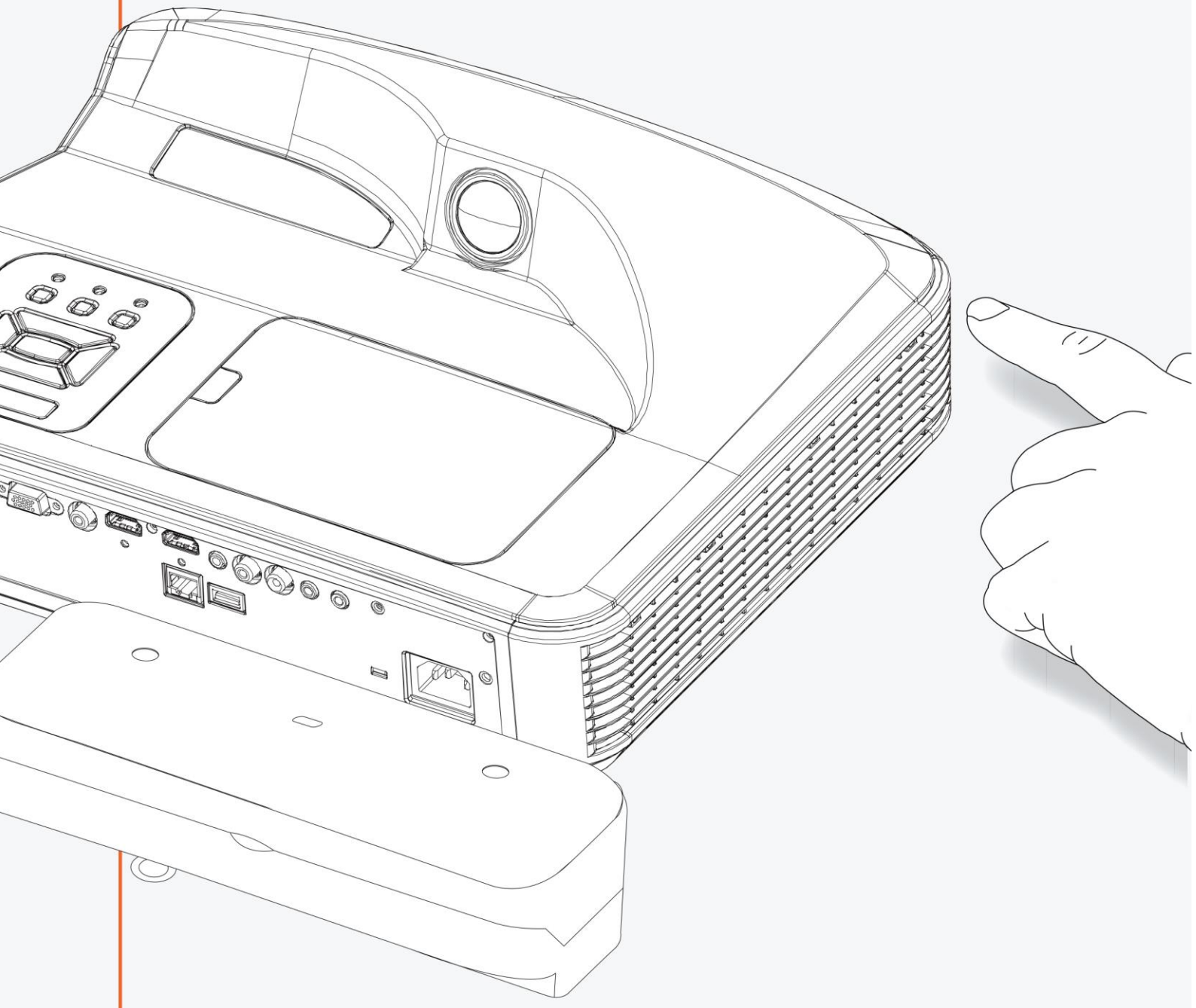


TACTILE FUNCTION OF INTERACTIVE VIDEOPROJECTOR MANUAL

SPE-VPI-360-LAS-W-I-T

Speechi

Speechi
Interactive solutions

Accessories

Contents of Your Box

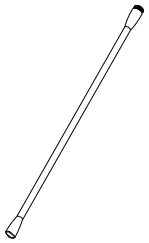
Following items are depending on your model, please check with your dealer.

- Interactive with Light Pen

Light Pen



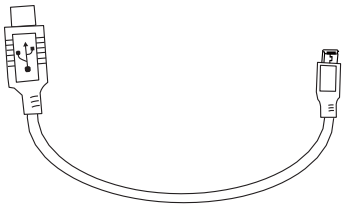
Pointer Extender



(*optional)

USB-mini cable

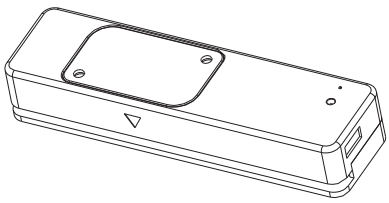
(for Projector to PC)



- Interactive with Curtain Module

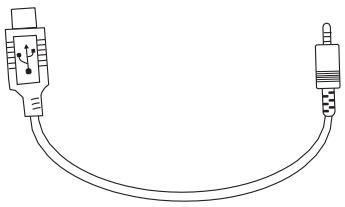
Optical Touch Curtain

(with 3 screws)



USB cable

(for Projector to Curtain Module)



Dummy Pen



System Requirements

Windows

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

Touch Calibration / LightPen3

OS Required	Windows 7 (32bit/64bit)/Windows 8/ Windows 10 (Must be installed. NET Framework 4.0)
Processor Type	Intel® Core™ i3 or above
RAM	2GB above
Min. Free disk space	110 MB
Projection Size	70"~ 100"

MAC

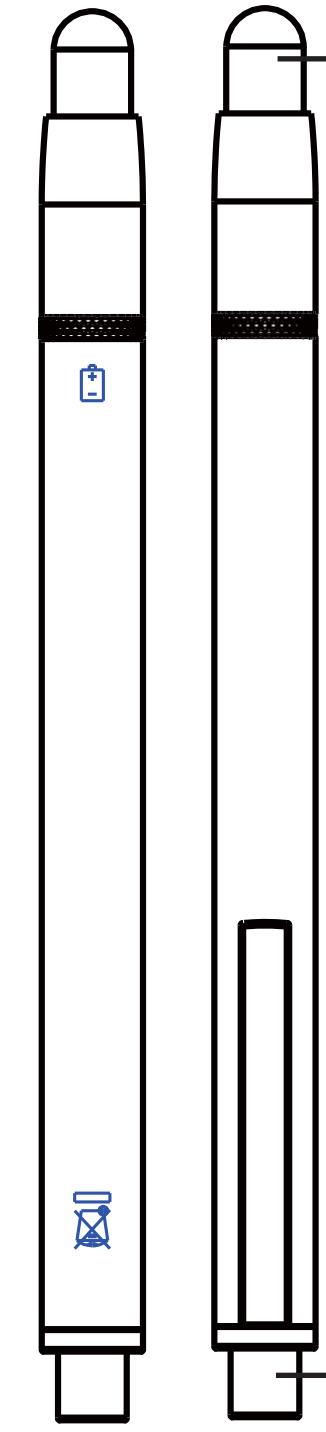
To ensure the interactive function work properly, please check your computer system to see if it meets the following conditions.

Touch Calibration / LightPen3

OS Required	Mac OS X v10.8 above
Processor Type	Intel® Core 2 Duo
RAM	4GB above
Min. Free disk space	100 MB
Projection Size	70"~ 100"

Part name and functions

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.

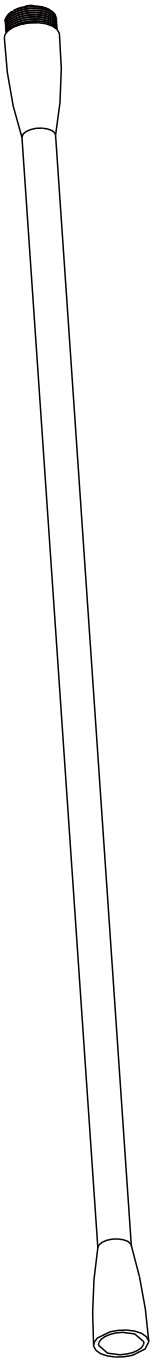
CAUTION

Touch sensor is located in the tip of the pen therefore, the Battery consumes 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.

(When the switch is in the off position the LED lamp of the pen tip does not light when the tip is pressed.)

Power switch

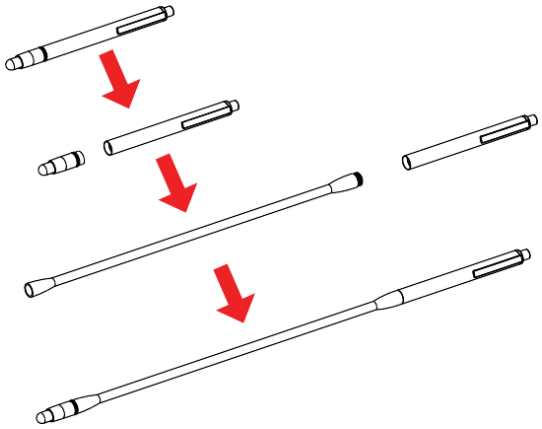
Instruction of the "Pointer Extender" (*optional)



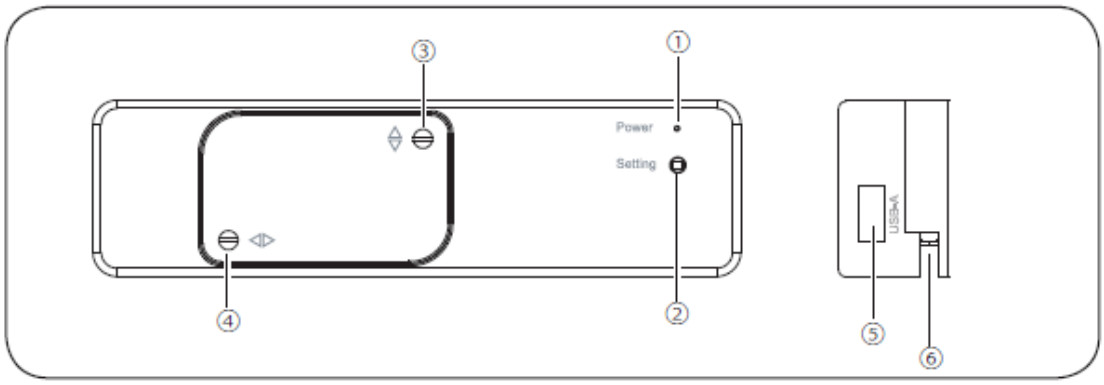
How to use this

Step 1: Remove the light pen head from the light pen body.

Step 2: Assemble the extension rod with the light pen.



Optical Touch Curtain **It depends on your model, please check with your dealer.*



① **POWER indicator**

- It lights red when the Optical Touch Curtain is in installation mode. The visible light would show up.
- It lights green during normal operations.

② **Setting**

- Press the button to switch to visible light mode.

③ **Rotary knob-Vertical(Refer to Page 5)**

-Use the screwdriver to adjust the Laser.

