

# INTERACTIVE FUNCTION MANUAL

SPE-400W-I-P



**Speechi**

Interactive solutions

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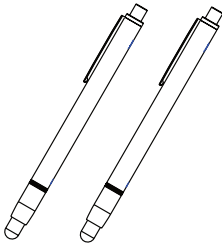
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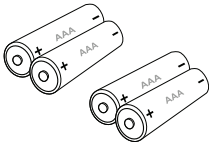
Contents of the Accessory

Please make sure that following items are included in the Accessory Bag. If any items are missing, contact your dealer.

1. Light Pen



2. Batteries (AAA)



## System Requirements-Windows

Interactive function is provided by "LightPen-Dual" software.

To ensure the interactive function work properly, please check your computer system to see if it meets the following conditions.

### TouchCalibration

System Requirements	
<b>OS Required</b>	Microsoft Windows XP (SP3)/Windows 7 (32bit/64bit)/Windows 8/ Windows 8.1 (. NET Framework 4.0 must be installed)
<b>Processor Type</b>	Intel® Core™ i3 or above
<b>RAM</b>	2GB above

### LightPen-Dual

System Requirements	
<b>OS Required</b>	Microsoft Windows XP(SP2)(32bit) / Vista (32bit)/Windows 7 (32bit/64bit)
<b>Processor Type</b>	Intel® Core™2 Duo 2.0GHz or above (dedicated GPU is recommended)
<b>RAM</b>	2GB above

## System Requirements-Mac

Interactive function is provided by "LightPen3" software.

To ensure the interactive function work properly, please check your computer system to see if it meets the following conditions.

### TouchCalibration

System Requirements	
<b>OS Required</b>	Mac OS X v10.5 above
<b>Processor Type</b>	Intel® Core™ i3 or above
<b>RAM</b>	2GB above

### LightPen3

System Requirements	
<b>OS Required</b>	Mac OS X v10.5 above
<b>Processor Type</b>	Intel processeor
<b>RAM</b>	512 MB above



## Accessories Introduction

### Function Key on the "Light Pen"



Back side



Front side

Pen tip with touch sensor

#### How to use this

While the tip of pen is pressed to the hard screen, IR is emitted from it and the projector detects the position of it.

- 1) Position the tip of the pen on the screen.
- 2) Press and hold the tip of the pen to the hard screen and you can draw a line as a pen.



#### CAUTION

**Touch sensor is located in the tip of the pen therefore, the Battery is consumed if the tip is pressed . If the pen is not used, please store it in off position of Power switch to avoid the consumption of the battery.**

**(Please confirm the "off position" as below; LED lamp of the pen tip does not light when the tip is pressed.)**

Power switch

# Operation Guide for Windows & Mac

## 1. Install Driver

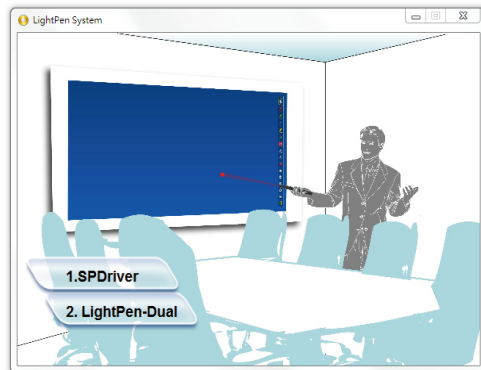
- Windows

Step 1. Insert the "Owner's Manual" CD-ROM into the CD drive.

Step 2. Open the "LightPen Software for Windows" folder in the CD-ROM.

Step 3. Double click " Setup.exe" by mouse.

And then the window will appear as below.

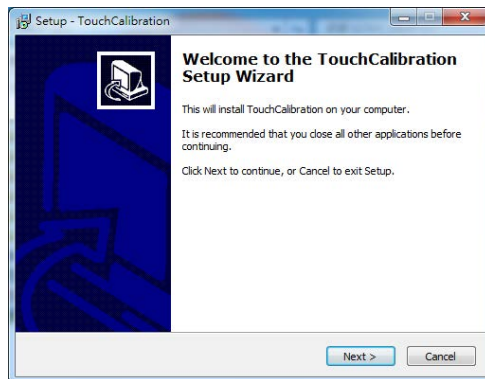


Step 4.

(1) Click " SPDriver" by mouse.

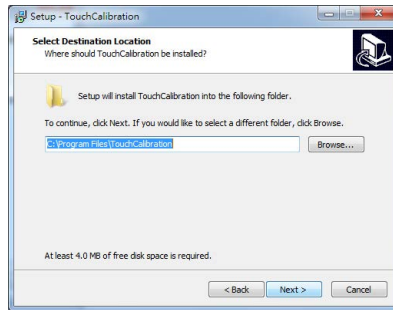
And then "Setup Wizard" window will appear as below.

Click "Next" to install.

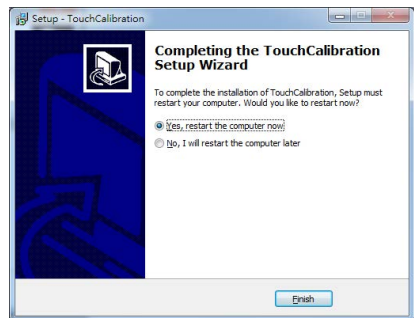
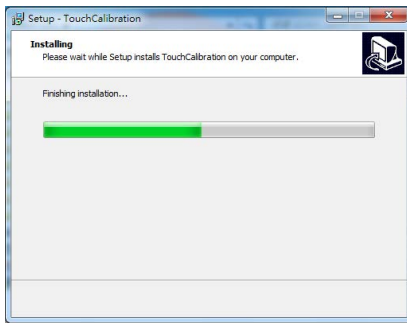


# Operation Guide for Windows & Mac

(2) You can choose to install folder depend on your requirements, or use the default folder. Then click "Next" to continue.



