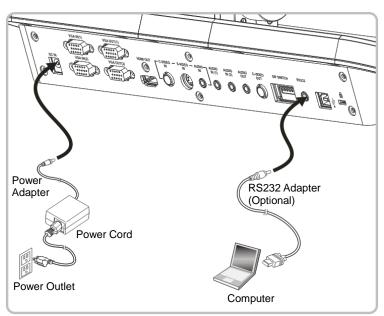




### 4.7 Connecting to an HDTV



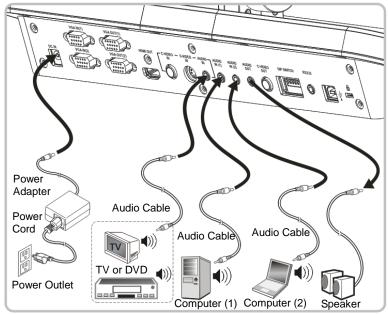
#### 4.8 Connecting to a Computer with RS232





#### 4.9 Connecting to Audio Input and Output

<Remark> Audio output is set according to VGA input; if VGA IN has Audio in, preset the output of audio source of VGA IN(1).



<Remark>: Or connect to an additional amplifier before connecting to the speaker.

#### 4.10 Installing application software

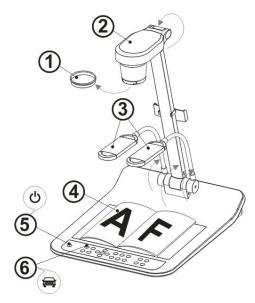
After installing the USB driver and application software, you can use the following functions:

- Control the PS750.
- Capture and record images.
- > Annotate the image, highlight important details and save it.
- > Support the full screen function.

<Note>: Please refer to Lumens™ software user manual for installation steps and software operation.



## **Chapter 5 Start Using**



<Note>: Please adjust it to be suitable for the local voltage frequency of 50/60Hz. For the frequency in actual use, please refer to the manual. (Attachment 1)

- 1. Remove the lens cap.
- 2. Pull up the camera and the camera arm. The camera should aim at the center of the presenter.
- 3. Pull up the lamp arm to a proper position.
- 4. Place an object to be displayed under the camera.
- 5. Press [POWER] (1) on the **remote control** or **control panel** to power on.
- Press [AUTO TUNE] on the control panel to optimize the image.
   You are ready to present.
- 7. Each time the camera head is moved, press [AF] on the **remote** control or control panel to refocus the lens.
- <Note>: According to your request, you can adjust the camera head slightly to aim at the center of the documents when the anchor of lens was reached.
  - When using the remote control, aim at the receptor on the PS750, and press the power button.
  - Once PS750 is turned on, the LED on the control panel will flash a few times and stay lit. Please contact your distributor if the LED is not on.

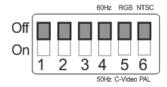


## **Chapter 6 DIP Switch Settings**

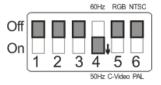
<Note>: You must re-start PS750 for DIP switching configuration to take effective.

#### 6.1 Connecting to a projector or monitor

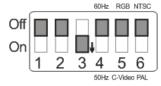
#### 6.1.1 XGA 60Hz output( default values) XGA 50Hz output



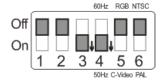
6.1.2 SXGA 60Hz output



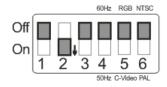
SXGA 50Hz output



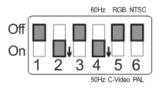
6.1.3 720P 60Hz output



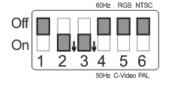
720P 50Hz output

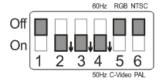


6.1.4 Special Mode 60Hz output



Special Mode 50Hz output





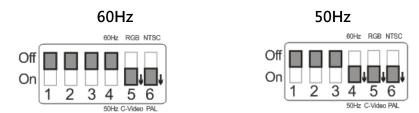


#### 6.2 Connecting to a TV/DVD

## 6.2.1 *NTSC:* America, Taiwan, Panama, Philippines, Canada, Chile, Japan, Korea and Mexico



6.2.2 PAL: Countries or regions not listed above.



<Remark> It doesn't support C-VIDEO and VGA simultaneously. Once C-VIDEO is on, VGA is not supported.



# Chapter 7 Control Panel/Remote Control and Setting Menu

#### 7.1 Functions of control panel and remote control

<Note>: OSD is not available at C-VIDEO mode. [MENU] / [ENTER] / [PLAYBACK] / [ROTATE] / [PAN] / [RECORD] / [CAPTURE] / [DELETE] / [VGA] / [SLIDE SHOW] / [PBP] functions are not available on the machine panel and the remote control.

<Remark> The below functions are listed alphabetically.