④ **Rotary knob-Horizontal(Refer to Page 5)**

-Use the screwdriver to adjust the Laser.

⑤ **USB-A**

- Connect with Projector

⑥ **Laser transmitting window**

Caution

Do not stare directly at the laser transmitting window nor aim the window at human body, to avoid any physical injury.

<Installation>

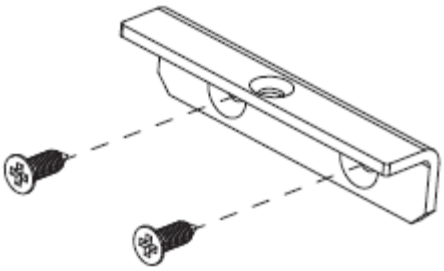
- For short-term demonstration:

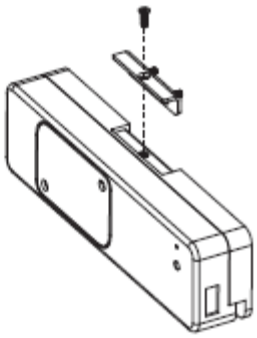
The curtain has been built with a magnet. You can easily make the curtain magnetic with whiteboard or other magnetic material on the center/top position of the projection screen.

- For long-term installation:

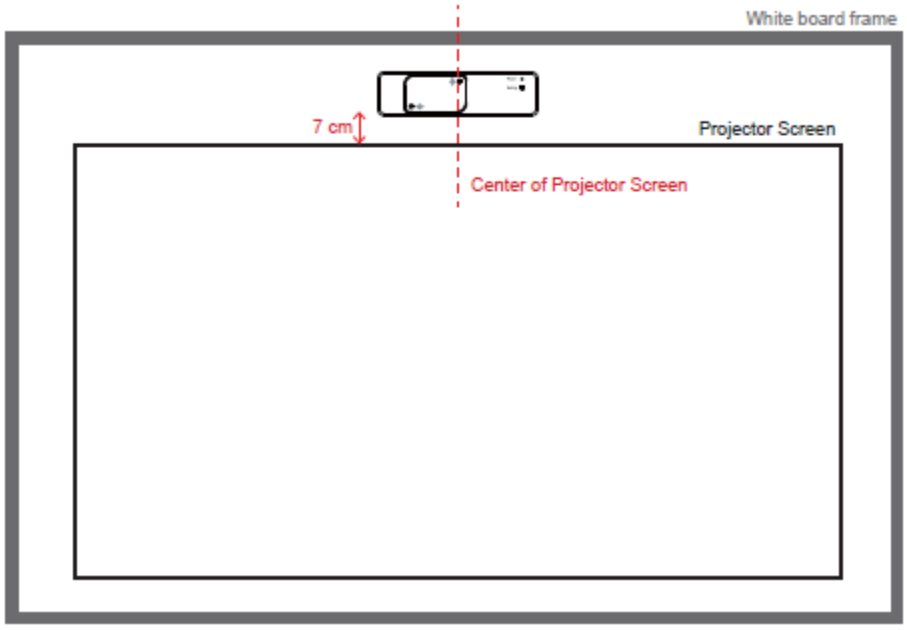
  Use the screws to fix the curtain with the base plate onto the whiteboard or

other smooth surface.



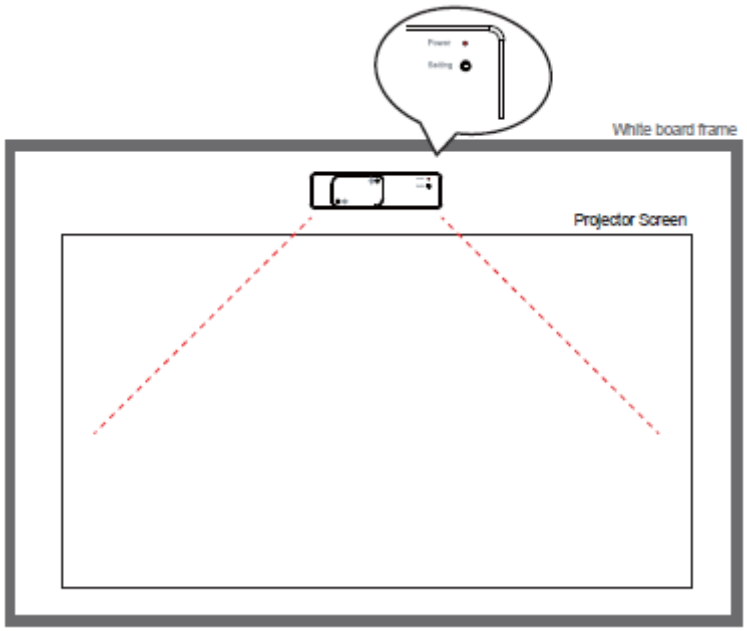


Place the curtain on the position upper than 7cm of the center/top for the projection screen.

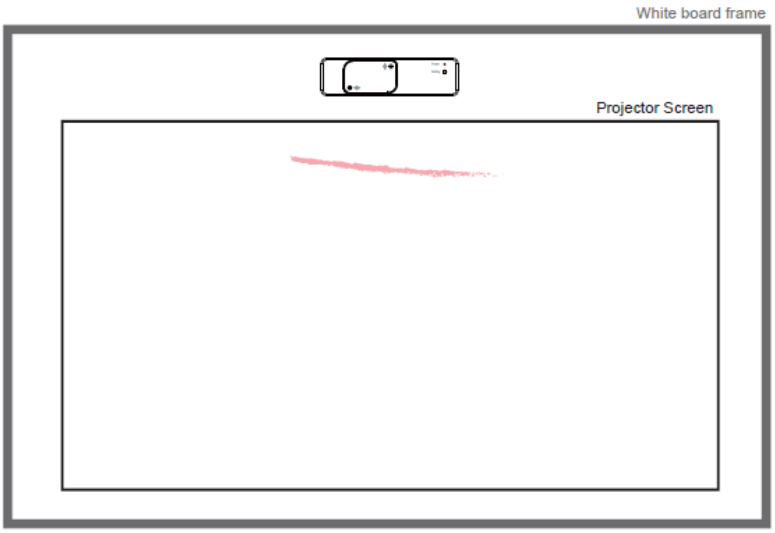


<Adjustment>

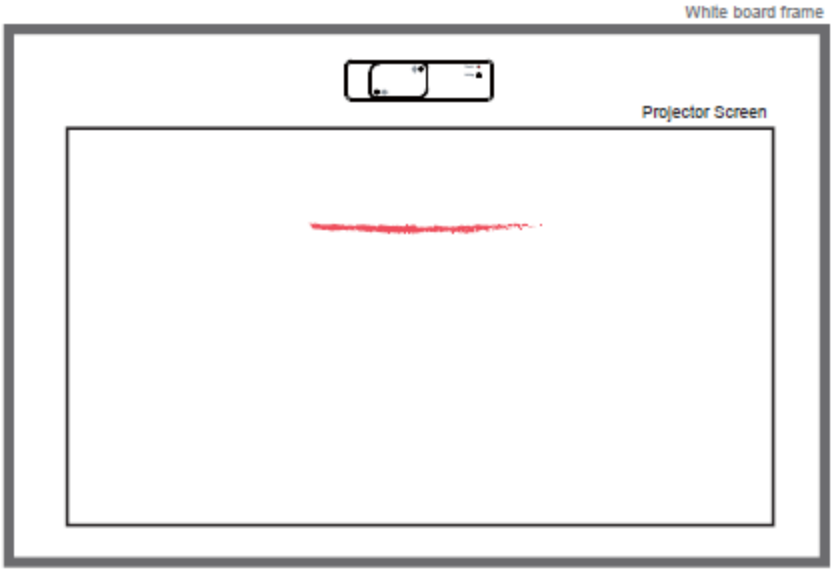
After the installation, connect the Curtain and the Projector via the USB cable. While the curtain has been connected, the ‘Power’ light will turn green. Press the ‘Setting’ button on the curtain, the ‘Power’ light will turn red and get into the installation mode. Press the "Blank" button on the Projector’s remote controller and then you can see the laser beam.



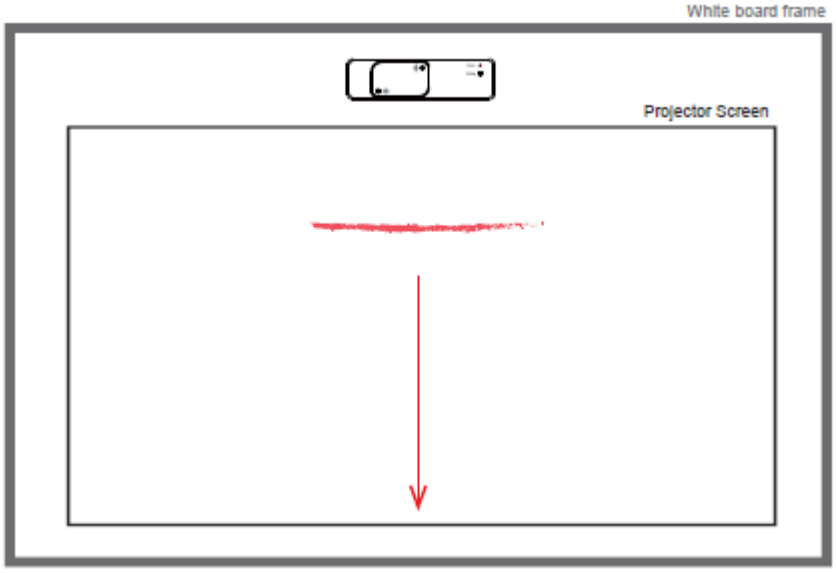
1. Use the slotted screwdriver to adjust the knob△▽ in a clockwise. You will see the laser beam hit onto the projection screen.



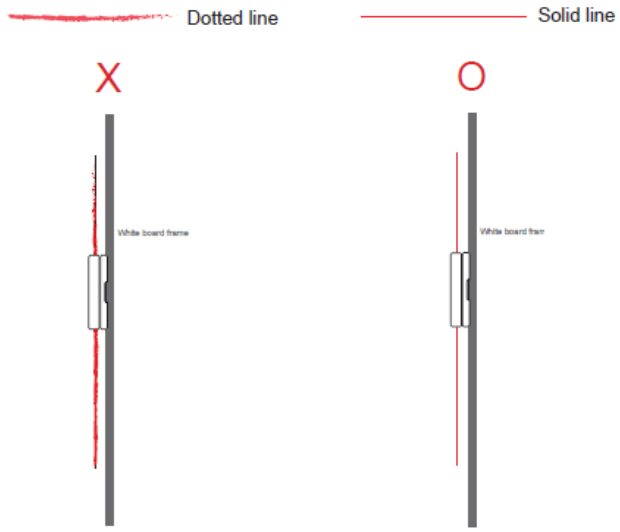
2. Adjust the knob ◁▷accordingly to make the laser beam as parallel to the Curtain.



