

Advantech AE Technical Share Document

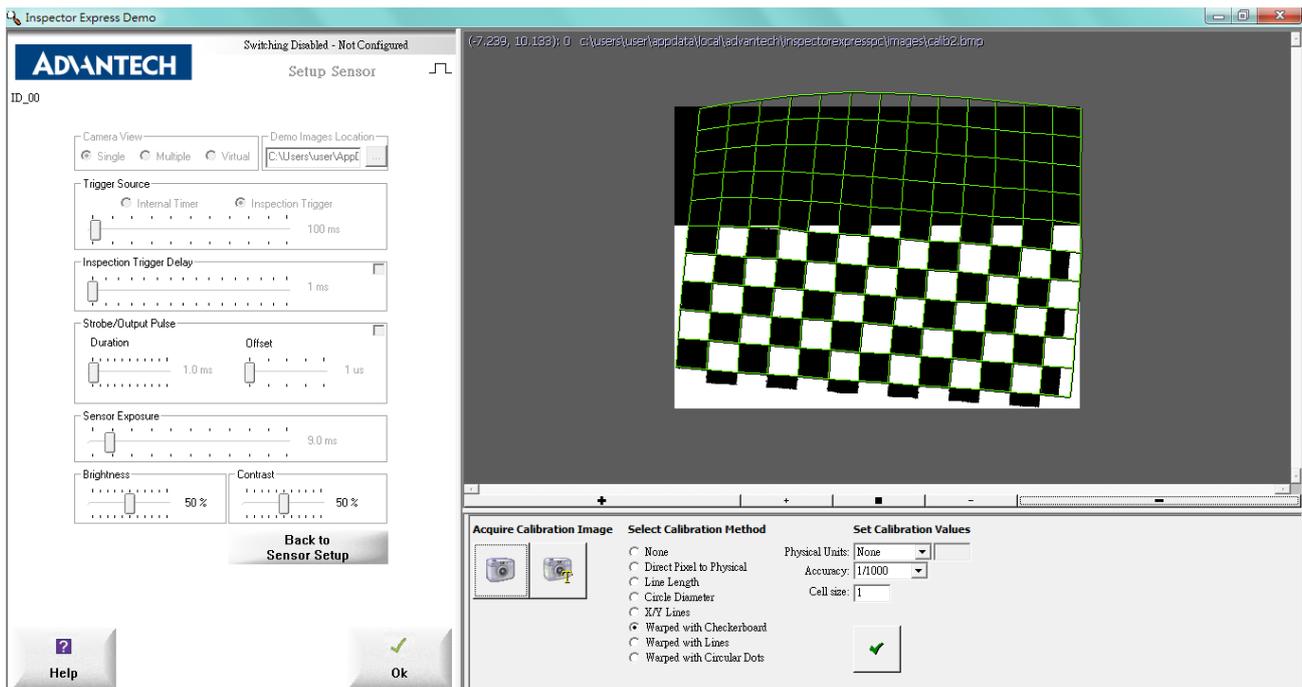
Date	2015/8/7	SR#	1-2179389487
Category	<input type="checkbox"/> FAQ <input checked="" type="checkbox"/> SOP	Related OS	
Abstract	Calibrate A Rotated Coordinate System		
Keyword	Calibration, Rotated Coordinate System, Inspector Express		
Related Product	AIN-EX-USBE, AEE-M0640-EXE, AEE-M1024-EXE, AEE-M1280-EXE, AEE-M1600-EXE, AEE-C0640-EXE, AEE-C1024-EXE, AEE-C1280-EXE		

■ **Problem Description:**

Sometimes in some applications for example a robot system, the coordinate must follow the robot system. It is hard to calculate by simply few line of algorithm. The way calibrating the coordinate system attached to the robot system could be executed using checker board calibration.

■ **Brief Solution - Step by Step:**

1. The checker board itself must be aligned by the robot moving.
2. As the checker board is placed appropriately, calibrate the coordinate system.



3. The coordinate system is changed and the change could be seen in the Tool setting page—the direction of coordinate axis itself is rotated.
4. Attach the origin to the origin symbol (it could only be a position alignment point) so that the rotation and displacement of the coordinate system are done.

The screenshot displays the 'Inspector Express Demo' software. The main window shows a grayscale image of a CD-ROM with a red box highlighting a specific area. The interface includes a 'Setup Template' section, a 'Select Tools' section, and a 'Tool' table at the bottom.

Tool					Fail	Perfect	Fail
Circle: CDiam2	1	0.398	0.091	0	0.398	5.398	
Match: MS	1	100%	0.349	100	100%	100	

■ **Reference:**