Name	Function Descriptions	Operation
	Turn on and off the Document Camera.	Remote control / Control panel
<b>≺,≻,</b> ∧, <b>∀</b>	Move up, down, left or right to select the needed function.	Remote control / Control panel
AF	Auto Focus	Control panel
AUTO TUNE	Automatically adjust the image to have the best brightness and focusing performance.	Remote control / Control panel
BRT+/-	Manually adjust the brightness of the image.	Remote control / Control panel
CAPTURE	Capture the image to the SD card (priority) or internal memory.	Remote control / Control panel
DELETE	Delete the image stored in the SD card (priority) or internal memory.	Remote control
ENTER	Enter/Activate functions.	Remote control / Control panel
FREEZE	Freeze the current image to temporarily stay on the screen. Press again to defreeze.	Remote control / Control panel
LAMP	Turn on / off the lamp.	Control panel



MENU	Activate the setting menu function/exit menu.	Remote control / Control panel
PAN	Switch a part of the live image.	Remote control
PBP	Display live images together with captured images.	Remote control
PLAYBACK	Display the list of captured images.	Remote control / Control panel
Projector ON	Turn on the projector.	Control panel
Projector OFF	Turn off the projector.	Control panel
RECORD	Press [Record] to record images to SD card (priority), press [Record] again to stop recording.	Remote control / Control panel
ROTATE	Rotate the image by 0°/90°/180°/270°	Control panel
SLIDE SHOW	Show the photos or videos stored in the SD card (priority) or internal memory in slide mode.	Remote control / Control panel
VGA 1	Switch between different image sources of VGA 1 Document Camera/VGA IN(1)/VGA IN(2)/DVD	Remote control / Control panel
VGA 2	Switch between different image sources of VGA 2 VGA Out (VGA OUT(1)) / VGA IN(1) / VGA IN(2) <note> VGA 2 button functions only when VGA OUT2 is set to (VGA IN), and for the related setting, refer to 8.2 I would like to set the image source of VGA OUT2.</note>	Control panel
ZOOM +/-	Increase or decrease the image size.	Remote control / Control panel



#### 7.2 Setting Menu

<Remark> Press [MENU] on the remote control or control panel to enter the setting menu; The bold underlined values in the following table are the defaults.

1 <sup>st</sup> Level Major Items	2 <sup>nd</sup> Level Minor Items	3 <sup>rd</sup> Level Adjustment values	Function Descriptions
	Auto Tune	<u>Enter</u>	Adjust the image to the optimal condition.
	Focus	0~ <u><b>A</b></u> ~Max	Use the left and right arrow keys to adjust focal length on an object.
	Brightness	0~ <u><b>A</b></u> ~Max	Use the left and right arrow keys to adjust brightness.
Display	Mode	Normal/Slide/Film /Microscope	Use the left and right arrow keys to select the image mode.
	Photo/Text	Photo/Text/Gray	Use the left and right arrow keys to select the image mode.
	Night Vision	On/ <u>Off</u>	Use the left and right arrow keys to select. The night vision mode suits with darker environment.
	Digital Zoom	On/ <u>Off</u>	Use the left and right arrow keys to turn <b>digital zoom</b> on/off.
	Slide Show	<u>Enter</u>	Press [ENTER] to play the photos or videos stored in the SD card (priority) or internal memory.
	Slide Show Effect	<ol> <li>Off</li> <li>Shutter</li> <li>Right</li> <li>Down</li> <li>Side</li> <li>Open</li> </ol>	Use the left and right arrow keys to select the image switch mode.
Storage	Delay	1. 0.5 Sec 2. 1 Sec 3. 3 Sec 4. 5 Sec 5. 10 Sec 6. Manual	Use the left and right arrow keys to select the delay time. Select manual mode to switch images manually.
	Image Quality	1. High 2. <u>Medium</u> 3. Low	Use the left and right arrow keys to select the image quality for the captured images and recorded videos.
	Copy To SD Card	Enter	Press [ENTER] to immediately copy the data in Document Camera to the SD card.



	Delete All	Yes/ <u>No</u>	Use the left and right arrow keys to select, and then press [ENTER] to confirm the deletion of photos. Delete the image stored in the SD card (priority) or internal memory.  Use the left and right arrow keys		
	Format	Yes/ <u>No</u>	to select, and then press [Enter] to format the data stored in the SD card (priority) or internal memory.		
	USB Transfer	Camera/Storage device	Use the left and right arrow keys to select the USB transfer mode.  1. Camera: Connecting the PS750 to view live image.  2. Storage device: connecting to the SD card (priority) or internal memory.		
	Capture	<ul><li>1. <u>Single</u></li><li>2. Continuous</li><li>3. Disable</li></ul>	Use the left and right arrow keys to select the video capture mode. (Single/Continuous/ Disable)		
	Capture Time	1. <b>1 hr</b> 2. 2 hr 3. 4 hr 4. 8 hr 5. 24 hr	Use the left and right arrow keys to set the capture time. <note> It only works when the capture mode is set to [continuous].</note>		
Satting	Capture Interval	1. <u>5 Sec</u> 2. 10 Sec 3. 30 Sec 4. 1 Min. 5. 2 Min. 6. 5 Min.	Use the left and right arrow keys to set the capture interval. <note> It only works when the capture mode is set to [continuous].</note>		
Setting	Auto Exposure	On/Off	Regardless of outside environment, the machine will adjust the brightness to the optimal condition. Use the left and right arrow keys to select.		
	White Balance	<u>Enter</u>	Regardless of outside light or color, the machine will adjust the color to the optimal condition; Press [Enter] to activate.		
	Projector Type	DLP/ <u>LCD</u>	Use the left and right arrow keys to select the projector type and reduce image noise.		
	Volume	0~ <u><b>A</b></u> ~Max	Use the left and right arrow keys to adjust the volume.		