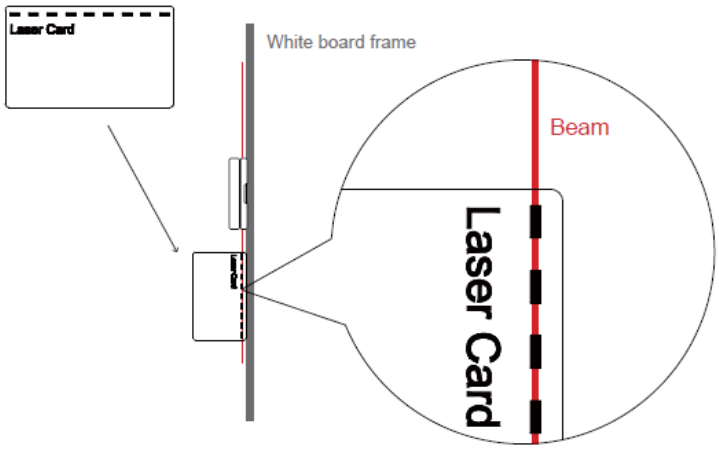
3. Adjust the knob△▽ to move the laser beam all the way down till out of the projection screen and ensure the laser beam is parallel with the Curtain.



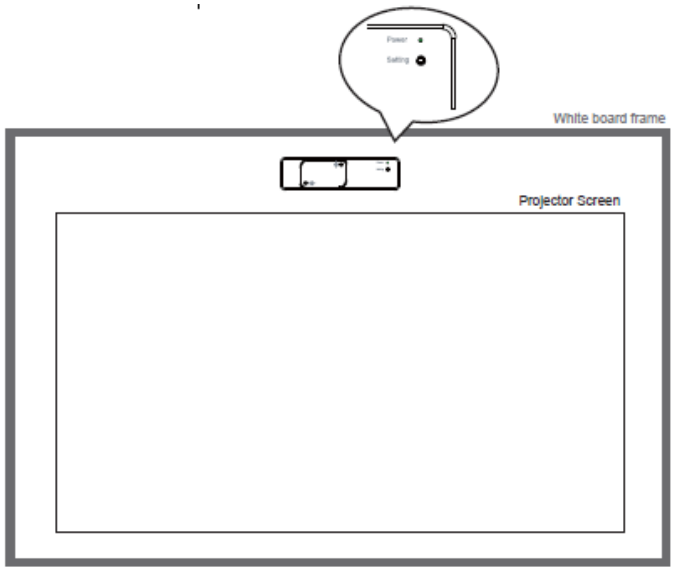
4. Ensure the laser beam looks like a solid line and parallel with the projection screen as the following picture.



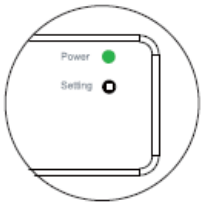
5. You can use the enclosed Laser Card to ensure the laser beam as solid as required.



6. After all the adjustment, press the ‘Setting’ button on the curtain then the ‘Power’ light will turn green. Revert to using Touch Mode to start utilizing interactive features.

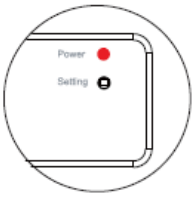


- Indicator and status



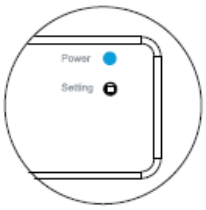
Green:

- Standby mode (connected with projector)
- Pen mode: ready for use with Light Pen



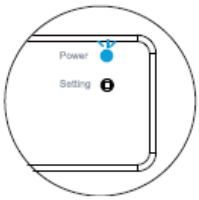
Red:

- Installation mode: ready for Laser beam adjustment.



Blue:

- Normal mode: ready for use with Touch function.



Flashing Blue:

- Error mode: need to check the setting of driver
- Touch Area Setting mode

*If the curtain still can't work properly, please contact your dealer.

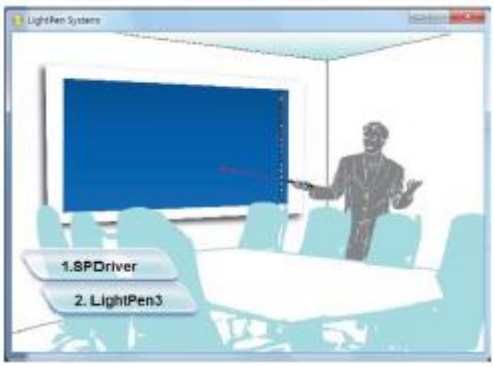
Operation Guide for Windows OS

Touch Calibration Driver Installation

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

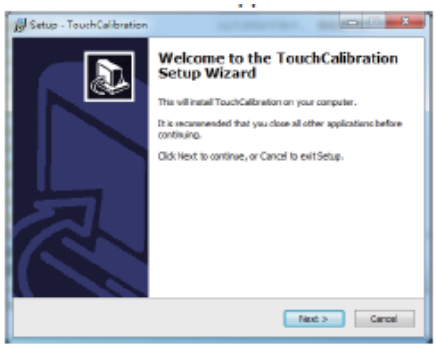
Step 2. Open the "LightPen Software for Windows" folder in the CD-ROM.

Step 3. Double click "Setup.exe" and the POP up window as following picture.

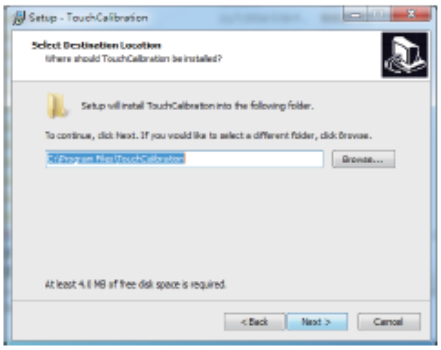


Step 4.

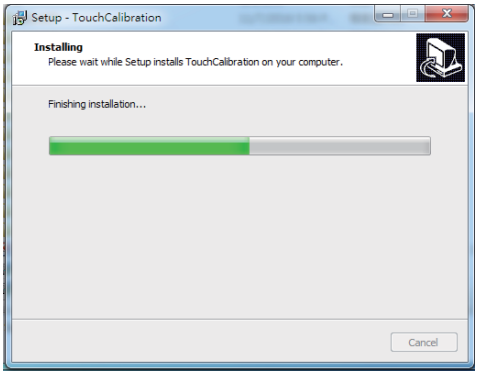
(1) Click "SPDriver" and then "Setup Wizard" window will appear (as shown as following picture).
Click "Next" to install.



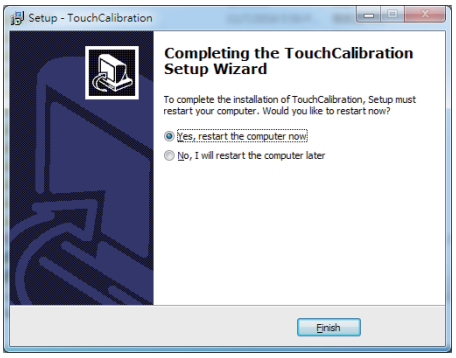
(2) You can choose the folder to install software as your desire and then click the “Next” or just simply click the “Next” to install to default folder.



(3) Installation under processing.



(4) Installation completed.

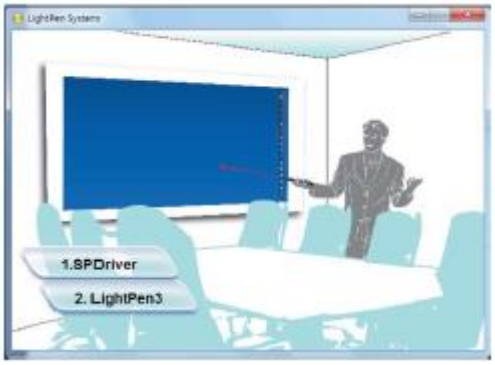


LightPen3 Software Installation

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” and the POP up window as following picture.

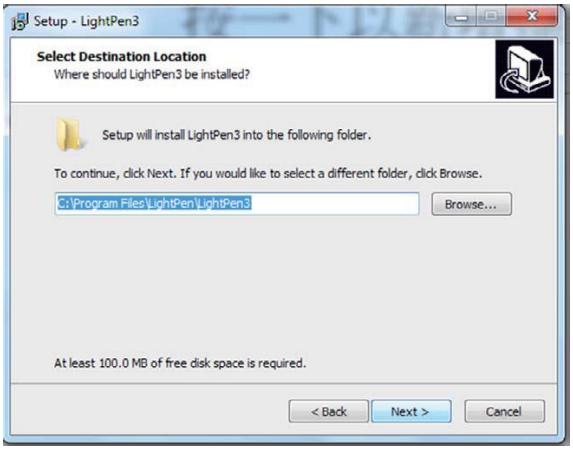


Step 4.

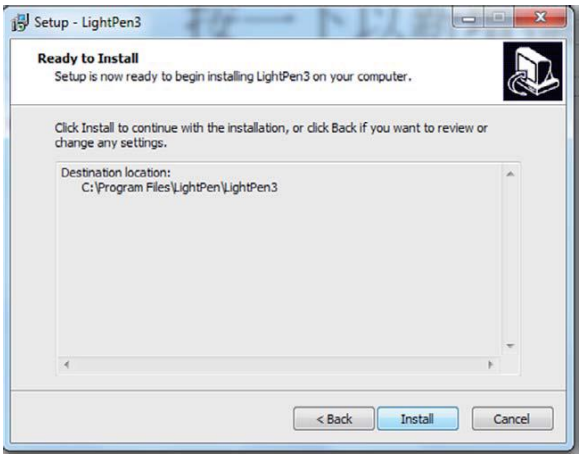
(1) Click "LightPen3" and then "Setup Wizard" window will appear (as shown as following picture).
Click "Next" to install.



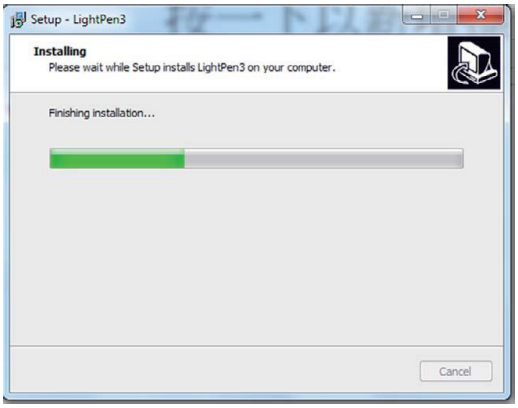
(2) You can choose the folder to install software as your desire and then click the “Next” or just simply click the “Next” to install to default folder.



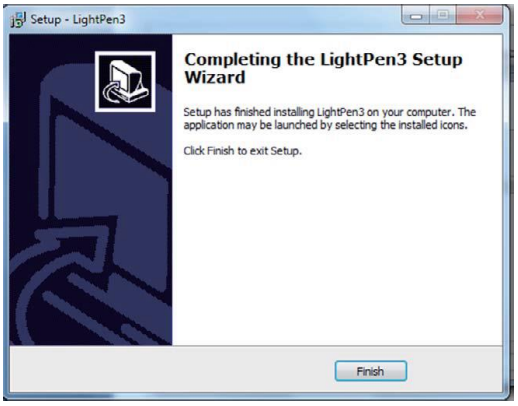
(3) Check the installation information and then click “Install” to start the process.