(3) Please wait for a while for the installation is finished.



## ● Driver Installation- Mac

Step 1. Insert the "Owner's Manual" CD-ROM into the CD drive.

Step 2. Open the "LightPen Software for Mac" folder in the CD-ROM and copy "mac.zip" to the disk.

Step 3. Double click and move SPDriver ICON to computer screen and execute it.

2. Utility icon indicator on the task bar as below:



..... Touch Mode.



..... Pen Mode.



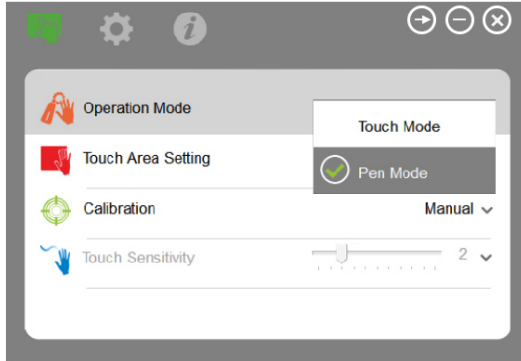
..... Disconnected.

\* Default is Touch Mode.  
Please change to Pen Mode.

# Operation Guide for Windows & Mac

## 3. Operation Mode

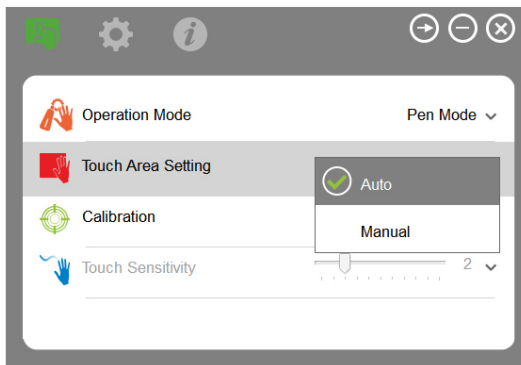
Default is Touch Mode. Please Click "Operation Mode" from "Touch Mode" to "Pen Mode". Windows 7 and Windows 8 operating system support multi-point touch control.



*\*Only single-point touch is available for Windows XP and Mac OS X.*

## 4. Touch Area Setting

### 4.1 Select Auto Touch Area Setting



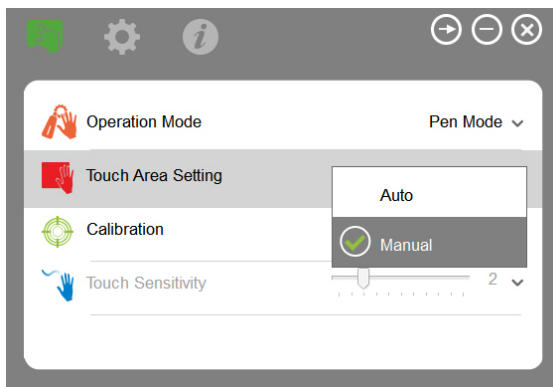
Note:

- Quit all software application
- Reduce ambient light
- Do not obstruct or shake lens during Touch Area Setting
- Check if projection image is clear. If not, adjust focus to sharpen the image

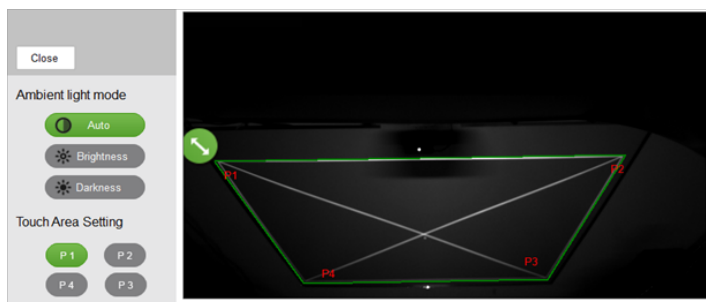
If fail message pops up, switch to Manual Touch Area Setting.

# Operation Guide for Windows & Mac

## 4.2 Select Manual Touch Area Setting:



(1) After the camera captures the projection image, a Touch Area window will pop up. If the captured image is not clear enough, please re-select “Ambient light mode selection” from “Auto” to “Bright” or “Dim” according to actual ambient light condition. Then press “Preview” and the camera will re-capture the image.



### (2) Touch Area Boundary Fine-tuning

Step 1: Click on P1, use mouse to drag P1 to upper left corner. Align adjustable green zone with projected white frame.

Step 2: Adjust P2 to P4 accordingly, adjustable green zone should completely overlap with projected white frame.

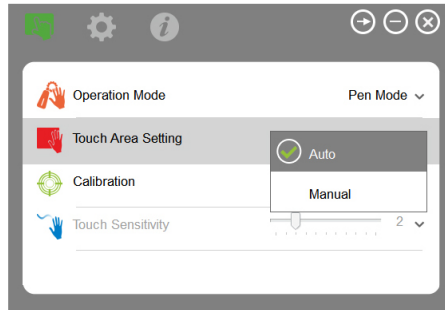
Step 3: Finally, check again if all the green frame overlap completely with projected white frame. If not, fine-adjust again.

