

# Advantech AE Technical Share Document

Date		SR#	1-2154030913
Category	<input type="checkbox"/> FAQ <input checked="" type="checkbox"/> SOP	Related OS	--
Abstract	Calibrate the image window by four points in Inspector PRO		
Keyword	Inspector PRO		
Related Product	Inspector PRO		

## ■ Problem Description:

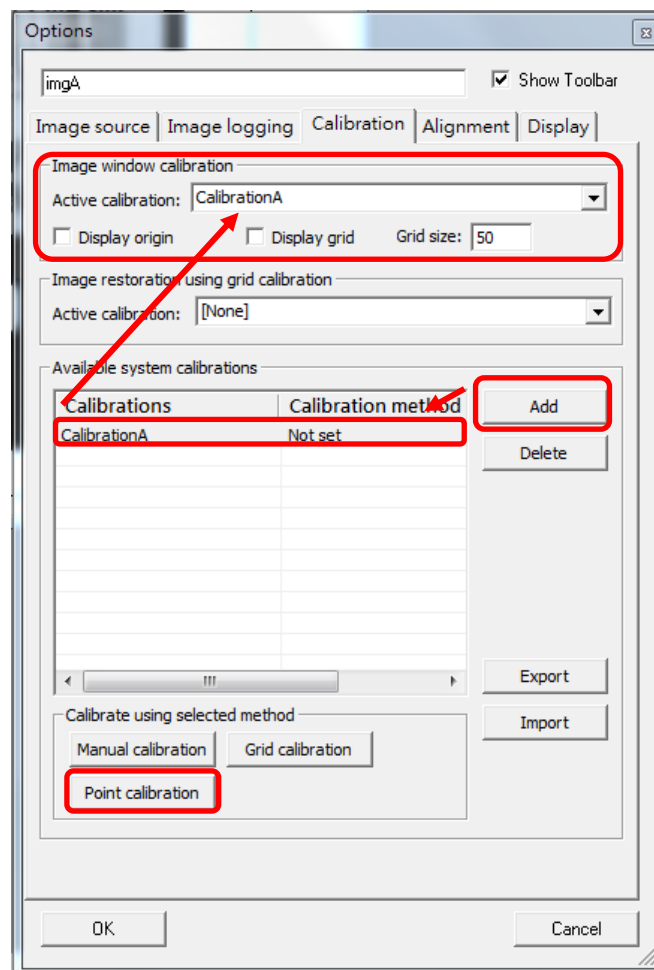
How to calibrate the image window to specific coordinate by four points in Inspector PRO?