(4) Installation under processing.



(5) Installation completed.

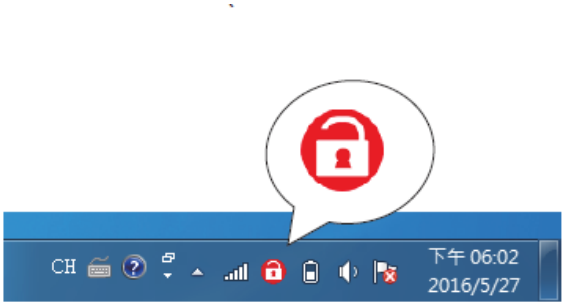


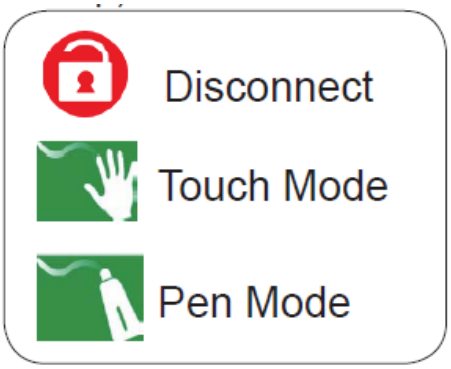
Initial Setting of Touch Calibration

Launch the SPDriver from “Start Menu / Touch Calibration / Touch Calibration”, or double click the “Touch Calibration” icon from Desktop.



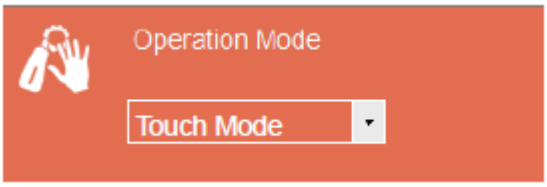
Connect your PC and the Projector via enclosed USB cable. The following icon will show up in the task bar.



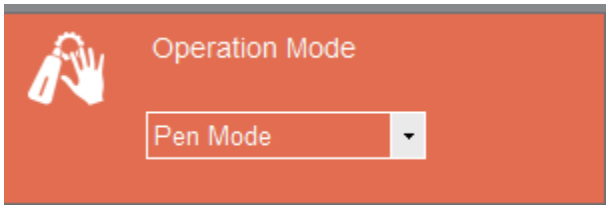


- Operation mode

  <Touch Mode> operates interactive function with Finger / Dummy Pen.



  <Pen Mode> operates interactive function with Light Pen



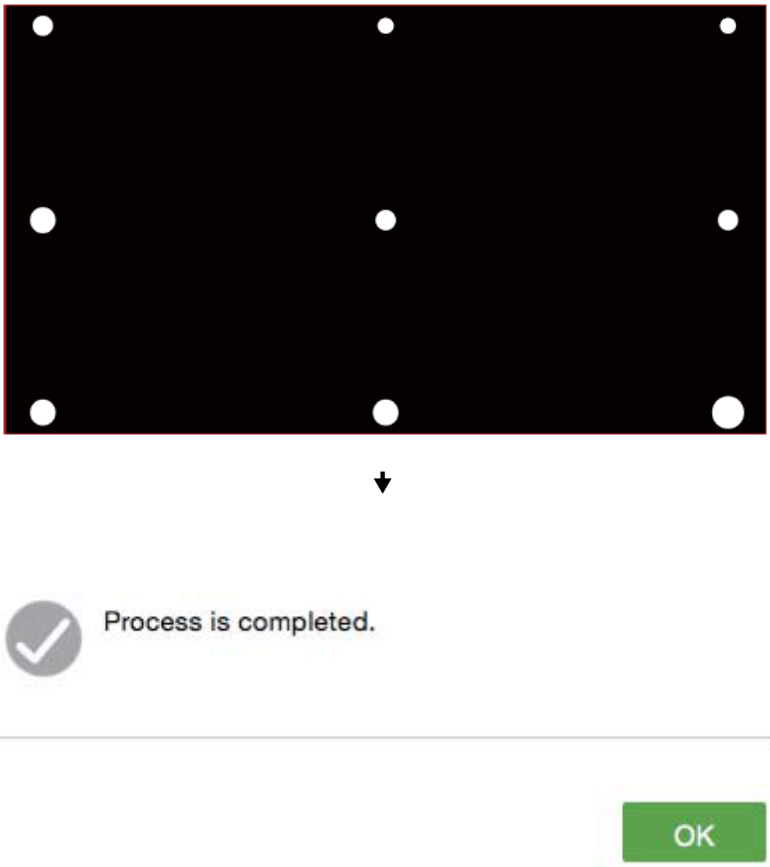
- Calibration

  <Automatic>

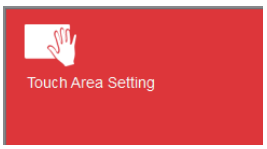
  Select the “Automatic” to proceed to the calibration process automatically.

Note : Before Launch the “Automatic calibration” function, please ensure: 1. Reduce the ambient light 2. Do not obstruct lens or shake projector during “Automatic Calibration” proceeding.

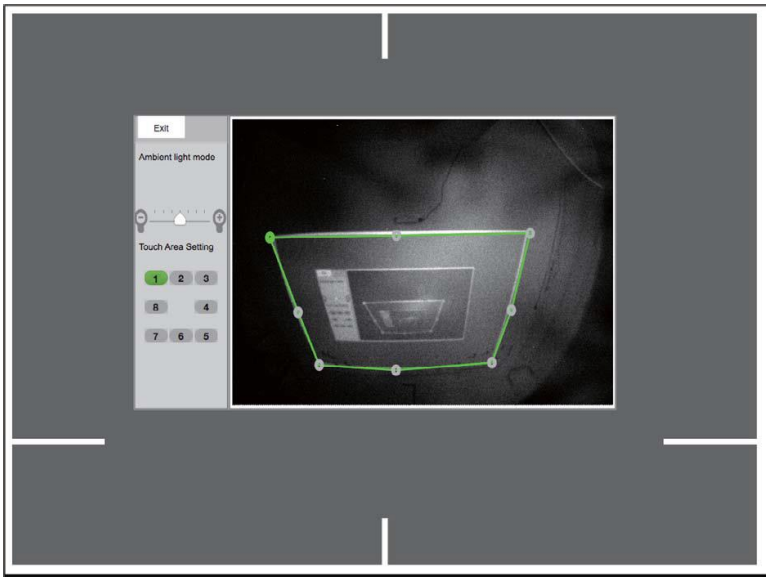




Check the "Touch Area Setting".

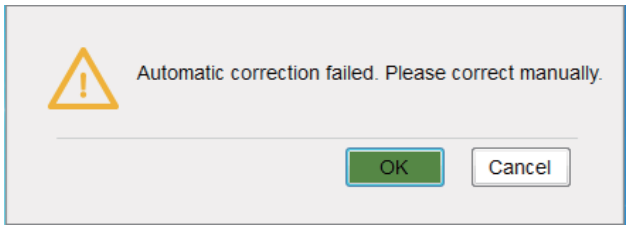


Ensure the green frame (Touch Area) within the white frame (Projected Area).



※Please refer the Page 18 for further adjustment of “Touch Area Setting”.

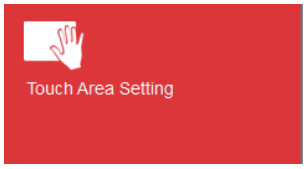
While the “Auto Calibration” process failed, the warning message will pop-up(as following picture). Click “OK” to launch “Touch Area Setting” for the Manual Calibration process.



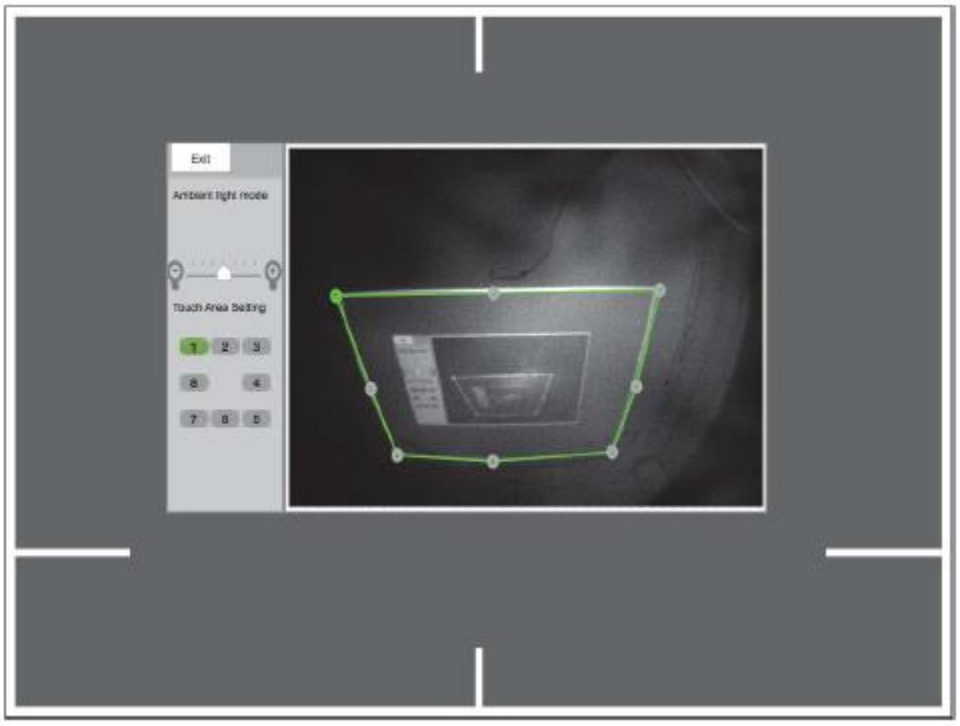
<Manual>

Launch the “Touch Area Setting” process before start the Manual Calibration.

■ Touch Area Setting

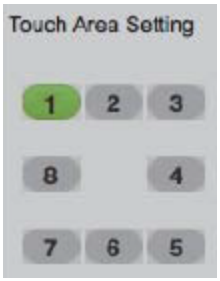


Select the adjustable point on the green frame by mouse on PC to ensure the touch area is within the white frame (projection area).

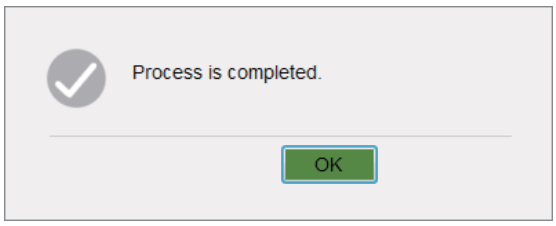


※ Adjust the “Ambient light mode” by click on “-“ / “+” to reduce / increase the brightness of the picture.

Or choose the adjustable point by click the number on “Touch Area Setting”.