(3) When the Touch Area is correctly located, click to “Exit.”

# Operation Guide for Windows & Mac

## 5. Calibration

### 5.1 Select Auto Calibration



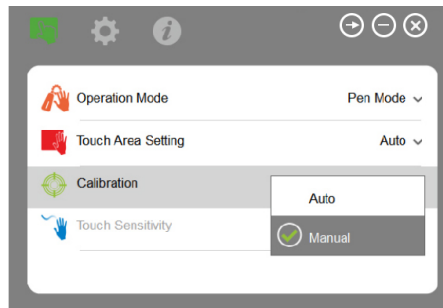
Note:

If the fail message pops up, follow below steps to trouble-shoot and do Auto Calibration again.

- Close all software application
- Reduce ambient light
- Do not obstruct or shake lens during calibration
- Check if projection image is clear. If not, adjust focus to sharpen the image

If the Auto Calibration fail message still pops up on screen, switch to Manual Calibration.

### 5.2 Select Manual Calibration



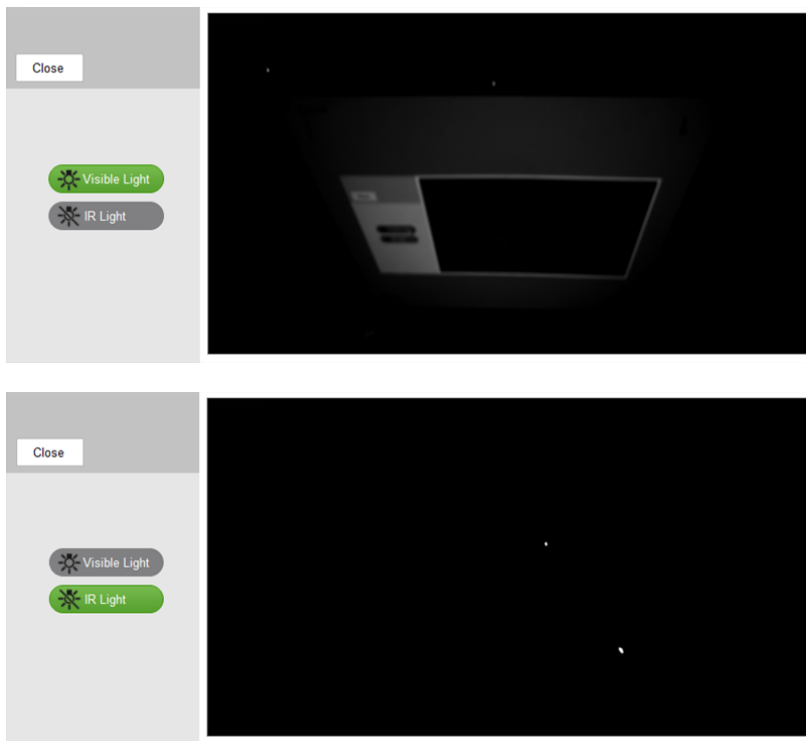
*Note: Manual Calibration is suggested for better accuracy.*

*Note: Touch Sensitivity is not adjustable under Pen Mode.*

## Operation Guide for Windows & Mac

### 6. Trouble-shooting Viewer

Sometimes infrared red light (IR light) from ambient light may interfere with touch performance. Trouble-shooting Viewer shows real time image for debug purpose. Switch between Visible Light/IR Light to remove interference on whiteboard/from ambient observed via Trouble-shooting Viewer.



Note: Touch function is disabled under Trouble-shooting Viewer.

# Operation Guide for Windows OS \_LightPen-Dual

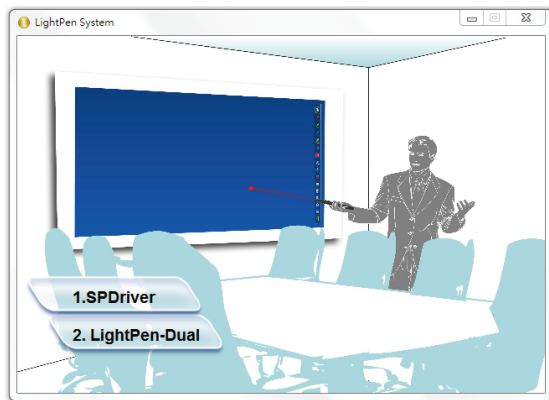
## 1. LightPen Software Installation

Step 1. Insert the "Owner's Manual" CD-ROM into the CD drive.

Step 2. Open the "LightPen Software for Windows" folder in the CD-ROM.

Step 3. Double click " Setup.exe" by mouse.

And then the window will appear as below.

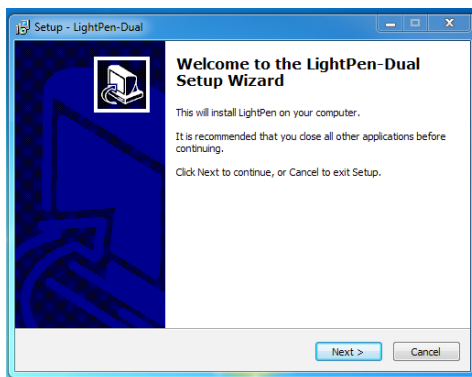


Step 4.

(1) click " LightPen-Dual" by mouse.

And then "Setup Wizard" window will appear as below.