## ■ 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.

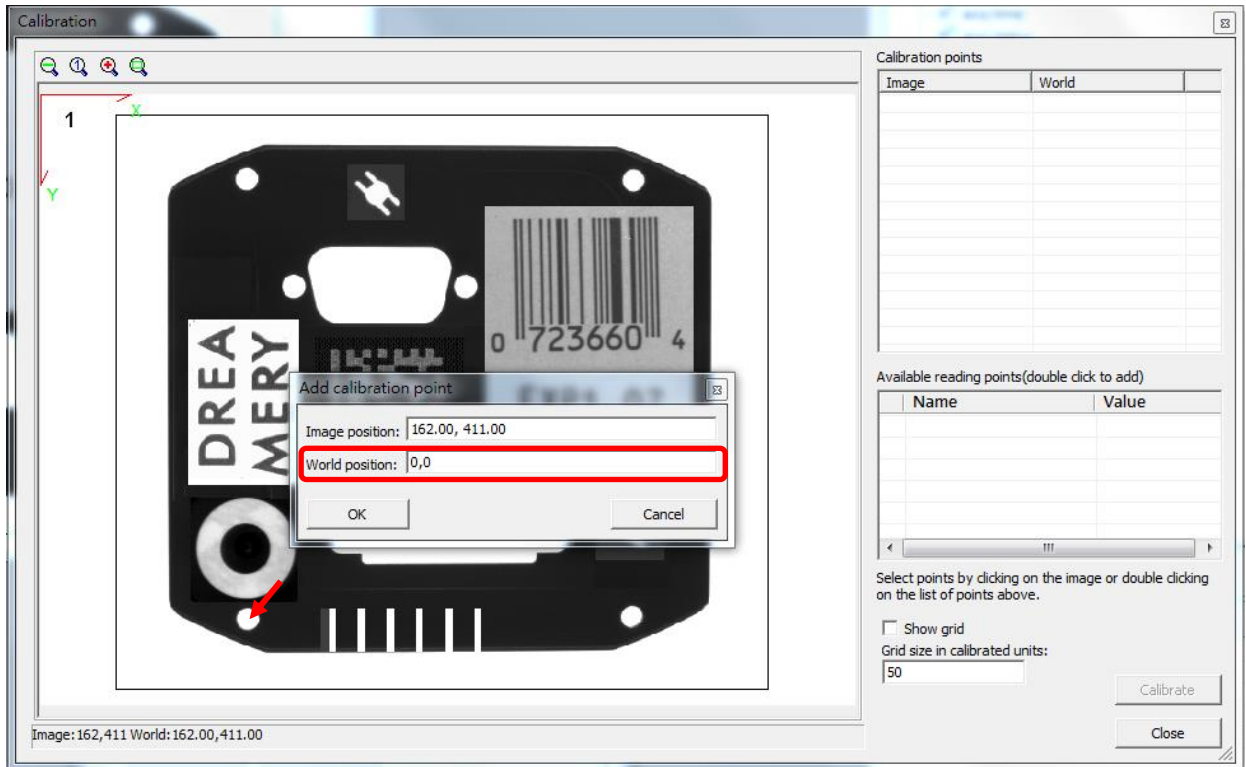
### The angle of developer

1. 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."



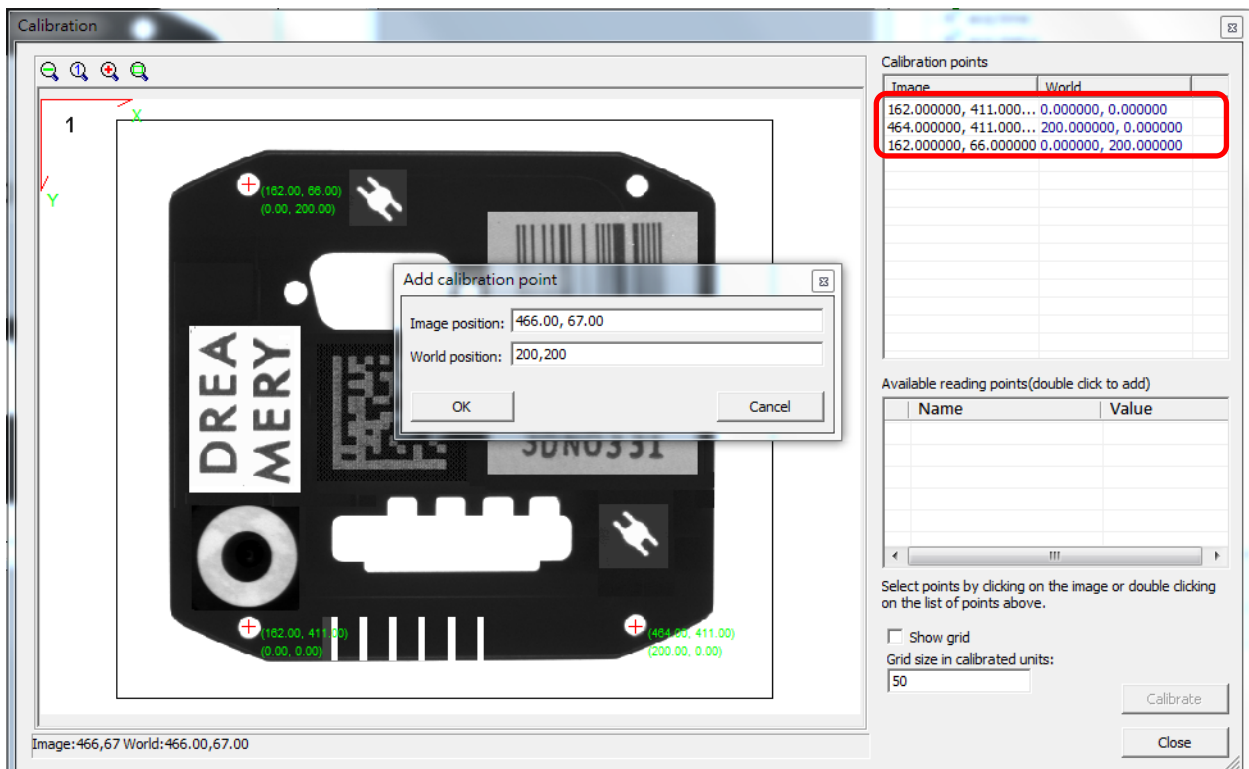
**Picture1:** The image of "Options"