	VGA OUT(2)	VGA IN / <u>VGA</u> <u>Out(1)</u>	1. Use the left and right arrow keys to select the images displayed by VGA OUT(2).  2. VGA IN: Use the [VGA 2] key on the <b>control panel</b> to select whether the screen images are output from VGA IN(1) or VGA IN(2).  VGA Out(1): The image output is the same as the
	Language	1. English 2. 繁體中文 3. Deutsch 4. Français 5. Español 6. Русский 7. Nederlands 8. Suomi 9. Polski 10. Italiano 11. Português 12. Svenska 13. ČESKY 14. 简体中文	setting of VGA Out(1)  English Traditional Chinese German French Spanish Russian Dutch Finnish Polish Italian Portuguese Swedish Czech Simplified Chinese Use the left and right arrow keys in the Language option to select the preferred language.
Advanced	Lock Down	On/ <u>Off</u>	Use the left and right arrow keys to turn the lock down function on and off. You can set the password when [On] is selected.
	Auto Erase	On/ <u>Off</u>	Use the left and right arrow keys to turn the auto erase function on and off. When [On] is selected, the saved images will automatically be deleted when the system is turned off.
	Preset Load	Yes/ <u>No</u>	Read the value of the current image mode. Use the left and right arrow keys to select, and then press [ENTER] to confirm.
	Preset Save	Yes/ <u>No</u>	Save the value of the current image mode. Use the left and right arrow keys to select, and then press [ENTER] to confirm.
	Factory Reset	Yes/ <u>No</u>	Use the left and right arrow keys to select, and then immediately press [ENTER]to activate the factory reset.



# Chapter 8 Descriptions of major functions

# 8.1 I would like to automatically adjust the image to have best brightness and focusing performance (Auto tune)

 Press [AUTO TUNE] on the remote control or control panel to adjust automatically.

#### 8.2 I would like to set the image source of VGA OUT2

Press [MENU] on the **remote control** or **control panel** to enter the setting menu

- 1. Press [▶] or [◀] to the [Setting] menu.
- 2. Press [▼] to enter [VGA OUT2].
- Press [◄] or [▶] to select [VGA OUT 1/VGA IN].
- 4. Press [MENU] to exit.

#### When VGA OUT2 is set to VGA IN.

 Press [VGA 2] on the control panel to switch between the image sources of VGA IN(1) and VGA IN(2).

#### 8.3 I would like to switch image sources

The default of image source is Live Image. Press **[VGA 1]** on the **remote control** or **control panel** to switch setting and PS750 will switch among the following five modes in turn:

- 1. Live images (default)
- 2. VGA IN(1)
- 3. VGA IN(2)
- 4. DVD C-Video
- 5. DVD S-Video

<Note> VGA IN mode will start only when it is connected to input equipment.



# 8.4 I would like to make text clearer and photos more colorful

The default of [PHOTO/TEXT] is PHOTO. Use the **remote control** or the **control panel** to change settings.

- [Photo] (default): for viewing photos or text with photos and will make the photos more colorful.
- [Text]: for viewing text files and will make the text clearer.
- [Gray]: for viewing black and white photos and will make the grayscale differentiation more distinct.
- 1. Press [MENU] to enter the setting menu.
- Press [▶] or [◄] to select [Display].
- Press [▼] to select [Photo/Text].
- Press [◄] or [►] to select [Photo/Text/Grey] (Refer to the previous section to make the most appropriate selection).
- 5. Press [MENU] to exit.

#### 8.5 I would like to zoom in /out of images

- 1. Press [ZOOM +] on the **remote control** or **control panel** to zoom in.
- Press [ZOOM -] on the remote control or control panel to zoom out.

#### 8.6 I would like to use the auto focus

1. Press [AF] on the remote control or control panel.

#### 8.7 I would like to adjust the brightness

- Use the remote control or the control panel and press [BRT +] to increase the brightness.
- Use the remote control or the control panel and press [BRT -] to decrease the brightness.

#### 8.8 I would like to turn on / off the lamp

The default of the lamp is ON. When using the control panel:

 Press [Lamp] to switch ON/OFF. (in the sequence of arm lamp/backlight/OFF)



#### 8.9 I would like to capture images

#### 8.9.1 Setting the quality of captured images

- Press [MENU] on the remote control or control panel to enter the setting menu.
- 2. Press [▶] or [◄] to the [Storage] menu.
- 3. Press [▼] to find [Image Quality].
- 4. Press [▶] or [◀] to select among [High/Medium/Low].
- 5. Press [MENU] to exit.

#### 8.9.2 Setting continuous capture

- Press [MENU] on the remote control or control panel to enter the setting menu.
- 2. Press [▶] or [◄] to the [Setting] menu.
- 3. Press [▼] to find [Capture].
- 4. Press [▶] or [◄] to select [continuous].
- Press [▼] to find [Capture Time]; Press [▶] or [◄] to select time settings.
- Press [▼] to find [Capture Interval]; Press [▶] or [◄] to select time settings.
- 7. Press [MENU] to exit.

#### 8.9.3 Capturing and saving images

1. Press [CAPTURE] on the remote control or control panel. <Remark> If the capture mode is set to [continuous], press [CAPTURE] to capture images continuously, press [CAPTURE] again to exit.

#### 8.10 I would like to view captured images

<Note> Images over 8 MB, cannot be played. Whilst playing, the [Rotate] function can be activated to rotate the images.

- 1. Press [PLAYBACK] on the **remote control** or **control panel** to display thumbnails of all captured images.
- Press [▲] or [▼] or [▼] to select the thumbnail you want you view.
- 3. Press [ENTER] for the full-screen display of the image.
- 4. Press [▶] or [◀] to turn to the previous/next image.
- 5. Press [MENU] to exit.