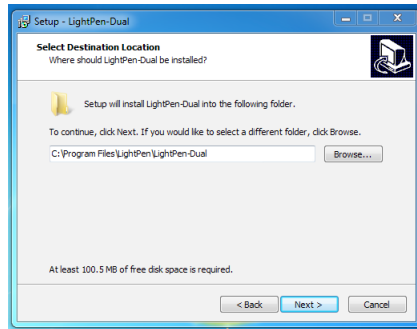
Click "Next" to install.



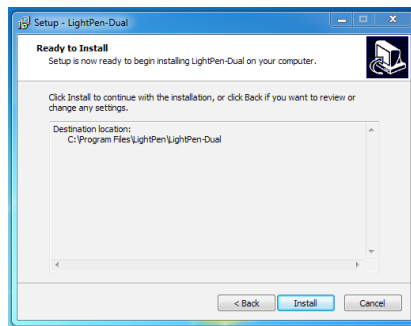


# Operation Guide for Windows OS \_LightPen-Dual

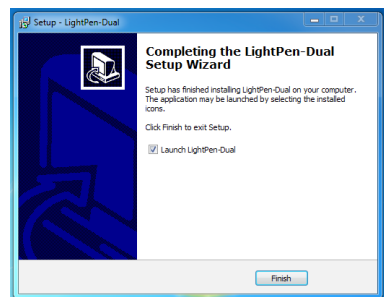
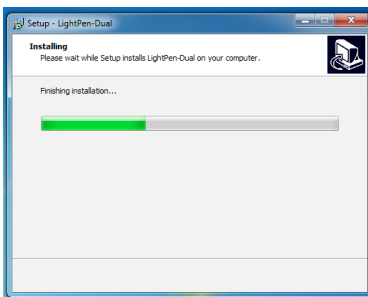
(2) You can choose to install folder depend on your requirements, or use the default folder. Then click "Next" to continue.



(3) Confirm the information listed and select "Install".



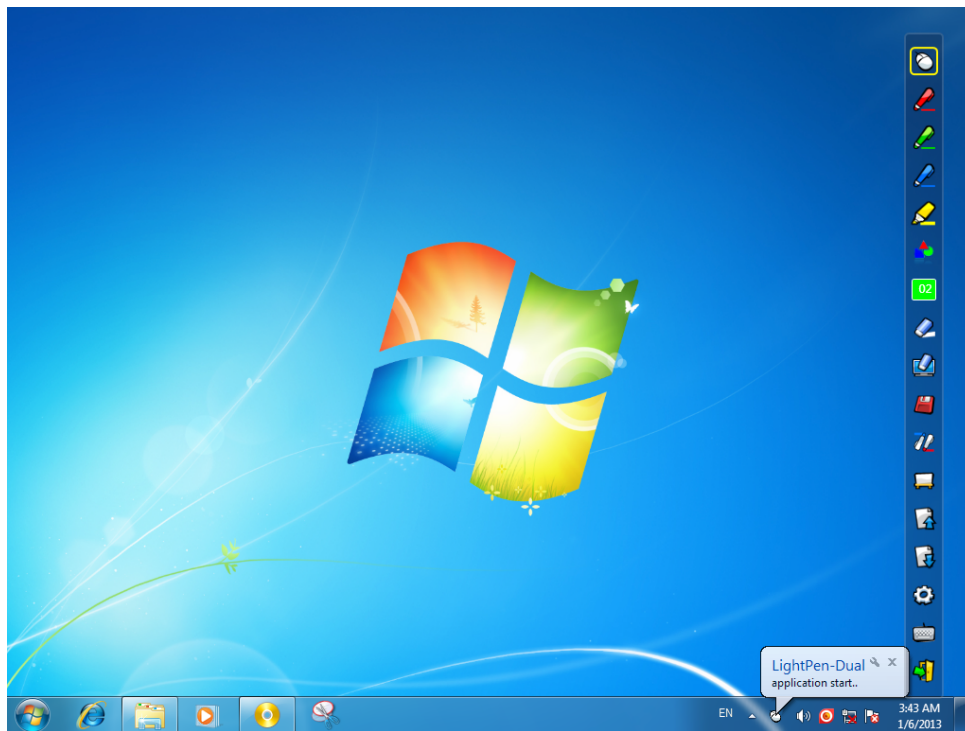
(4) Please wait for a while for the installation. Installation is finished.



# Operation Guide for Windows OS \_LightPen-Dual


















## 2. LightPen-Dual Function

When you complete the installation of LightPen-Dual and from "Start Menu/LightPen/LightPen-Dual" to start it, you see the tool bar in the right side as shown below.



# Operation Guide for Windows OS \_LightPen-Dual


## 2.1. Function of each icon in the Tool bar

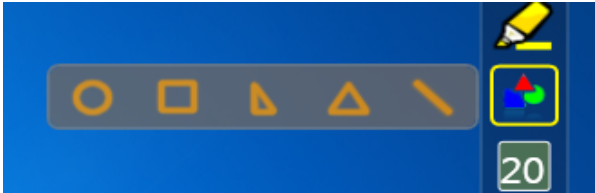
Icon		Description
	Mouse	Change function to Computer Mouse.
	Red pen	Change function to red pen.
	Green pen	Change function to green pen.
	Blue pen	Change function to blue pen.
	Marker pen	Change function to marker pen.
	Drawing tool	Draw a circle, a square, a triangle or a straight line.
	Fineness and color of pen	Select the fineness and color of pen.
	Eraser	Erase drawing.
	Clean all	Erase drawing on the screen all at once.
	Save file	Save the current page into file in computer.
	Dual Pen	<Full Screen Mode> / <Split Screen Mode> support two pens writing at the same time
	White Board	Change function to white board.
	Page up	Go to last page.
	Page down	Go to next page.
	Edit tool	Edit drawing.
	Keyboard	On screen keyboard.
	Exit	Exit the application.