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.



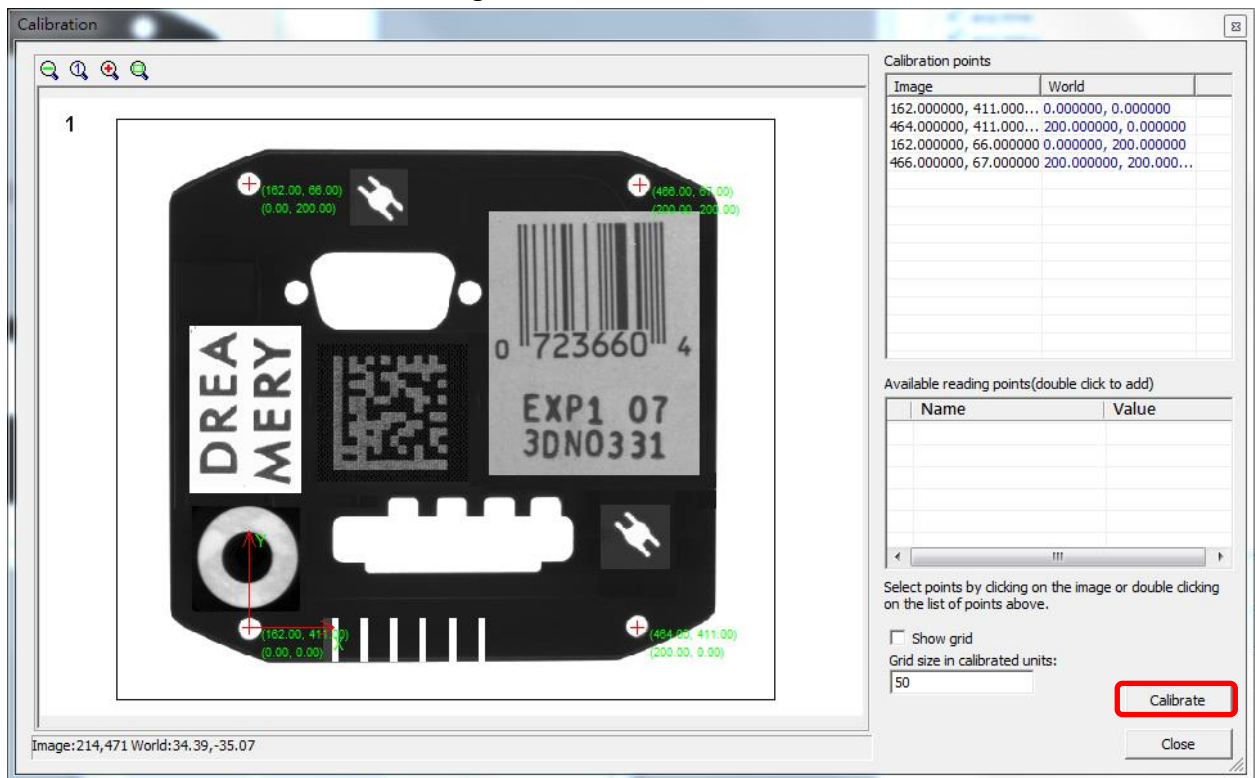
**Picture2:** The image in "Calibration"

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.