#### 8.11 I would like to delete captured images

- 1. Use the remote control and press [PLAYBACK]
- Press [▲] or [▼] or [▼] to select the thumbnail you want you delete.
- 3. Pressing [DELETE] will open a [Delete File] window.
- 4. Press [▶] or [◄] to select [Yes] (The default value is No).
- 5. Press [ENTER] to delete the selected photo.
- 6. Press [MENU] to exit.

# 8.12 I would like to automatically delete the captured images whenever it is turned off (Auto Erase)

- 1. Press [MENU] on the **remote control** or **control panel** to enter the setting menu.
- 2. Press [▶] or [◄] to the [Advanced] menu.
- 3. Press [▲] or [▼] to [Auto Erase].
- 4. Press [▶] or [◀] to select [ON].
- 5. Press [MENU] to exit.
- 6. It will automatically delete all captured photos when it is turned off.

#### 8.13 I would like to record motion images (Record).

#### 8.13.1. Setting the image quality

- Press [MENU] on the remote control or control panel to enter the setting menu.
- 2. Press [▶] or [◄] to the [Storage] menu.
- 3. Press [▼] to find [Image Quality].
- 4. Press [▶] or [◄] to select among [High/Medium/Low].
- 5. Press [MENU] to exit.

#### 8.13.2. Recording motion images

- 1. Press [RECORD] on the **remote control** or **control panel** to start recording videos.
- 2. Press [RECORD] again to stop recording.
- <Remark> Record sounds with the built-in microphone of the control panel.



#### 8.13.3. Playing image

- Press [PLAYBACK] on the remote control or control panel to display thumbnails of all videos recorded.
- 2. Press [▶] or [▲] or [▲] or [▼] to select files to browse.
- 3. Press [ENTER] for full-screen play.
- 4. Press [▲] or [▼] to adjust the volume of the video. <Note> When motion images are played back, the volume of Audio Out can be controlled by up/ low arrow keys. In any other modes, you are not allowed to control volume using [▲] or [▼] key.
- 5. Press [▶] or [◄] to turn to the previous/next video.
- Press [SOURCE] to exit.
   Note> Only the files recorded can be played, and when live sound output is not available, additional amplifier can be connected to AUDIO OUT.

# 8.14 I would like to switch a part of the live image (PAN)

#### Use Remote control:

- 1. Press [PAN] to enter the image pan mode.
- 2. Press [▲] or [▼] or [▼] to move and view the partial enlarged images.
- 3. Press [PAN] to exit the partial enlarged mode.

#### 8.15 I would like to play the slides (Slide Show)

#### 8.15.1 Setting the slide show effect:

- Press [MENU] on the remote control or control panel to enter the setting menu.
- 2. Press [▶] or [◀] to the [Storage] menu.
- 3. Press [▼] to find the [Slide Show Effect].
- Press [▶] or [◄] to select image switch mode between [Off / Shutter / Right / Down / Side / Open].
- 5. Press [MENU] to exit.



#### 8.15.2 Setting delay time

- Press [MENU] on the remote control or control panel to enter the setting menu.
- 2. Press [▶] or [◄] to the [Storage] menu.
- 3. Press [▼] to find [Delay].
- 4. Press [▶] or [◄] to select image switch mode between [0.5 Sec / 1 Sec / 3 Sec / 5 Sec / 10 Sec / Manual].
- 5. Press [MENU] to exit.

#### 8.15.3 Activating/Stopping the slide show

<Note> Images over 8 MB, cannot be played.

If you use the remote control or the control panel:

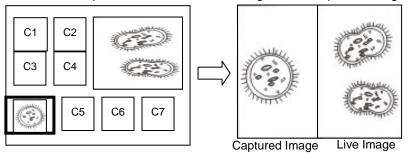
- Press [SLIDE SHOW] to start playing.
- 2. Press [SLIDE SHOW] again to stop playing.

#### 8.16 I would like to view the X-ray film

- 1. Place an X-ray film to be displayed under the camera.
- Press [Lamp] button on the control panel to switch on the **Backlight** (in the sequence of arm lamp/backlight/OFF)
- 3. Press [AUTO TUNE] button to optimize the image.

#### 8.17 I would like to compare images (PBP)

This function will compare and contrast a live image with a captured image.



#### **Use Remote control**

- Press [PBP] to enter the PBP (Picture by Picture) photo selection screen.
- 2. Press [▲] or [▼] or [▼] to select the file to be compared.
- 3. Press [ENTER] to activate image comparison.
- Press [▶] or [◄] to move the image left or right.
   Remark> Press [ENTER] to switch between the captured and live images.



- 5. Press [PLAYBACK] to return to image thumbnails.
- 6. Repeat Steps 2 ~ 4.
- 7. Press [MENU] to exit.

# 8.18 I would like to resume the factory default setting (Factory Reset)

#### 8.18.1 Use the OSD menu

- Press [MENU] on the remote control or control panel to enter the setting menu.
- 2. Press [▶] or [◄] to the [Advanced] menu.
- 3. Press [▼] to the [Factory Reset].
- 4. Press [▶] or [◄] to select [Yes].
- 5. Press [ENTER] to activate.

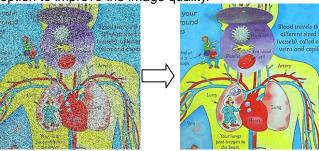
#### 8.18.2 Use Compound Key

 Use the remote control or control panel, and press [Enter + Auto Tune] simultaneously to restore the initial value.