# Operation Guide for Windows OS \_LightPen-Dual


## 2.2 Advanced function in Tool bar



### (1) Drawing Tool

Select , then Drawing Tool function menu will be shown on the screen as below. Please select the icon you want to use.



### (2) Dual Pen

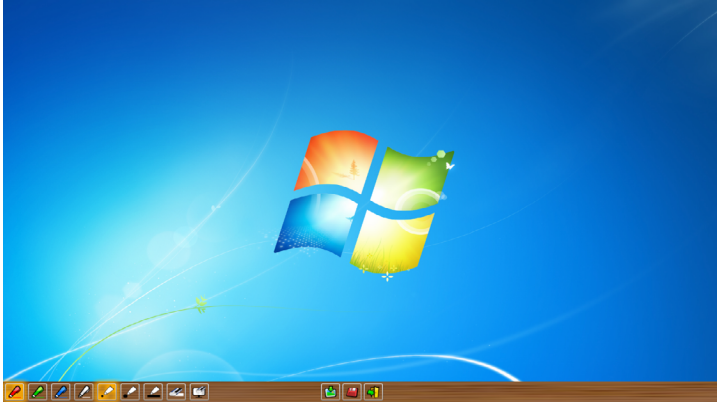
Select , then Dual Pen Mode setting menu will be shown on the screen as below. Please choose the screen mode to use.

Icon	Description
	Use two pens at the same time on full screen by same setting
	Use two pens at the same time on two split screen by different setting



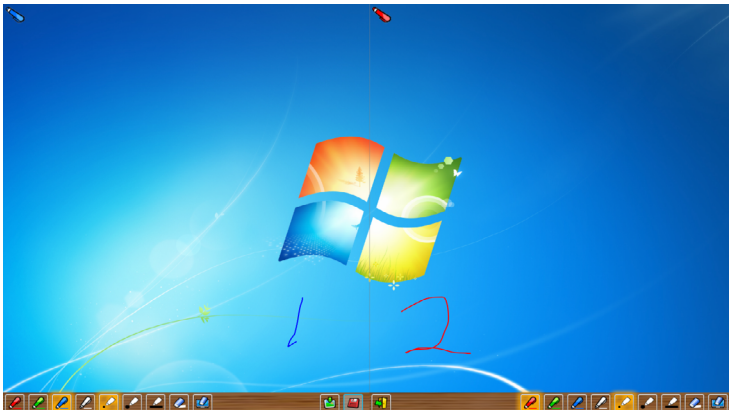
## (2-1) <Full Screen Mode>

Use two pens at the same time on full screen by same setting.















## <Split Screen Mode>

Use two pens at the same time on two split screen by different setting.








## Operation Guide for Windows OS \_LightPen-Dual


(2-2)The description of two pens function

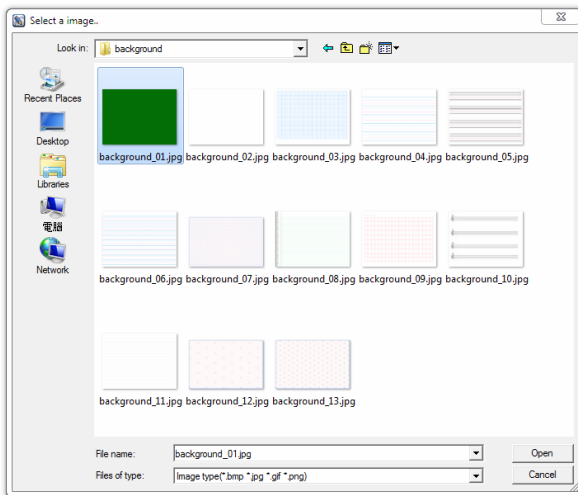
Icon		Description
	Red pen	Change function to red pen.
	Green pen	Change function to green pen.
	Blue pen	Change function to blue pen.
	White pen	Change function to white pen.
	Thin round pen	Draw with a thin round script.
	Thick round pen	Draw with a thick round script.
	Thick angle pen	Draw with an angle script.
	Eraser	Erase drawing.
	Clean all	Erase drawing on the screen all at once.
	Insert Image	Insert an image as the background.
	Save file	Save the current page into file in computer.
	Exit	Exit the application.


## Operation Guide for Windows OS \_LightPen-Dual

### (3) Whiteboard Mode

Select  screen will change to white color background. Original Page up  and Page down  function icon on Toolbar also change to  import background icon and  import whiteboard icon.

Select , you can see the below interface. You can select any picture you want to be used on background.













Select , background will turn to White board mode.

If you want to exit White board mode, just click  again.

## Operation Guide for Windows OS \_LightPen-Dual

### (4). Edit Tool

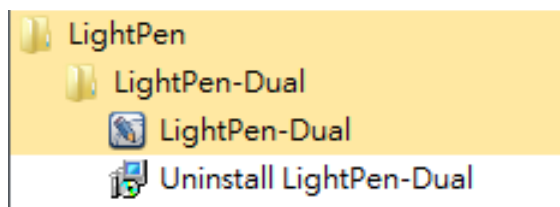
Select , edit tool bar is shown as blow. Please select the function you want to use.

Icon	Description
	Select drawing line as an object. An object can enlarge, decrease, or move.
	Rotate the drawing object you choice.
	Print the current page you are seeing.
	Undo the last operation.
	Redo the last operation.
	Spotlight function.
	Curtain function.
	change the vertical toolbar to a horizontal toolbar.
	switch the toolbar position to the right/left side.