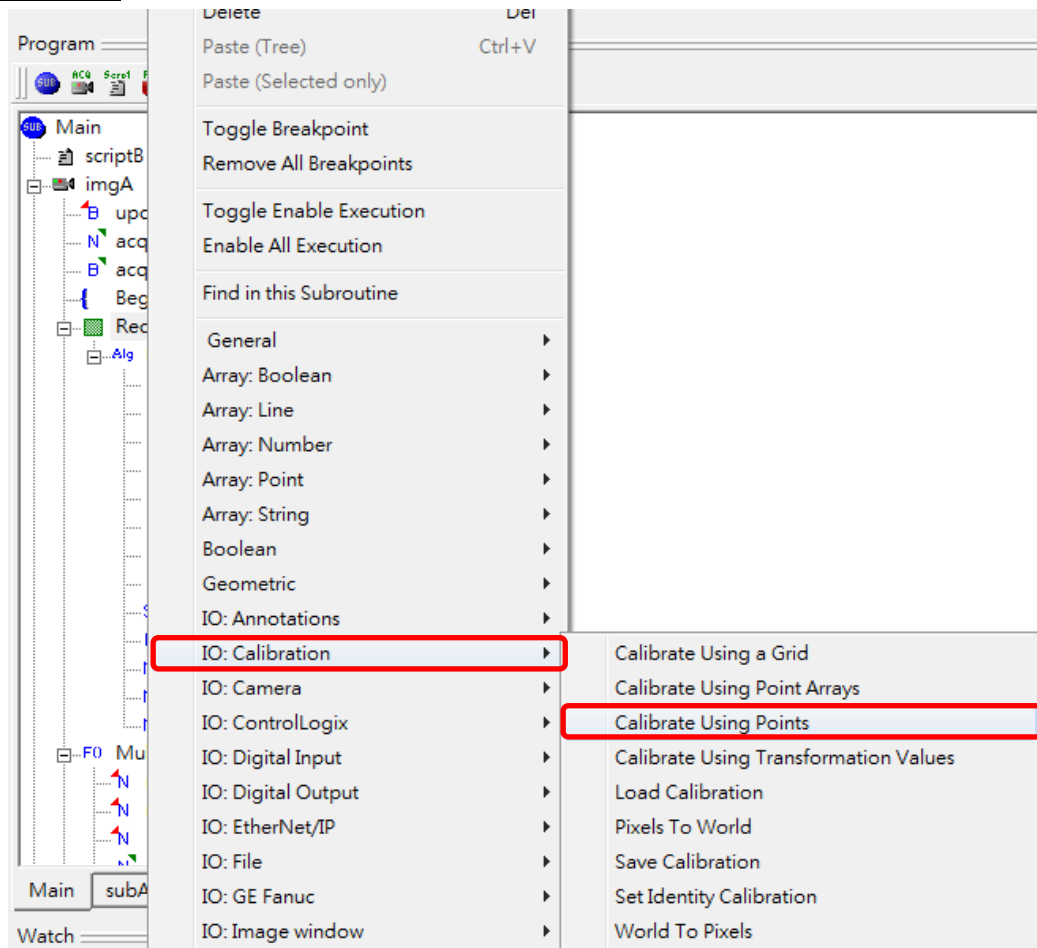
**Picture3:** The image in "Calibration"

- 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."



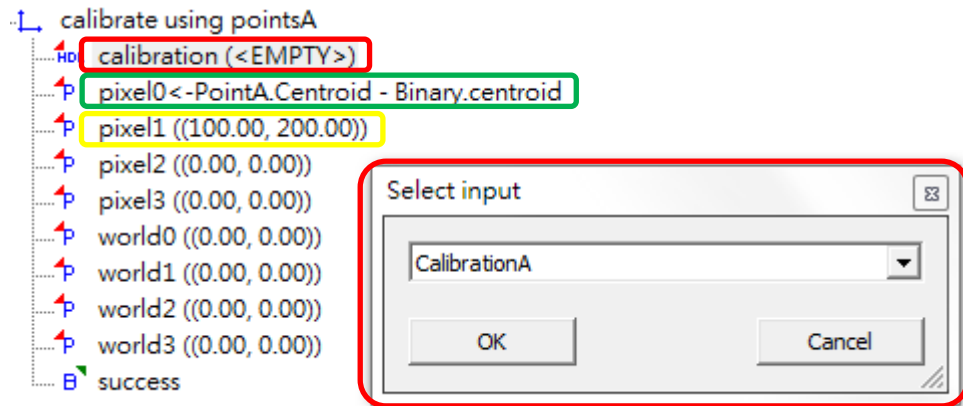
Picture4: The image in "Calibration"