# 8.19 I would like to reduce the image noise (Projector Type)

 This function enables Document Camera to automatically clear image noise. The noise is especially obvious when Document Camera is connected to a DLP projector. You can set the DLP projector to improve the image quality.

2. If there is special noise when VGA out is connected, please set DLP option to improve the image quality.



- Press [MENU] on the remote control or control panel to enter the setting menu.
- 4. Press [▶] or [◄] to the [Setting] menu.
- 5. Press [▼] to enter [Projector Type].
- 6. Press [▶] or [◄] to select [LCD/DLP].
- 7. Press [MENU] to exit.



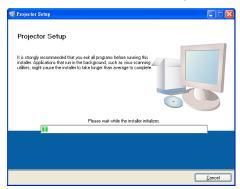
#### 8.20 I would like to control projector.

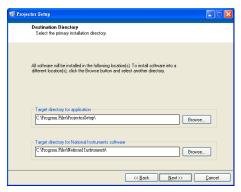
#### 8.20.1 Connecting to a computer

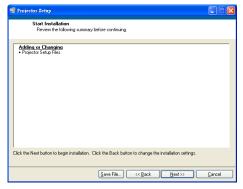
Connect PS750 to a computer, and for connecting method, refer to User Manual **4.8 Connecting to a Computer with RS232**.

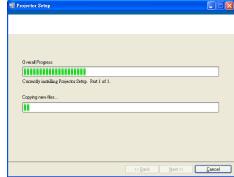
#### 8.20.2 Installing application software

- **8.20.2.1** Go to Lumens website: <a href="www.lumens.com.tw/goto.htm">www.lumens.com.tw/goto.htm</a> and download the software [Projector Control].
- **8.20.2.2** Extract the file and then click [Setup.exe] to install.
- **8.20.2.3** The installation wizard will guide you through the process. Please follow the on-screen instructions and press **[Next]** for the next step.





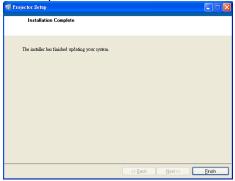






**8.20.2.4** When the installation is completed, press [Finish] to end the

installation procedure.

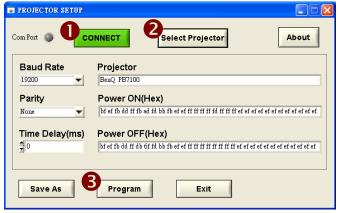


#### 8.20.3 Setting procedure

**8.20.3.1** Click[Start]/[Programs]/[Projector Setup]



- **8.20.3.2** When the procedure is started, a setting window will pop up.
- 8.20.3.3 Press [CONNECT] to set up the connection. [Com Port] lamp flashing green indicates a successful connection.

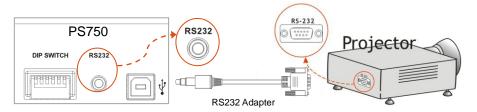


- **8.20.3.4** Press [Select Projector] to select the projector type and display information.
- **8.20.3.5** Press [**Program**] to switch PS750 settings.
- [Note] If any setting is modified, press [Save as] to set up a "\*.txt" file for setting storage.
- **8.20.3.6** When the setting is completed, press **[Exit]** to exit.



#### 8.20.4 Connecting to a projector

- **8.20.4.1** Remove the RS-232 cable from the computer.
- **8.20.4.2** Connect the RS-232 cable to the RS-232 port on the projector.



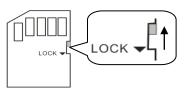
#### 8.20.5 Control of projector

- **8.20.5.1** Press [Projector ON] on the control panel to turn on the projector.
- **8.20.5.2** Press [Projector OFF] on the control panel to turn off the projector.

#### 8.21 Using a SD card

#### 8.21.1 Deactivate the write protect function (SD Lock)

If the write protect function of the SD card is activated, you will not be able to use the **Capture** function, although you can still read the files in it. Adjust the Lock of the SD card to deactivate the write protect function.



#### 8.21.2 Inserting a SD card

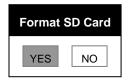
8.20.2.1 The screen will display [Copy to SD card] and ask if you would like to copy the files saved in the PS750 to a SD card.

Press [▶] or [◄] on the control panel to select.





8.20.2.2 The screen will display as follow, once you insert an unformatted SD card:



▶ Press [▶] or [◄] on the control panel to select.
<Note> The data previously saved on the SD card will be erased when it is formatting.

#### 8.21.3 Ejecting a SD card

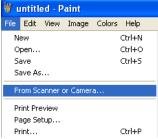
<Note> Turn the power off before ejecting the SD card to avoid damaging the SD card.

#### 8.22 Computer-related functions

Ensure that the USB cable is connected and the drivers are installed before using the computer-related functions. Refer to <a href="#">Chapter 4 Installation and Connections</a> in this user manual.

#### 8.22.1 I would like to insert a photo in MS-Paint

 Click [File/From Scanner or Camera] in MS-Paint shown as the bottom left figure.





2. Click [Get Picture] will capture the photos of live images and insert the files in use shown as top right figure.

#### 8.22.2 I would like to insert a photo in MS-Word

<Remark> For Windows Office 2003 or later versions, please use the function with OneNote.

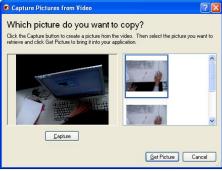
1. Click [Insert / Image / From Scanner or Camera] in *MS-Word*.