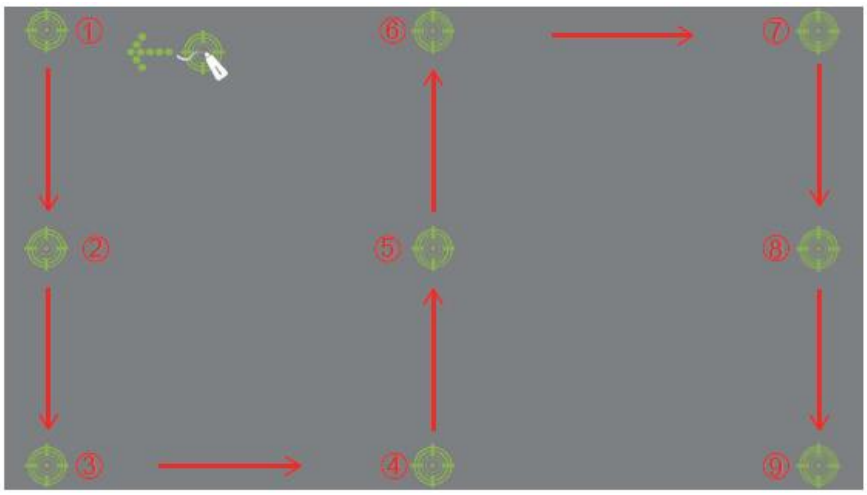
Click “Exit” on the left-upper corner to complete the Touch Area Setting process.



- Manual Calibration



Select “Manual” and click “Start” to launch the Manual Calibration process. The following picture will show up on the projected screen.



Note:

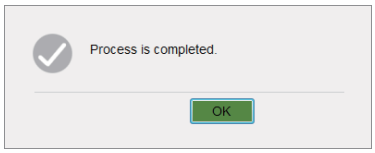
 Click the calibration points by LightPen.

 Click the calibration points by Finger / Dummy Pen

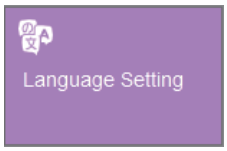
※ Press “ESC” button on keyboard to exit the Calibration process

※ Press “↑up” button on keyboard to recalibrate the previous point.

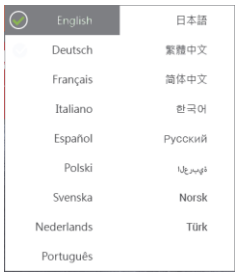
Complete the Manual Calibration process by click all of the 9 points in order. The following picture will show up after complete the Manual Calibration process.



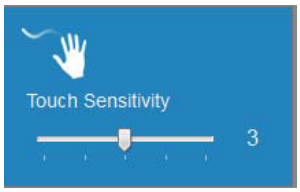
- Language Setting



Change the language as you desire by click on the Name of the language.



- Touch Sensitivity

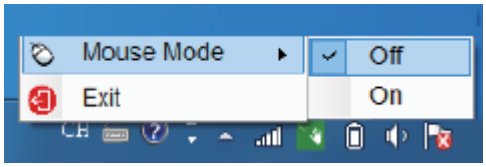


Adjust the Touch Sensitivity level while the effect of Touch mode is not good, or the drawing line is intermittent.

- Level 1: the lowest sensitivity (more smooth drawing line)
- Level 5: the highest sensitivity (more straighten drawing line)

- Mouse Mode

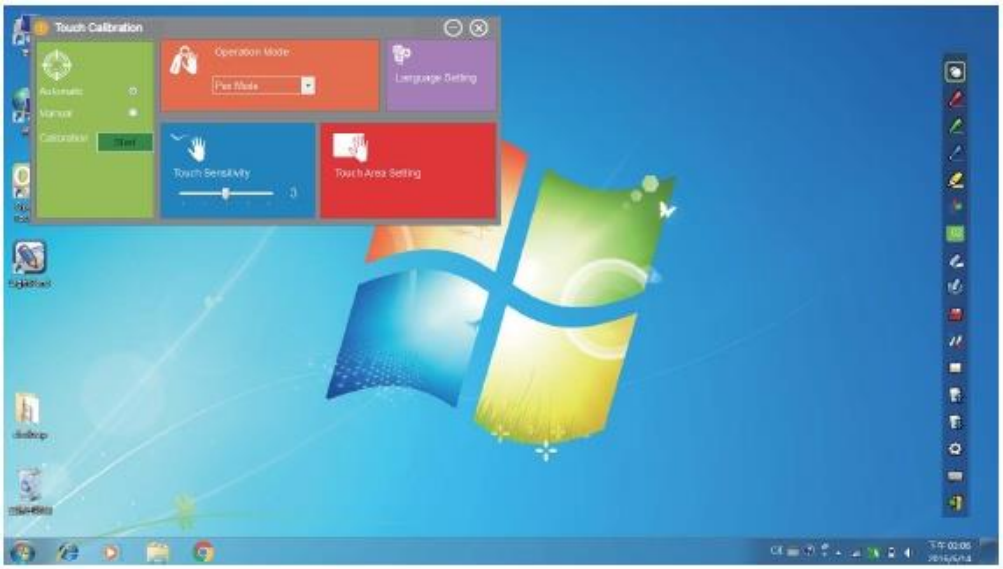
Click the  /  icon on the task bar, the following menu would show up.



- Off: available to drawing with multi point as Touch device
- ON: available to drawing with single point as Mouse device

Instruction of LightPen3

Launch the LighPen3 from “Start Menu/LightPen/LightPen3” or simply click the LightPen icon on the desktop. The toolbar of LightPen3 would show up as the following picture.



- Instruction of the Toolbar

ICON	Description
	Switch the touch point as Mouse Cursor
	Drawing as Red pen
	Drawing as Green pen
	Drawing as Blue pen
	Drawing as High light transparent Marker pen
	Drawing with circle, triangle, square or strait line.
	Change the color and fineness of drawing line.
	Erase the drawing.

	Erase all the drawing on the screen at once.
	Save current drawing to computer.
	<Full screen mode> Using two pens at full screen <Split screen mode> Using two pens at split screen at the same time.
	Switch to white board mode.
	Backward to last page
	Forward to next page
	Extended tool for the drawing.
	On screen keyboard.
	Exit the application

- Advanced function instruction

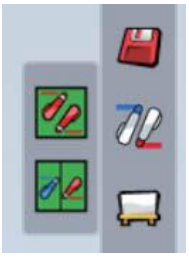
(1) Drawing Tool

Click the to show the Drawing Tool Function menu up and select the function you desire.



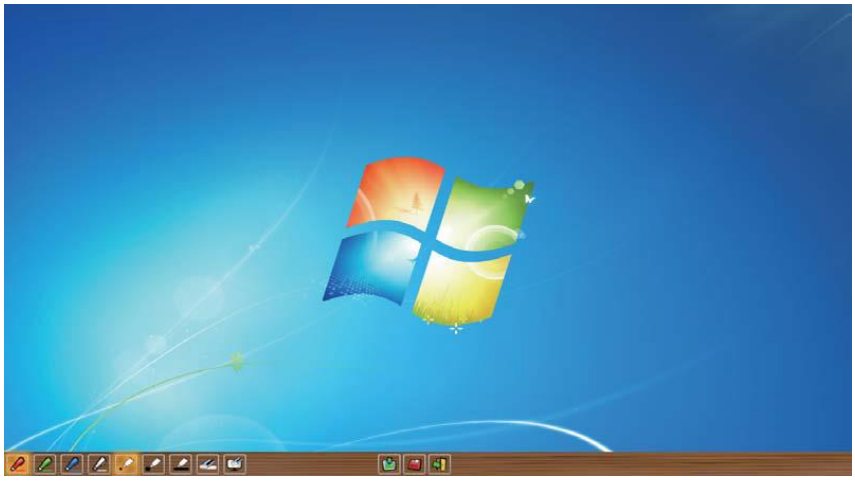
(2) Dual Pen

Click the to show the Dual Pen Mode setting menu up and select the Full Screen mode / Split Screen mode as you desire.



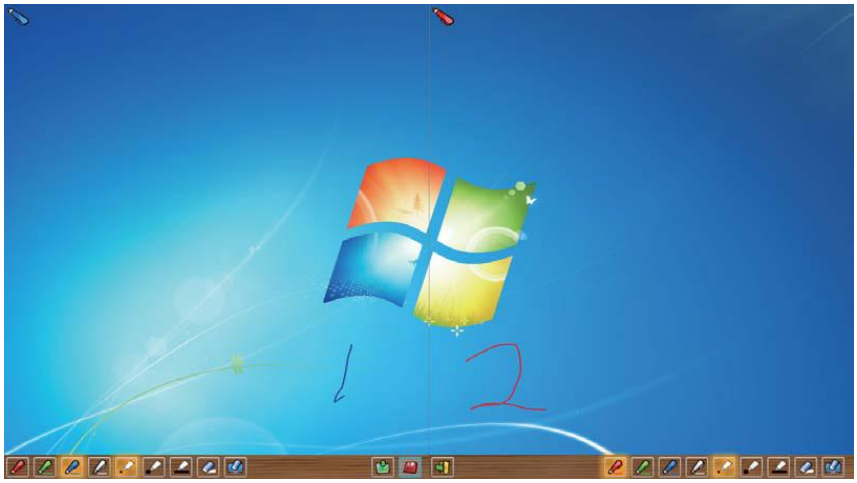
< Full Screen mode>

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



< Split Screen mode>

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



<Dual Pen mode tool>

ICON	Description
	Drawing as Red pen

	Drawing as Green pen
	Drawing as Blue pen
	Drawing as White pen
	Drawing as thin round script
	Drawing as thick round script
	Drawing as angle script
	Erase the drawing.
	Erase all the drawing on the screen at once.
	Insert an image as background of drawing
	Save current drawing to computer.
	Exit the application

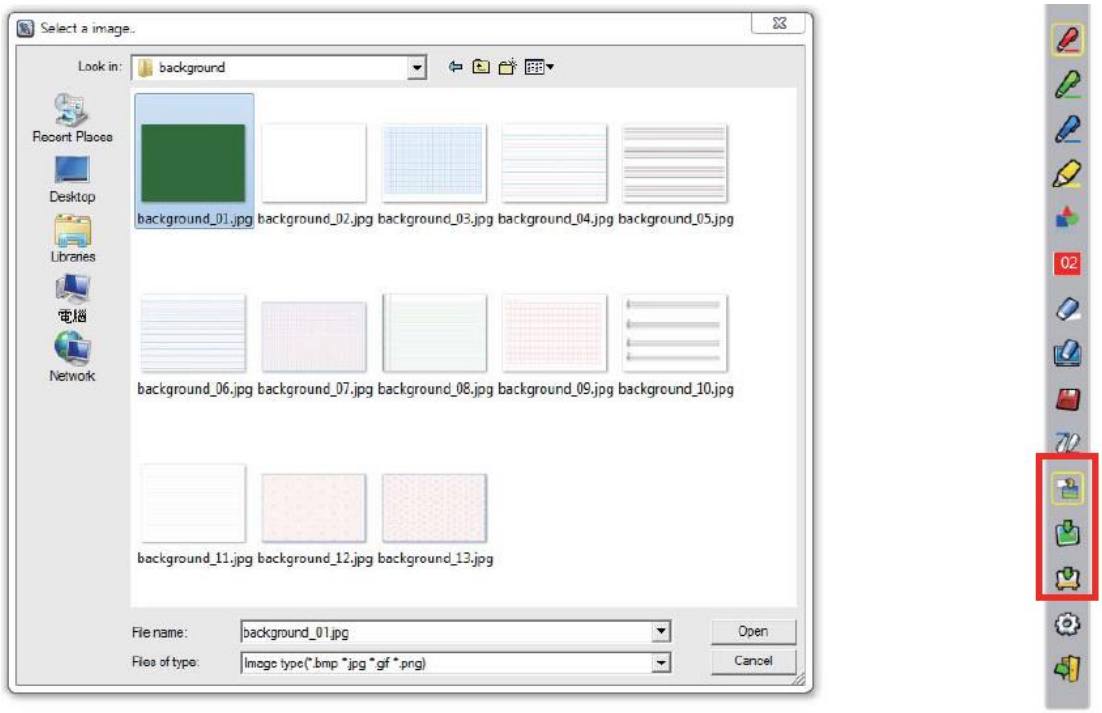
(3)  Whiteboard mode

Click  to switch to the whiteboard mode. The  and  will change to  and .