## The angle of end user



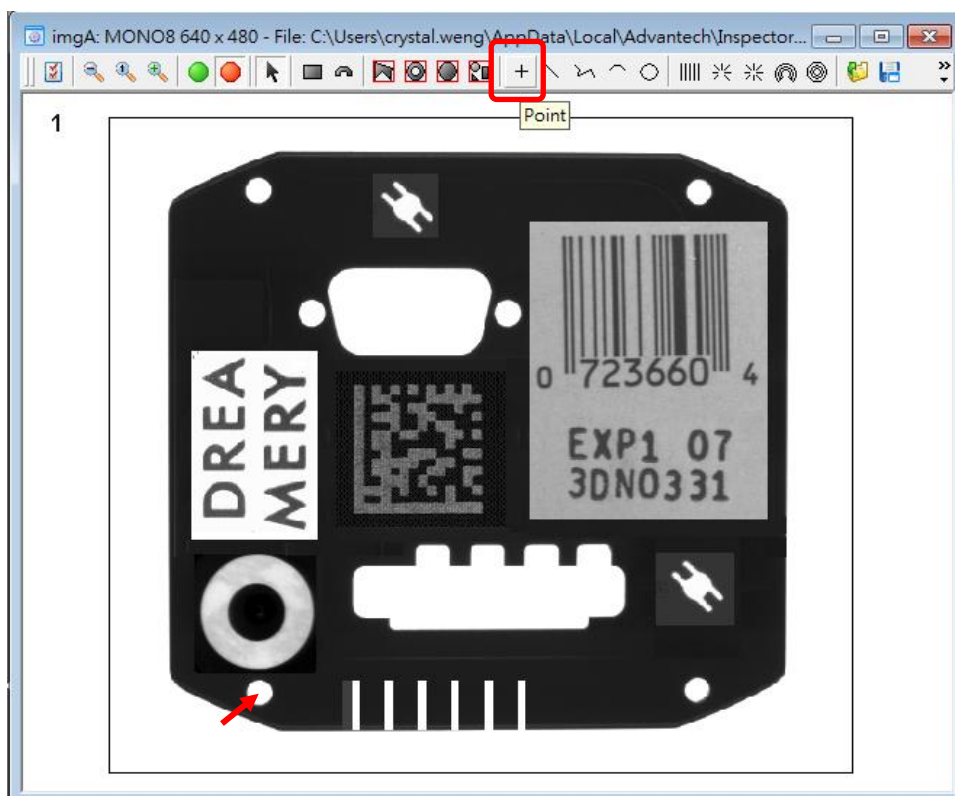
Picture5: The image of program window

1. 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."
2. 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).
3. According to picture 6, connect input "CalibrationX" to the "calibration" in "calibrate using points" function.(red box)