### 2.3 How to execute LightPen-Dual software again

Execute the driver from "Start Menu / LightPen / LightPen-Dual / LightPen-Dual".



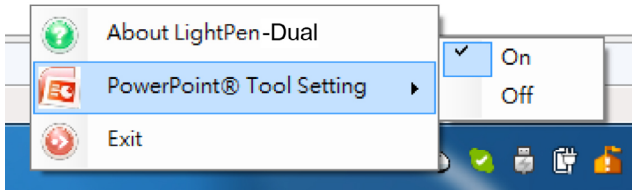


# Operation Guide for Windows OS \_LightPen-Dual

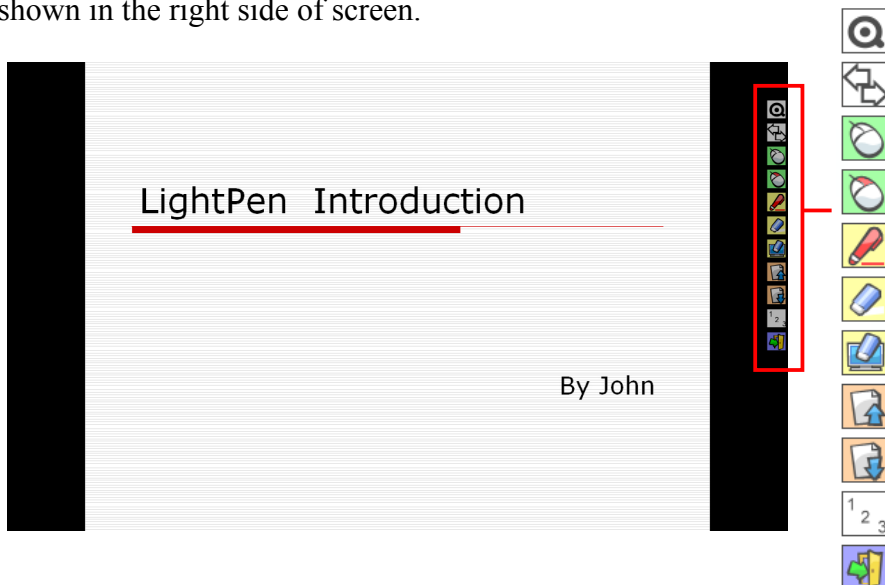
## 2.4 PowerPoint® Tool

This function can be executed by LightPen-Dual.

\*The PowerPoint® Tool does not support Microsoft Office PowerPoint® 2002.\*














If you click mouse icon on the task bar and select "PowerPoint® Tool setting" as "ON", when you use PowerPoint® and show your PowerPoint® file as "Presentation mode", PowerPoint® tool will be shown in the right side of screen.



When you exit "Presentation mode", PowerPoint® tool will be closed automatically.

## Operation Guide for Windows OS \_LightPen-Dual

### (1)Function of each icon in PowerPoint® Tool bar

Icon	Description
	Make toolbar as a small icon.
	Change PowerPoint® Toolbar to another side.
	Change function to Computer Mouse.
	Change function to Computer Mouse Right Key.
	Change function to red pen.
	Erase drawing.
	Erase drawing on the screen all at once.
	Go to last page.
	Go to next page.
	Select page.
	Exit Presentation Mode.

# Operation Guide for Mac OS\_LightPen3

Interactive function is provided by "LightPen3" software

## 1. LightPen3 Installation

Step 1. Insert the "Owner's Manual" CD-ROM into the CD drive.

Step 2. Open the "LightPen Software for Mac" folder in the CD-ROM and copy "LightPen3.zip" to the disk.

Step 3. Double click and move LightPen3 ICON to computer screen and execute it.

## 2. How To Use Interactive Function in LightPen3

















### 2.1 LightPen3 Function

When you complete the installation of LightPen3 and start it, you see the tool bar in the right side as shown below.



## Operation Guide for Mac OS \_LightPen3


### 2.2 Function of each icon in the Tool bar

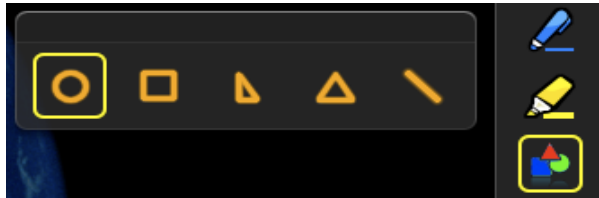
Icon		Description
	Mouse	Change function to Computer Mouse.
	Red pen	Change function to red pen.
	Green pen	Change function to green pen.
	Blue pen	Change function to blue pen.
	Marker pen	Change function to marker pen.
	Drawing tool	Draw a circle, a square, a triangle or a straight line.
	Fineness and color of pen	Select the fineness and color of pen.
	Eraser	Erase drawing.
	Clean all	Erase drawing on the screen all at once.
	Save file	Save the current page into file in computer.
	White Board	Change function to white board.
	Page up	Go to last page.
	Page down	Go to next page.
	Edit tool	Edit drawing.
	Keyboard	On screen keyboard.
	Exit	Exit the application.

