

## Advantech AE Technical Share Document

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Category	■ FAQ □ SOP	Related OS	
Abstract	When using 2D or 3D arc pop up Invalid radius error		
Keyword	ARC, 2D ARC, 3D ARC		
Related Product	PCI-1245V, PCI-1245, PCI-1265, PCI-1285, PCI-1203		

### ■ Problem Description

When user use 2D or 3D Arc function, user may get an “invalid radius error”, how to solve it ?

### ■ Problem Analysis

This issue usually happen with the coordinate of the arc that get transfer from real unit to pulse domain, the coordinate cannot drawing a arc because of the radius is not same from start point to end point.

### ■ Solution

To solve this issue, please increase the accuracy of the coordinate and make sure the distance of center point to end point is same as start point to center point.

The equation as below

$$Radious = \sqrt{(X_2 - X_1)^2 + (Y_2 - Y_1)^2}$$