2. Select [Visual Presenter V2] and click [Custom Insert].



3. Click [Get Picture]. It will capture the photo of live image.



# 8.22.3 I would like to change the setting of the PS750 and then capture a photo in *MS-Word*

1. Click [Insert / Image / From Scanner or Camera] in MS-Word.

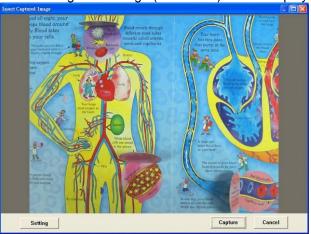




2. Select [Visual Presenter V2 TWAIN] and click [Custom Insert].



3. A window showing a live image (see below) will be displayed:



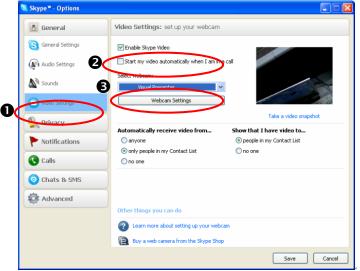
- 4. Press [Setting]
  - To control the PS750 via the Camera Settings interface. The operating procedure is the same with the **remote control** and **control panel** of the PS750. Refer to <u>PS750 User Manual Chapter 7</u> Control Panel / Remote Control and Setting Menu.
- 5. Press [Capture] to capture images in MS-Word.
- 6. Press [Cancel] to exit.



#### 8.22.4 I would like to set the PS750 as a webcam for Skype

The PS750 can be used as a webcam for teleconferencing software such as **Skype** or **MSN**. With Skype as an example, operating instructions are provided below:

- 1. Open **Skype** and enter [Tools] > [Options].
- 2. Select [Video Settings] > [webcam] > [Visual Presenter V2] and check Start my video automatically when I am in a call, as shown below.



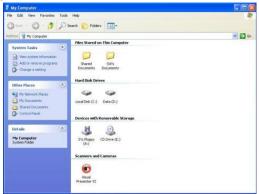
Start calling your contact. When both sides are connected, Skype will display the video screen.





#### 8.22.5 I would like to set the PS750 as a PC Camera

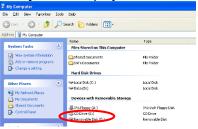
- Press [MENU] on the control panel or remote control to enter the setting menu.
- 2. Press [▶] or [◀] to the [Storage] menu.
- 3. Press [▼] to find [USB Transfer].
- 4. Press [▶] or [◀] to select [Camera].
- A window will be displayed, showing the [Visual Presenter V2], as shown below.



6. Click the [Visual Presenter V2].

#### 8.22.6 I would like to set the PS750 as a Removable Disc

- Press [MENU] on the control panel or remote control to enter the setting menu.
- 2. Press [▶] or [◄] to the [Storage] menu.
- 3. Press [▼] to find [USB Transfer].
- 4. Press [▶] or [◄] to select [Storage device].
- 5. Press [MENU] to exit.
- 6. A [Removable Disc] will be displayed.





<Remark> The Removable Disc will select SD card if a SD card has been inserted, but if a SD card has not been inserted, the Removable Disc is internal memory

<Note> Doing this will disable the [Capture] function. Suggest you return it to [Camera] mode after using this function. Please follow the 8.21.5 Steps  $1 \sim 5$ .

#### 8.22.7 I would like to connect Interactive Whiteboard

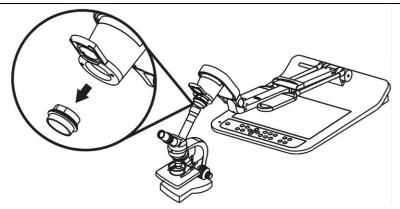
To connect an Interactive Whiteboard, please go to the SD card or Lumens website (<a href="http://www.lumens.com.tw/goto.htm">http://www.lumens.com.tw/goto.htm</a>) to download user manual for a specific brand.



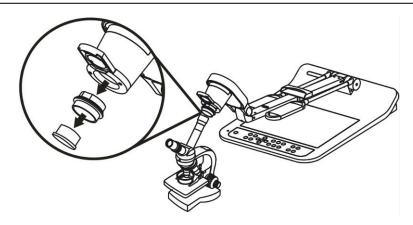
### **Chapter 9 Connecting to Microscope**

- 1 Mount the microscope adaptor (Optional accessory) onto the microscope. <Note> Please choose an appropriate microscope adapter. Microscope adapter accessories are applicable to eyepieces of Ø28mm, Ø31mm, Ø33mm, and Ø34mm.
- 2 The lens of PS750 connects with the microscope adapter.

If the eyepiece is Ø33mm or Ø34mm, only one Lumens microscope adapter is needed.



If the eyepiece is Ø28mm or Ø31mm, you need two microscope adapters. (1. The Lumens microscope adapter. 2. The microscope adapter suitable for the eyepiece size Ø28mm or Ø31mm).



