

Advantech AE Technical Share Document

Date		SR#	1-2154030913	
Category	□FAQ∎ SOP	Related OS		
Abstract	Calibrate the image window by four points in Inspector PRO			
Keyword	Inspector PRO			
Related Product	Inspector PRO			

Problem Description:

How to calibrate the image window to specific coordinate by four points in Inspector PRO?

Brief Solution - Step by Step:

There are two methods to achieve this function. The first way is for the users who want to calibrate the image window just from developers, and second method is for end users or someone who may calibrate frequently. That is, second method is more obvious and easy to use in the interface of Inspector PRO.

The angle of developer

Double click image window to open "Options" → Click "Calibration" → Click "Add" to add a calibration, and remember to choose corresponding calibration in "Image window calibration."

Options	
[img4	Show Toolbar
Image source Image logging Calibration AI	ignment Display
Image window calibration Active calibration: CalibrationA Display origin Display grid Grid si	ze: 50
Image restoration using grid calibration	
Active calibration: [[None]	
Available system calibrations	
Calibrations Calibration met	5d Add
Calibration	Delete
<	Export
Calibrate using selected method	Import
Manual calibration Grid calibration	
Point calibration	
OK	Cancel

Picture1: The image of "Options"

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- 2. According to picture1, please click selected calibration and click "Point calibration."
- 3. Click the point you want to calibrate on the image, and then will pop up window for typing coordinate you want.



Picture2: The image in "Calibration"

4. Click "OK", then you will see the data was record in the right side and the red point and green coordinate on the image.



Picture3: The image in "Calibration"



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5. Likewise, calibrate the other three points. If you done the all four points, click "Calibrate." Then, the axis of coordinate will show on the image. Click "Close" and "OK."



Picture4: The image in "Calibration"



Picture5: The image of program window

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- Double click image window to open "Options" → Click "Calibration" → Click "Add" to add a calibration, and remember to choose corresponding calibration in "Image window calibration."
- According to picture 5, in the Program window, right click on window to add "IO: Calibration→ Calibrate Using Points" function to the program. Therefore, it will generate a "calibrate using points" function accompany with 9 inputs which are 4 "pixel", 4 "world" and 1 "calibration". If you want to assign point A to be (x,y), then "pixel" is point A and the coordinate of "world" is (x,y).
- According to picture 6, connect input "CalibrationX" to the "calibration" in "calibrate using points" function.(red box)



Picture6: The image of program window

- 4. Type coordinate of selected point(yellow box) or just add a point(green box, we will explicate the steps of add a new point in 4.a) to pixel0~pixel3. world0~world3 are coordinates you want pixel0~pixel3 to be.
 - a. If you want to add any point in the image, click "+" and choose a point in the image window to add a new point → double click the point, and add a algorithm.(Here, we take "Centroid Binary" for an example) → the data will show in the program window → right click "pixel" to connect input to point A (please refer to picture7~10)





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Snap Repeat Apply	
	Close
PointA	

Picture7: The image of image window

Picture8: The image of image window



Picture9: The image of the data show in the program window



Picture10: The image of connect input to point A in the program window

5. After done all the settings, run the investigation once. The image will be calibrated.

Reference:

1. Inspector PRO Help