# Operation Guide for Mac OS\_LightPen3






## 2.3 Advanced function in Tool bar


### (1) Drawing Tool

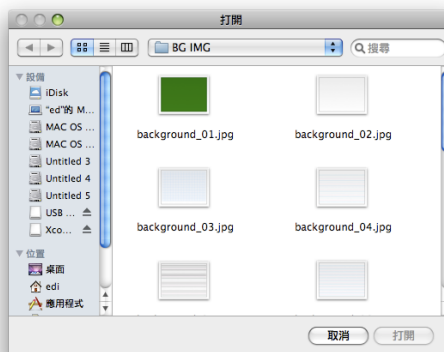
Select , then Drawing Tool function menu will be shown on the screen as below. Please select the icon you want to use.




### (2) Whiteboard Mode

Select , screen will change to white color background. Original Page up  and Page down  function icon on Toolbar also change to  import background icon and  import whiteboard icon.

i. Select , you can see the below interface. You can select any picture you want to be used on background.









## Operation Guide for Mac OS\_LightPen3

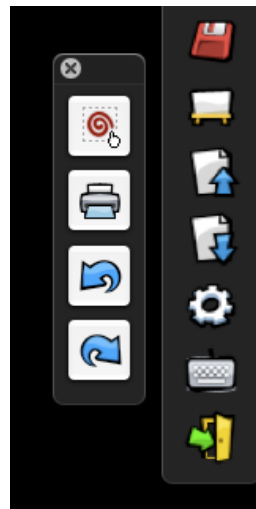
ii. Select , background will turn to White board mode.

If you want to exit White board mode, just click  again.

### (3) Edit Tool

Select , edit tool bar is shown as blow. Please select the function you want to use.

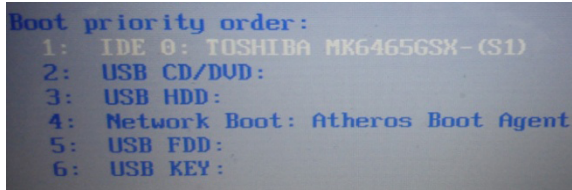
Icon	Description
	Select drawing line as an object. An object can enlarge, decrease, rotate, delete or move .
	Rotate the drawing object you choice.
	Print the current page you are seeing.
	Undo the last operation.
	Redo the last operation.



# Troubleshooting

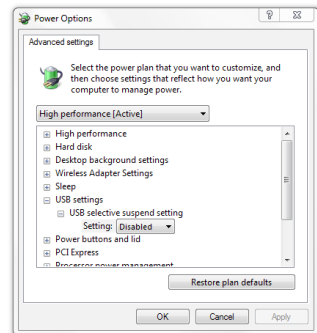
## 1. Q: Why cannot the PC boot when the USB cable which connects PC and projector is already plugged in?

- A: 1. Unplug USB cable from PC; or  
2. Go to BIOS setup page of PC and modify the “Boot priority order.”  
Choose Hard disk as top priority, save the change and restart PC.



## 2. Q: What to do when Windows system cannot identify the USB device?

- A: 1. Unplug/re-plug in the USB cable and check again.  
2. Switch to another USB port and check again.  
3. Restart your computer and check again.  
4. Go to Power Options in Control Panel, check USB selective suspend settings status in USB settings under Advance Settings. Switch to “Disabled”.



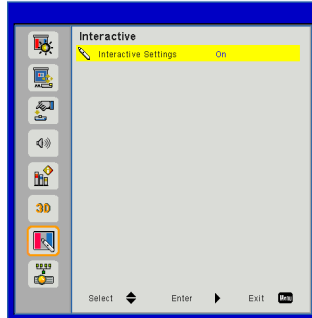
5. Go to official website of the laptop/PC manufacturer, and update USB driver to latest version.  
6. Use the USB cable included with your projector and check again. If an USB extension is needed, please contact your distributor.  
7. The USB port of your computer maybe not working. Please contact your IT staff.

# Troubleshooting

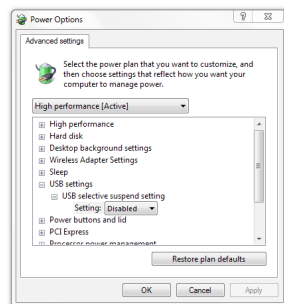
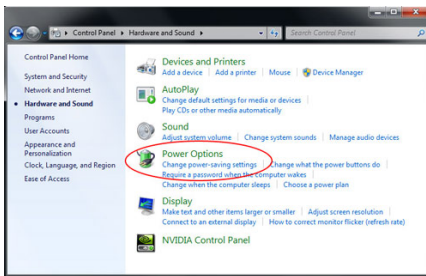
## 3. Q: Why utility icon ( ) is red, not green ( )?

A: Red icon indicates fail connection, this may be caused by following:

1. Check if interactive function is enabled via OSD selection



2. Unplug/re-plug in the USB cable and check again.
3. Switch to another USB port and check again.
4. Restart your computer and check again.
5. Go to Power Options in Control Panel; check USB selective suspend settings status in USB settings under Advance Settings. Switch to “Disabled”.



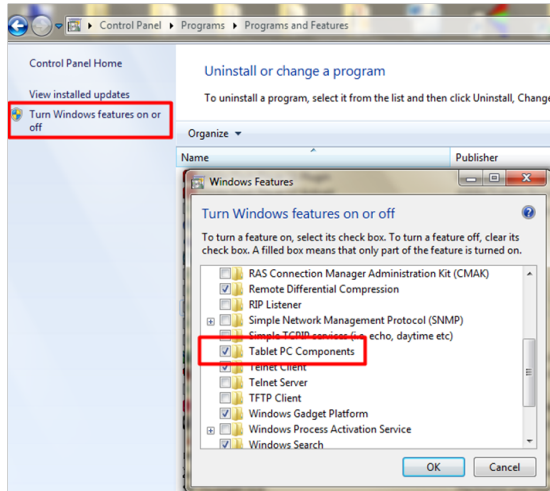
6. Go to official website of the laptop/PC manufacturer, and update USB driver to latest version.
7. Go to official website of the laptop/PC manufacturer, and update BIOS driver to latest version.
8. Use the USB cable included with your projector and check again.  
If an USB extension is needed, please contact your distributor.
9. The USB port of your computer maybe not working. Please contact your IT staff.