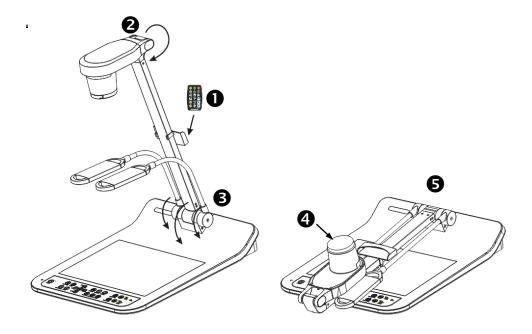
3 Select the [Microscope] Mode



- 3.1. If you use the **remote control** or the control panel
  - 3.1.1. Press [MENU] to enter the setting menu.
  - 3.1.2. Press [▶] or [◄] to the [Display].
  - 3.1.3. Press [▼] to select [Mode].
  - 3.1.4. Press [▶] or [◄] to the [Microscope].
- 4 If the image is not clear
  - 4.1. Please adjust the focus of microscope.
  - 4.2. Please press the **control panel** [AF] button to activate the auto focus.
- 5 Digital Zoom
  - 5.1. If you use the remote control or the control panel
    - 5.1.1. Press [MENU] to enter the setting menu.
    - 5.1.2. Press [▶] or [◄] to the [Display].
    - 5.1.3. Press [▼] to select [Digital Zoom].
    - 5.1.4. Press [▶] or [◄] to select [On].
    - 5.1.5. Press [Zoom +] / [Zoom -]
- <Note> Please reset to normal mode after using the microscope, otherwise, you are unable to use zoom in/out function.
  - 1. Press [MENU] on the **remote control** or **control panel** to enter the setting menu.
  - 2. Press [▶] or [◀] to the [Display].
  - 3. Press [▼] to select [Mode].
  - 4. Press [▶] or [◀] to the [Normal].

## **Chapter 10 Packing the Machine**

- 1. Put the remote control back to the holder.
- 2. Fold back the camera head to align with the arm.
- 3. Turn the two lamp arms and the arm of camera head down and adjust them to be parallel with the platform.
- 4. Put the lens cap on the camera head.
- 5. Finally, fold the machine as in the following figure.





## **Chapter 11 Troubleshooting**

This chapter describes problems you may encounter while using PS750. If you have questions, please refer to related chapters and follow all the suggested solutions. If the problem still occurred, please contact our distributors or service center.

No.	Issues	Solutions
1	Boot without power	Make sure you have plugged in the power cord.
2	No image output from the PS750	1. Check the power.  2. Check the connection, Refer to PS750 User Manual Chapter 4 Installation and Connections  3. Check the Descriptions of major functions 8.3 I would like to switch image sources.  4. Check the settings for the source of the projector. For the appropriate input selection of the projector, refer to
	Unable to focus	the projectors user manual.  5. Check if DIP Switch is properly set. Refer to PS750 User  Manual Chapter 6 DIP Switch Settings for related settings.
3	Unable to locus	Probably the document is too close. Press [Zoom -] on the remote control or control panel. Or pull away the distance between document and lens, then press [AF].
4	The image is incomplete	Check the Auto Image setting of your projector. Please refer to the user manual of the projector.
5	Forget the password for turning on	Please contact your distributor or the service center.
6	Lumens Document Camera, Lumens™ and other applications cannot be used simultaneously	Lumens Document Camera, Lumens™ and other applications cannot be executed simultaneously. Please close the currently running applications and then execute the application to be used.
7	When the unit is turned on, the auxiliary floodlight	Please make sure the arm lamp is set to [OFF]. For the switch-on or -off of arm lamp, refer to PS750 User Manual Chapter 8 Descriptions of major functions 8.8 I would
Щ	auxilial y 1100uligitt	Chapter o Descriptions of major functions 6.0 ( Would

	do not light.	like to turn on / off the lamp.
8	PS750 fails to store images or react.	<ol> <li>Please make sure whether the stored data has reached the maximum storage capacity of PS750 unit or SD card.</li> <li>Please make sure if SD card is adjusted to the data protection mode (Lock). Suggest you take out the SD card from PS750, and then adjust the SD card to the mode of Unlock.</li> <li>Please make sure if the Capture function is set to Continuous mode or the time for capture is set to be long. For the related setting, refer to PS750 User</li> </ol>
		Manual Chapter 8 Descriptions of major functions
9	The images	8.9 I would like to capture images.  Press [AUTO TUNE] to automatically adjust to the optimal
	outputted from	brightness and focal length.
	PS750 are too	
	bright, dark or	
	vague.	
10	The images	Please refer to the manual (Attachment 1), confirm the
	outputted are not	voltage frequency and reset it according to Chapter 6 DIP
	clear, and the moire	Switch Settings
	appears.	



205 Westwood Ave, Long Branch, NJ 07740 Phone: 866-94 BOARDS (26273) / (732)-222-1511 Fax: (732)-222-7088 | E-mail: sales@touchboards.com