<  Insert any image as background>

Select any picture from your data as the background.

Or you can choose the default background from the folder as the following picture.



< Switch the background as white>

Click to insert the white background, click to get back the original background.

(4) Edit Tool

Click to show up the Edit Tool Bar. Select the extended function as you desire.



< Select Tool>

Click to select the drawing as an object to Enlarge, Decrease or Move.

< Rotate Tool>

Click to rotate the drawing you selected.

< Printing Tool>

Click to print the current page out.

< Undo>

Click to undo the last operation.

< Redo>

Click to redo the last operation.

< Spotlight Tool>

Click  to launch the spotlight function

 Curtain Tool>

Click  to launch the curtain function.

 H/V tool bar>

Click  to switch the toolbar as vertical / horizontal

 R/L tool bar>

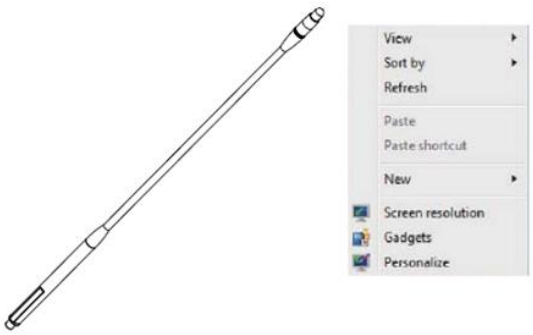
Click  to switch the toolbar on left / right side.

Mouse right key function

The Pointer or the Light Pen can take over the Mouse function.

Pressing the tip of the pointer or Light Pen is just like to click with left key of mouse.

Pressing and holding the tip of the pointer or Light Pen for more than 3 seconds, will launch the menu bar as click with right key of mouse as following picture.



Operation Guide for Mac OS

Touch Calibration Driver 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 the “Touch Calibration.zip” to the disk.

Step 3. Double click the “Touch Calibration.zip” to unzip as a folder.

Step 4. Double click “install-SP” icon in the folder and the installation window would show up as following picture.

Step 5. Click “Install” to start the installation. Follow the instruction to complete the installation.

LightPen3 software Installation

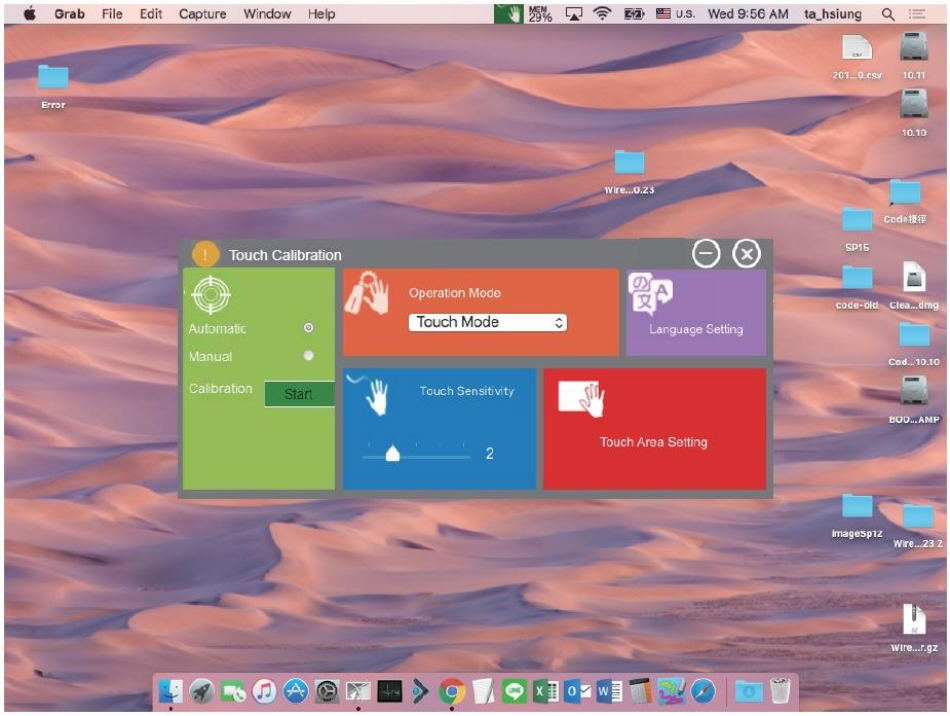
Step 1. Insert the "Owner's Manual" CD-ROM into the CD drive.

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

Step 3. Double click “LightPen3.zip” to unzip and execute it.

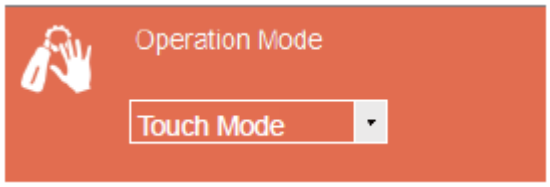
Initial Setting of Touch Calibration

Connect the Projector and the computer via USB cable. The Touch Calibration window would pop-up as following picture.

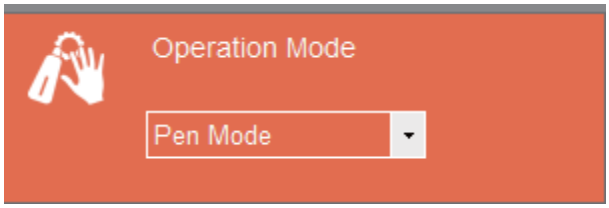


- Operation mode

  <Touch Mode> Operates interactive function with Finger / Dummy Pen.



  <Pen Mode> Operates interactive function with Light Pen.

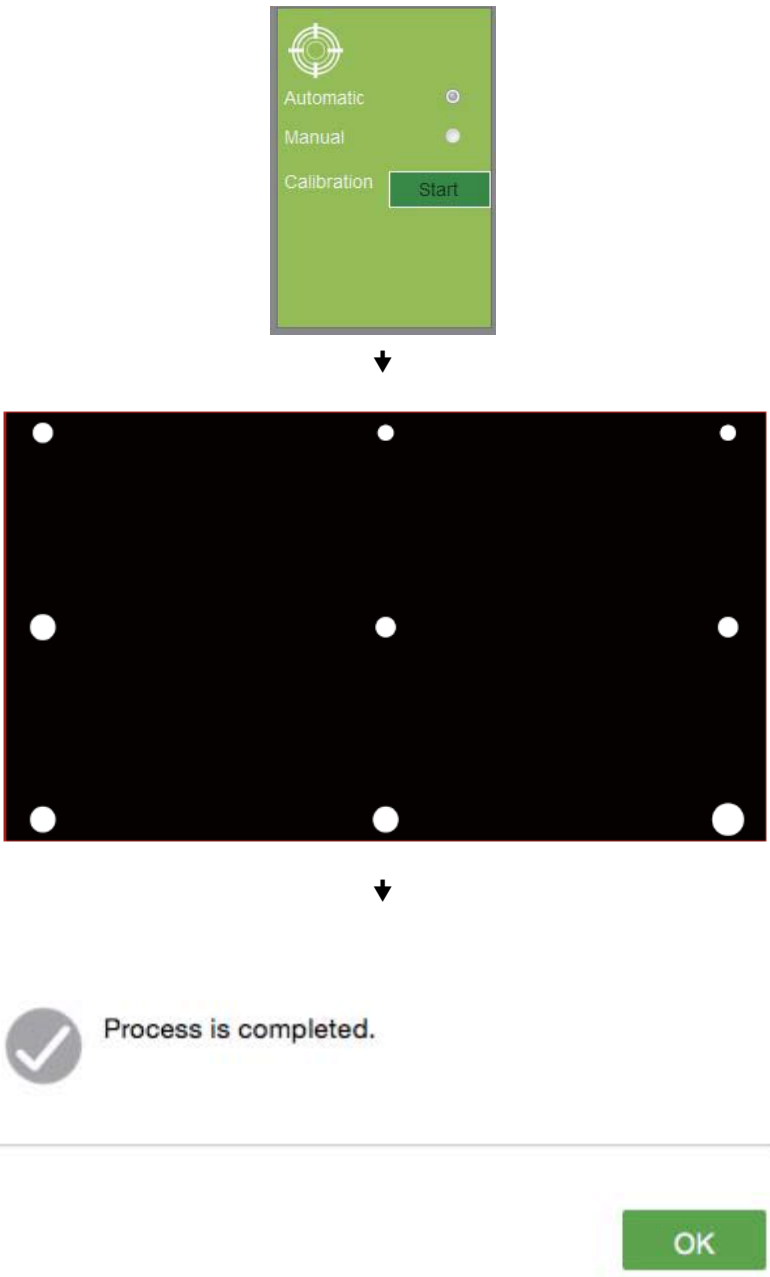


- Calibration

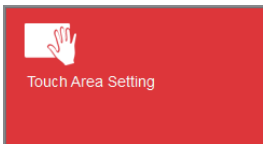
  <Automatic>

  Select the “Automatic” to proceed to the calibration process automatically.

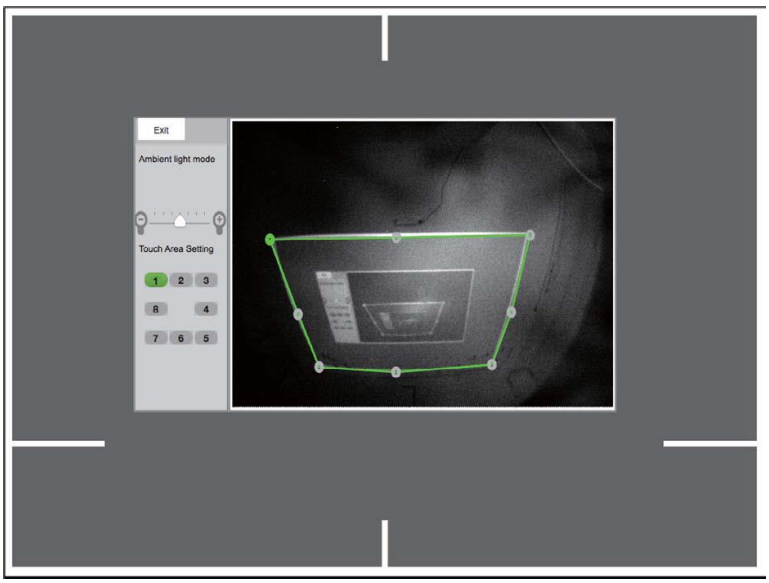
Note: Before Launch the “Automatic calibration” function, please ensure: 3. Reduce the ambient light 4. Do not obstruct lens or shake projector during “Automatic Calibration” proceeding.