## Troubleshooting

### 4. Q: What to do when there is only single touch point?

- A: 1. Re-plug USB cable from PC.  
2. Go to “Control Panel” and make sure “Tablet PC Components” is selected.



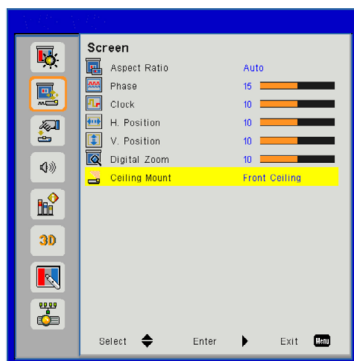
### 5. Q: When should Calibration and Touch Area Setting be done?

- A: Please perform Calibration and Touch Area setting during first installation. If projector or whiteboard is moved, Touch Area Setting and Calibration should be performed again.
- When Laptop/PC resolution is changed, calibrate again.
  - For better accuracy, please do Manual Calibration.
  - If an overlarge offset is observed, please perform Manual Calibration and see "Calibration"(see page 10) for troubleshooting.

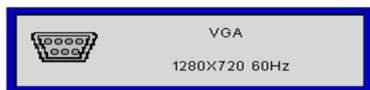
## Troubleshooting

### 6. Q: What to do when Auto Calibration and Auto Touch Area Setting both failed?

A: 1. Check “Ceiling Mount” OSD setting first. The interactive function supports Ceiling Mode only



2. When projector OSD message is shown, this may result failure to Auto Calibration and Auto Touch Area Setting. Please wait until OSD message is gone before performing Auto Calibration and Auto Touch Area Setting.



3. Please follow below trouble-shooting steps to perform Auto Calibration and Auto Touch Area Setting again.
- Quit all software application
  - Reduce ambient light
  - Do not obstruct or shake lens during Calibration
  - Check if projection image is clear. If not, adjust focus to sharpen the image.
  - If the “Auto Touch Area Setting failed” or "Auto Calibration failed" message pops up on screen again, please switch to Manual Mode to do Touch Area Setting and Calibration.

## Troubleshooting

4. Please check Projector Lamp Power Mode selection. Lower lamp brightness (ECO mode) may affect both Auto Touch Area Setting and Auto Calibration. Please switch to Normal mode to complete Touch Area Setting and Calibration.



5. Please check Projector Color Mode selection. To ensure accuracy of both Auto Touch Area Setting and Auto Calibration, it is suggested to switch Color mode to Bright Mode.



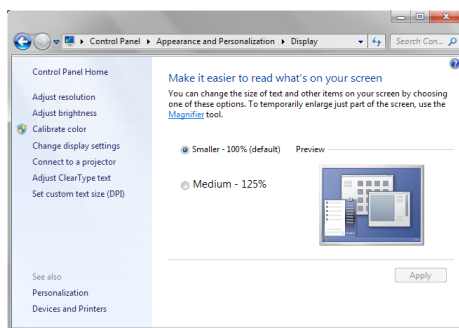
### 7. Q: What to do when the mouse cursor ( ) flashes or jumps on screen, or when Touch function does not work well at certain projection area?

- A: 1. Check if there is strong light shown on the whiteboard. If yes, turn off the light.
2. Check if there is any foreign object on the whiteboard. If yes, remove the object.
3. Refer to Touch Area Setting for detailed procedures, check if Manual Touch Area boundary is located properly.

### 8. Q: What to do when Touch function is not accurate?

- A: Touch accuracy may be impacted when Windows default display setting under Windows has been changed.

1. Go to the setting page <Start menu/Control Panel/Appearance and Personalization>



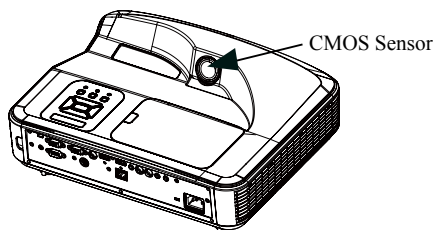
2. Select “Smaller - 100%(Default)” and click “Apply”.

## Troubleshooting

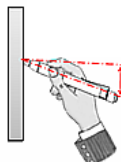
### 9. Q: Why I cannot execute calibration on the circle target mark?

**A:** (1) Please check if "Pointer" or "Light Pen" works:

- (1-1) Please check if "Pointer" or "Pen" battery is low or battery cap is loose.
- (1-2) When using "Pointer" or "LightPen", be sure to locate the tip of the "Pointer" or "LightPen" in the site of the CMOS sensor in front of the projector. If the sensor cannot see it, the Interactive system does not work.



**The writing should be avoided in the shadows.**



**Using Light pen to maintain 25° or above with projection screen.**

- (2) The ambient light may be too strong. Take the light out of the site of the CMOS sensor.

Strong ambient light is usually caused by the following:

- (2-1) Sunlight through the windows near the screen.
- (2-2) Light source working close to the sensor or the screen.