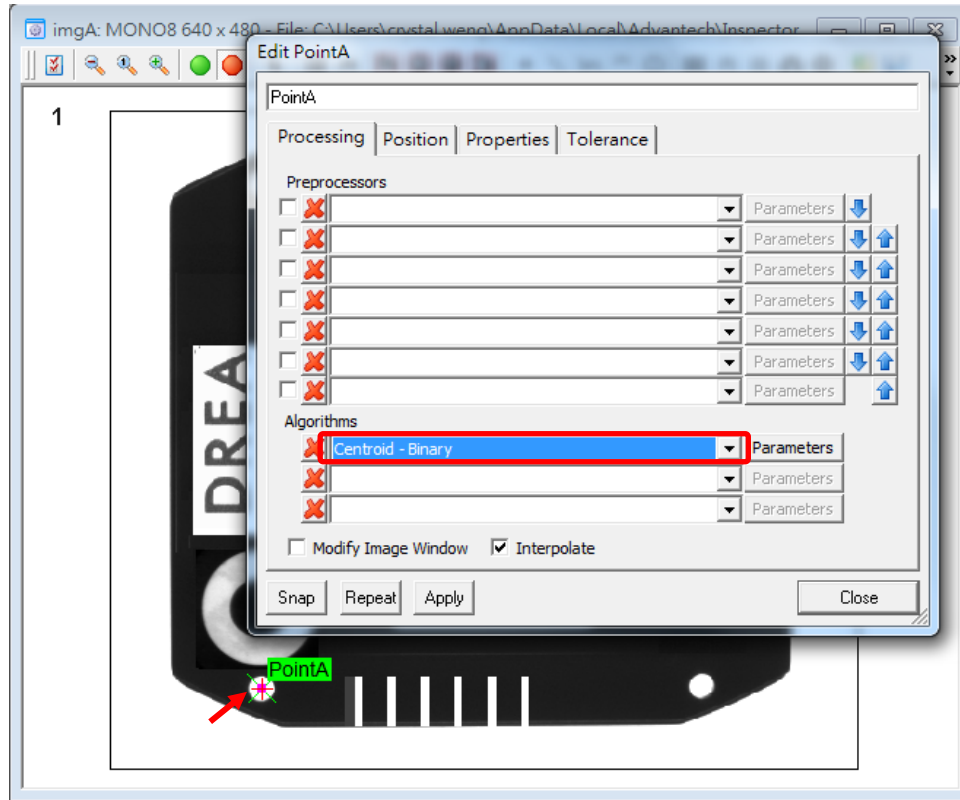


Picture6: The image of program window

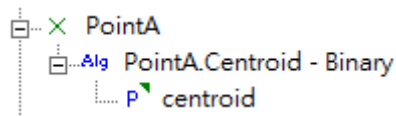
4. Type coordinate of selected point(yellow box) or just add a point(green box, we will explicate the steps of add a new point in 4.a) to pixel0~pixel3. world0~world3 are coordinates you want pixel0~pixel3 to be.
  - a. If you want to add any point in the image, click "+" and choose a point in the image 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)



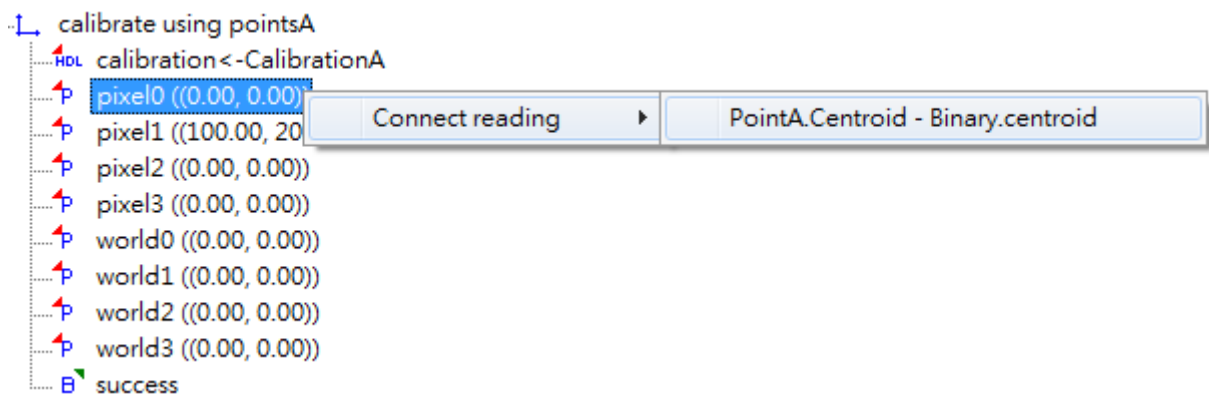
**Picture7:** The image of image window



**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