Check the "Touch Area Setting".

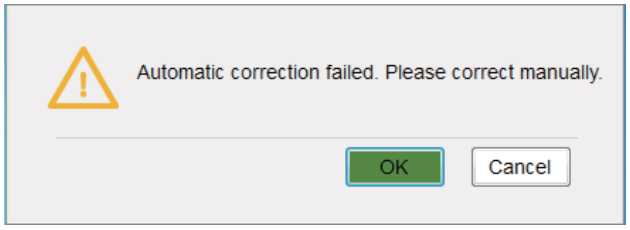


Ensure the green frame (Touch Area) is within the white frame (Projected Area).



※Please refer the Page 18 for further adjustment of “Touch Area Setting”.

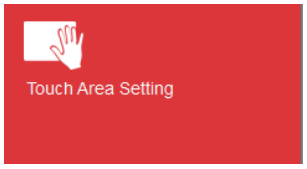
If the “Auto Calibration” process failed, the warning message will pop-up(as following picture). Click “OK” to launch “Touch Area Setting” for the Manual Calibration process.



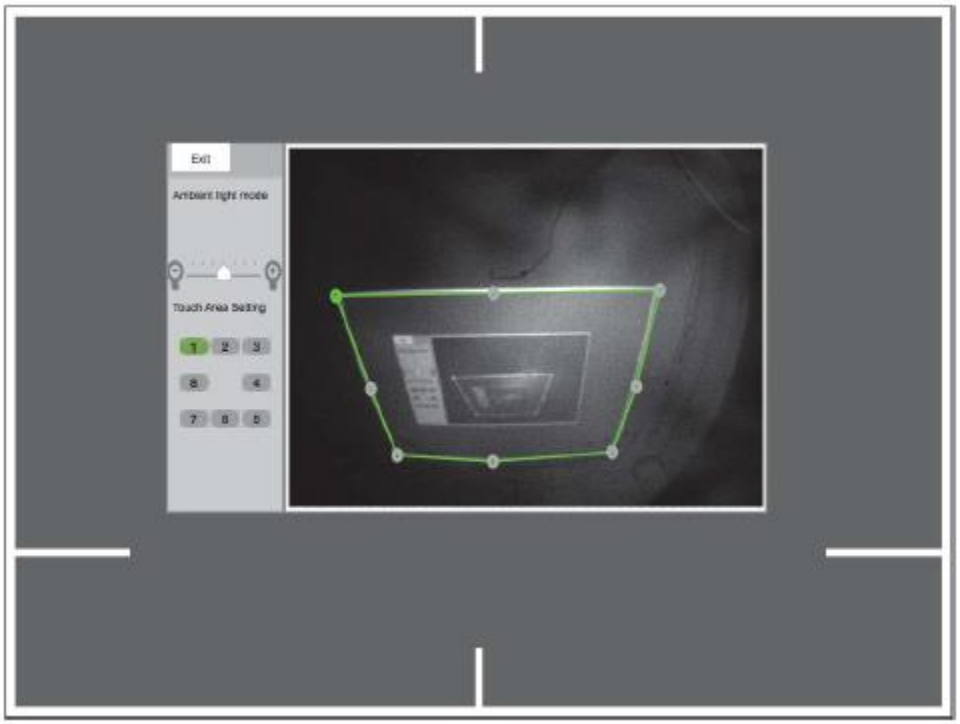
<Manual>

Launch the “Touch Area Setting” process before start the Manual Calibration.

■ Touch Area Setting

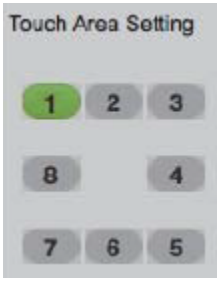


Select the adjustable point on the green frame by mouse on PC to ensure the touch area is within the white frame (projection area).

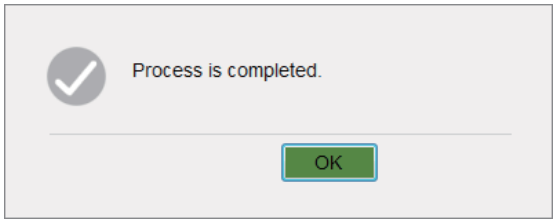


※ Adjust the “Ambient light mode” by click on “-“ / “+” to reduce / increase the brightness of the picture.

Or choose the adjustable point by click the number on “Touch Area Setting”.



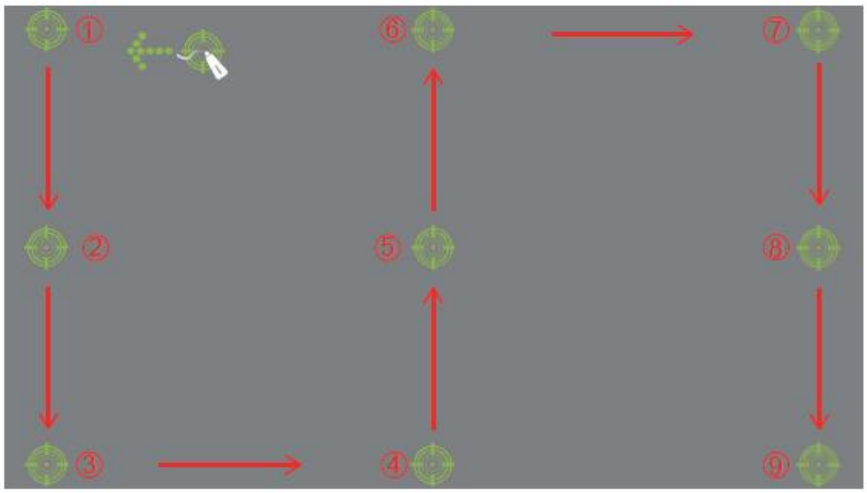
Click “Exit” on the left-upper corner to complete the Touch Area Setting process.



■ Manual Calibration



Select “Manual” and click “Start” to launch the Manual Calibration process. The following picture will show up on the projected screen.



Note:

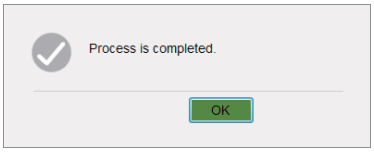
 Click the calibration points by LightPen.

 Click the calibration points by Finger / Dummy Pen

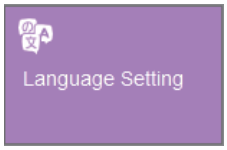
※ Press “ESC” button on keyboard to exit the Calibration process

※ Press “↑up” button on keyboard to recalibrate the previous point.

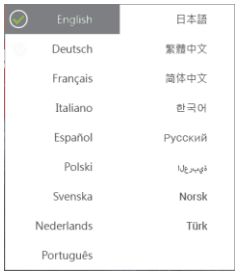
Complete the Manual Calibration process by click all of the 9 points in order. The following picture will show up after complete the Manual Calibration process.



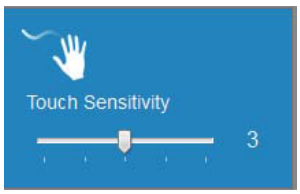
- Language Setting



Change the language as you desire by click on the Name of the language.



- Touch Sensitivity

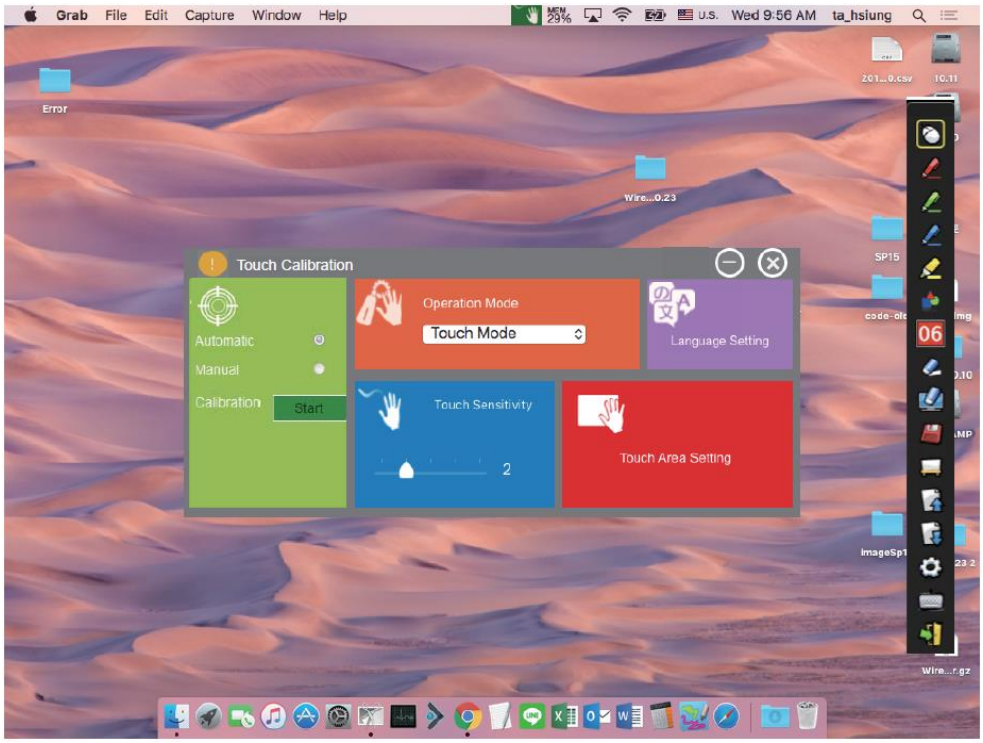


Adjust the Touch Sensitivity level if the effect of Touch mode is not good, or the drawing line is intermittent.

- Level 1: the lowest sensitivity (more smooth drawing line)
- Level 5: the highest sensitivity (more straighten drawing line)

Instruction of LightPen3

Double click the LightPen3 icon to launch the LightPen3 tool bar as following picture.



- Instruction of the Toolbar

ICON	Description

	Switch the touch point as Mouse Cursor
	Drawing as Red pen
	Drawing as Green pen
	Drawing as Blue pen
	Drawing as High light transparent Marker pen
	Drawing with circle, triangle, square or strait line.
	Change the color and fineness of drawing line.
	Erase the drawing.
	Erase all the drawing on the screen at once.
	Save current drawing to computer.
	<Full screen mode> Using two pens at full screen <Split screen mode> Using two pens at split screen at the same time.
	Switch to white board mode.
	Backward to last page
	Forward to next page
	Extended tool for the drawing.
	On screen keyboard.
	Exit the application

- Advanced function instruction

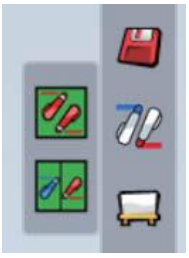
(5) Drawing Tool

Click the to show the Drawing Tool Function menu up and select the function you desired.



