ADVANTECH Enabling an Intelligent Planet

Date	2015/07/16	y/16 SR# 1-2120463818		
Category	□FAQ ■SOP	Related OS	N/A	
Abstract	How to Calibrate Advantech ADAM AIO based Module			
Keyword	Calibrate, AIO			
Related				
Product	Alo support among ADAM-4XXX & ADAM-6XXX			

Problem Description:

This document demonstrates the SOP of calibrating Advantech ADAM AIO based module.

Brief Solution - Step by Step:

AI/AO of ADAM-Module can be calibrated via ADAM utility when necessary.

In addition, using an precise voltage source(such as Fluke) is also required to calibrate the module correctly.

Below is an rough SOP by using ADAM-4017+(Vin 0, Channel 0) as calibration example.



- 1. Set modules as initial mode before applying power to the module and let it warm up for about 30 minutes.
- 2. Click "Setup" from utility tool bar, then select "Allow Calibration".

🗙 Advantech Adam/Apax .NET Utility (Win32) Version 2.05.04						
<u>File I</u> ool	ls 🔓	Setup) <u>H</u> elp			
🖹 🛃 🔍	-		<u>F</u> avorite Group			
🖃 🗐 Serial			<u>R</u> efresh Serial and Ethernet		D&M-4017+	
- T- 🗿 O	OÞ		<u>A</u> dd COM Ports	ĺ	IDAM-4017+	
	OM OM	~	Show TreeView	_	Module setting	Data area
		~	Allow <u>C</u> alibration		Channel	Input range
🖃 🍋 Etherr	net				Chamier.	input tange

Enabling an Intelligent Planet

AD\ANTECH

3. Select input range that you want to calibrate. In this example, we select ±10V.

ADAM-4017+	
Module setting Data area	
Channel: Input range:	Zero calibration
0 ▼ +/- 10 V ▼ Apply ▲ All follow CH0	Span calibration

4. You may start calibrating by select "Zero Calibration". A pop-out window will be shown by telling you to apply 0.0V to the Channel 0

17 ADAM-401	7+ zero calibration		×		
Please apply	0.0 mV	to the Ch-O of the module.			
Press 'Apply' button to do the calibration!					
Арріу					

5. At this point, apply 0.0V to the Channel 0 from the power source, and click "Apply".

Once it is done, a pop-out message "Set Calibration Done!"



- 6. Similarly, you may execute SPAN calibration by click "SPAN Calibration", and apply 10.0V to the channel from power source.
- 7. After whole calibration is done, you can check whether the level of mV, mA and V have been correctly sensed/detected via AI channel 0.

Channel setting					
	Channel	Value	IntputRange	_	
C	D 0	0.000 V	+/- 10 V		Apply change
	1	16.170 mV	+/- 150 mV		
	☑ 2	13.240 mV	+/- 150 mV		Enable all
	⊡ 3	12.090 mV	+/- 150 mV		,
	☑ 4	14.490 mV	+/- 150 mV		
	·	· - ·	· ·		