### **Attachment 1**

#### World voltage & frequency

Region/	Country	Ţ	Region/	Country	Ţ	Region/	Country (Country	Ţ
Chinese	English	Frequency	Chinese	English	Frequency	Chinese	English	Frequency
阿 富 汗	Ü	50	大 陸	China	50	關島	Guam	60
阿爾及利亞	J	50	哥倫比亞	Colombia	60	石 榴 島	Grenada	50
安 哥 拉	0	50	剛果	Congo	50	瓜地馬拉	Guatemala	60
安 地 瓜		50	哥斯大黎加	Costa Rica	60	幾內亞	Guinea	50
阿 根 廷	J	50	古 巴	Cuba	60	蓋亞納	Gayana	50
澳 洲	Australia	50	塞普路斯	Cyprus	50	海 地	Haiti	60
澳 地 利	Austria	50	捷  克	Czechoslov akia	50	夏威夷	Hawaii	60
亞 述 爾	Azores	50	達荷美	Dahomey	50	宏都拉斯	Honduras	60
巴哈馬	Bahamas	60	丹 麥	Den mark	50	香 港	Hong Kong	50
巴 林	Bahrain	60	多明尼加	Dominican	60	匈牙利	Hungary	50
孟加拉	Bangladesh	50	杜 貝	Dubai	50	冰 島	Ice land	50
巴 貝 多	Babados	50	厄瓜多爾	Ecuador	60	印 度	India	50
比 利 時	Belgium	50	埃 及	Egypt	50	印 尼	Indonesin	50
百 慕 達	Bermuda	60	薩爾瓦多	El Salvador	60	伊 朗	Iran	50
玻利維亞	Bolivia	50	赤道幾內亞	Equatorial Guinea	50	伊 拉 克	Iraq	50
波 札 那		50	衣索匹亞	Ethiopia	50	愛 爾 蘭	Ireland	50
巴 西	Brazii	50 60	法羅群島	Faeroe Island	50	曼 島	Isle of Man	50
保加利亞	Bulgaria	50	裴 濟	Fiji	50	以 色 列	Israel	50
緬 甸	Burma	50	芬 蘭	Finland	50	義 大 利	Italy	50
蒲 隆 地	Burundi	50	法 國	France	50	象牙海岸	Ivory Coast	50
高 棉	Cambodia	50	蓋亞那	French Guiana	50	牙 買 加	Jamaica	50
喀 麥 隆	Cameroon	50	加彭	Gabon	50	日 本	Japan	50 60
加拿大	Canada	60	甘 比 亞	Gambia	50	約 旦	Jordan	50
康那利群島	CanaryIslan d	50	德 國	Germany	50	肯 亞	Kenya	50
中非共和國	Africa Rep.	50	迦 納	Ghana	50	韓國	Korea	60
錫 蘭	Ceylon	50	直布羅陀	Gibraltar	50	科 威 特	Kuwait	50
查 德		50	大不列顛	Great Britain	50	黎巴嫩	Lebanon	50
海峽群島	Channel Island	50	希 臘	Greece	50	賴索托	Lesotho	50



Region	Country (Country	Fn	Region/	Country	F	Region/	Country	Ε̈́
Chinese	English	Frequency	Chinese	English	Frequency	Chinese	English	Frequency
智 利	Chile	50	格陸蘭	Greenland	50	賴比瑞亞	Liberia	60
利 比 亞	Libya	50	阿 曼	Oman	50	敘 利 亞	Syria	50
盧 森 堡	Luxembourg	50	巴基斯坦	Pakistan	50	大 溪 地	Tahiti	60
澳門	Macao	50	巴拿馬	Panama	60	中華民國	R.O.C. Taiwan	60
馬得拉群島	Madeiral	50	巴 拉 奎	Paraguay	50	坦尙尼亞	Tanzania	50
馬約卡島	Majokca Island	50	秘魯	Peru	60	泰 國	Thailand	50
馬拉加西	Malagasy	50	菲 律 賓	Philippines	60	多哥共和國	Togo Rep.of	50
馬 拉 威	Malawi	50	波 蘭	Poland	50	東加	Tonga	50
馬來西亞	Malaysia	50	葡萄牙	Portugal	"	千 里 達	Trinidad	60
馬 利	Mali Rep.	50	波多黎各	Puerto Rico	60	他巴哥	Tobago	60
馬 爾 他	Malta	50	科 托	Qatar	50	突尼西亞	Tunisia	50
馬丁尼克島	Martinique	50	羅德西亞	Rhodesia	50	土 耳 其	Turkey	50
茅里塔尼亞	Mauritania	50	羅馬尼亞	Romania	50	烏 干 達	Uganda	50
模里西斯	Mauritius	50	盧 安 達	Rwanda	50	美 國	USA.	60
墨西哥	Mexico	60	沙 烏 地 阿 拉 伯	Saudi Arabia	50 60	蘇聯	USSR	50
摩 那 哥	Monaco	50	蘇格蘭	Scotland	50	英 國	United Kingdom	50
蒙特色納島	Montserrat	60	塞內加爾	Senegal	50	上 伏 塔	Upper Volta	50
摩洛哥	Morocco	50	獅子山	Sierra Leone	50	烏 拉 奎	Uruguay	50
莫桑鼻克	Mozambique	50	新 加 坡	Singapore	50	委內瑞拉	Venezuela	60
尼泊爾	Nepal	50	索馬利亞	Somalia	50	越南	Viet-Nam	50
荷爾	Netherlands	50	南非共和國	South Africa Rep.	50	維爾京群島	Virgin Island	60
新蘇格蘭	New Caledonia	50	西 班 牙	Spain	50	西薩摩亞	Western Samoa	50
紐 西 蘭	New Zealand	50	斯里蘭卡	Sri Lanka	50	葉門亞丁	Yeman(Aden)	50
尼加拉瓜	Nicaragua	60	蘇 丹	Sudan	50	葉門阿拉伯	Yemen(Arab)	50
尼日	Niger	50	蘇利南	Surinam	60	南斯拉夫	Yugoslavia	50
奈 及 利 亞	Nigeria	50	史瓦濟蘭	Swaziland	50	薩伊共和國	Zaire Rep. of	50
挪  威	Norway	50	瑞典	Sweden	50	尚 比 亞	Zambia	50
琉 球	Okinawa	60	瑞士	Switzerland	50			