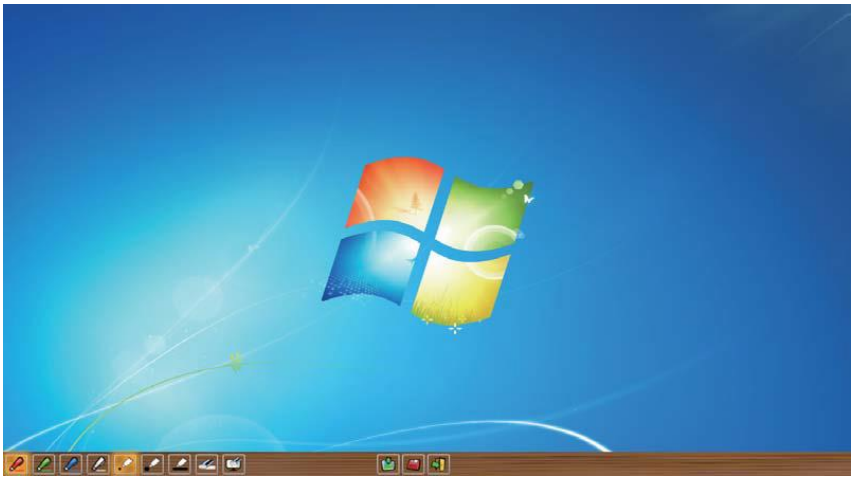
(6) Dual Pen

Click the to show the Dual Pen Mode setting menu up and select the Full Screen mode / Split Screen mode as you desired.



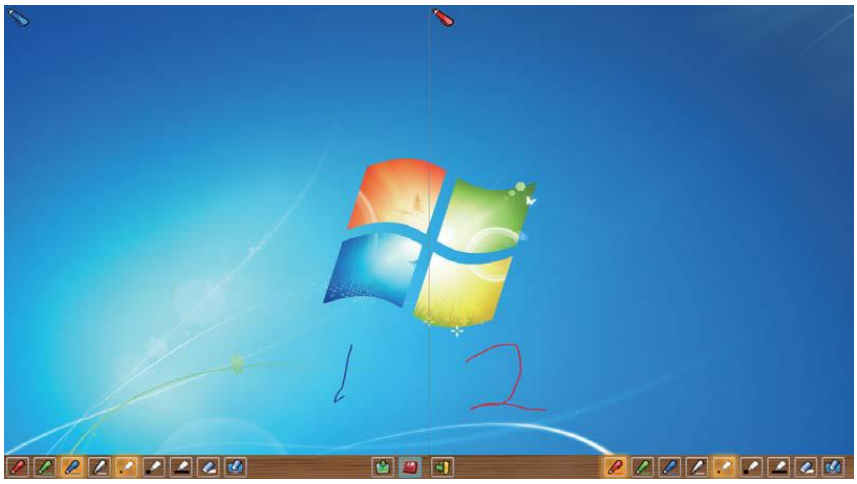
< Full Screen mode>

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



< Split Screen mode>

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



<Dual Pen mode tool>

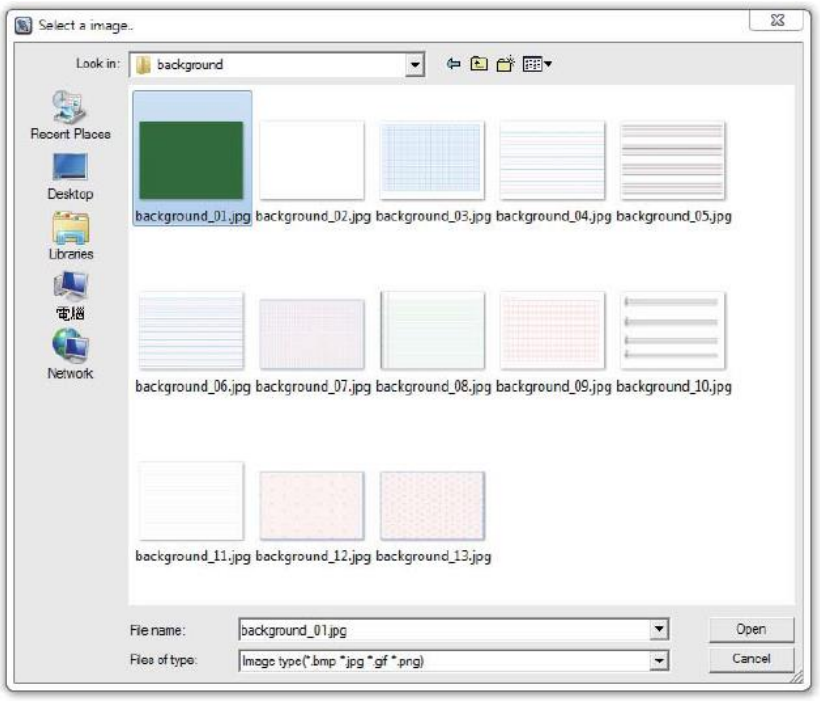
ICON	Description
	Drawing as Red pen
	Drawing as Green pen
	Drawing as Blue pen
	Drawing as White pen
	Drawing as thin round script
	Drawing as thick round script
	Drawing as angle script
	Erase the drawing.
	Erase all the drawing on the screen at once.
	Insert an image as background of drawing
	Save current drawing to computer.
	Exit the application

(7) Whiteboard mode

Click to switch to the whiteboard mode. The and will change to and .

< Insert any image as background>

Select any picture from your data as the background.
Or you can choose the default background from the folder as the following picture.





< Switch the background as white>

Click to insert the white background, click to get back the original background.

(8) Edit Tool

Click to show up the Edit Tool Bar. Select the extended function as you desire.



< Select Tool>

Click to select the drawing as an object to Enlarge, Decrease or Move.

< Rotate Tool>

Click to rotate the drawing you selected.

< Printing Tool>

Click to print the current page out.

< Undo>

Click to undo the last operation.

< Redo>

Click to redo the last operation.

< Spotlight Tool>

Click  to launch the spotlight function

<  Curtain Tool>

Click  to launch the curtain function.

<  H/V tool bar>

Click  to switch the toolbar as vertical / horizontal

<  R/L tool bar>

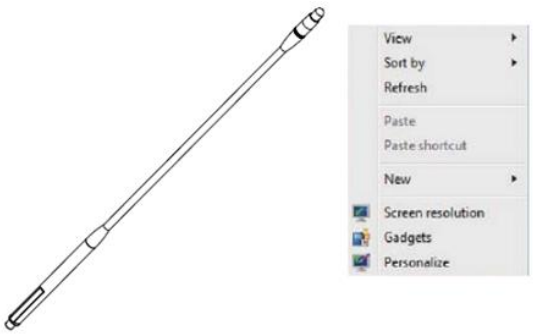
Click  to switch the toolbar on left / right side.

Mouse right key function

The Pointer or the Light Pen can take over the Mouse function.

Pressing the tip of the pointer or Light Pen is just like to click with left key of mouse.

Pressing and holding the tip of the pointer or Light Pen for more than 3 seconds, will launch the menu bar as click with right key of mouse as following picture.



Troubleshooting

1. Q: Why does it show  and Touch Calibration can't be used?

A: Reasons for this might be:

(1) The USB cable does not be connected PC with Projector properly. Please check if the USB cable has been connected PC with Projector properly.

(1-1) When there is the icon on the task bar as shown as following images, it means you should connect the

USB cable with PC and Projector, then execute driver again.



(1-2) In case of Windows OS, while the following image (A) pop up, it means the system indicates the USB cable is not connected or the USB port is out of order. When the icon is shown as (B), it means you can operate the interactive function by Touch mode (with Curtain). When the icon as shown as (C), it means you can operate the interactive function with Light Pen.

(A)



(B)



(C)



(2) The USB cable is not properly. Please use the enclosed one with the projector.

(3) The USB port of computer is malfunction. Please check the condition of the USB port with your IT engineer.

2. Q: Why I can't execute the calibration mark during the calibration process?

A: (1) Please ensure the condition of the "Light Pen" or "Pointer"

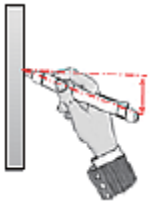
(1-1) Please ensure the battery is not running low. And the battery cap is not loose.

(1-2) Please ensure the Pen tip is inside the CMOS sensor area.

Avoid to writing in the shadow area

The writing angle between the pen tip and the screen should be less than 75°

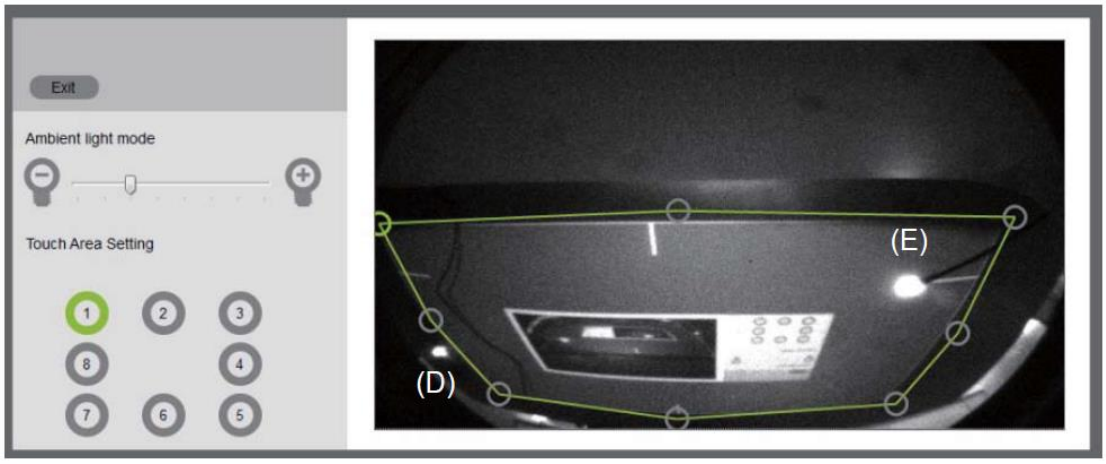




(2) The ambient light might be too strong. Take the light out of the CMOS sensor area. The strong ambient light is usually caused by the following:

(2-1) The Sunlight through the windows is too close to the screen.

(2-2) Light source is too close to the CMOS sensor or screen. Please check it with the Touch Area Setting mode. Adjust the ambient light to out of the green zone as light point (D) to avoid trouble. Take off or take the light out of the CMOS sensor area if the ambient light is into the green zone as light point (E).



3. Q: Why the cursor is not at the position that pen tip pointed?
   A: The possible reason for this is:
   (1) The calibration data is incorrect. Please ensure to click in the “center” of the calibration mark on the manual calibration process. (Please refer the page 19 for Windows OS or page 31 for Mac OS)
   (2) The position of the projector or the projection screen has been changed.
   (3) The projection screen size has been changed.
   (4) The resolution setting of the input source has been

changed.
Please launch the calibration process again.

4. Q: Why the cursor is jumping?
A: This might be caused by the interference of the strong light. Adjust the ambient light or the sunlight to avoid the interference. (Please refer the A(2-2) of the question 2)