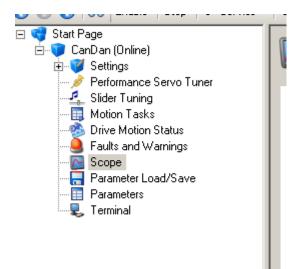
- 1. Open Workbench
- 2. Select scope from the tree on the right



3. Click on the "CHANNELS" tab and then select "<User Defined>" from the pull down menu:

Chan	nels Time-base and Trigger	Service N	1otion   M	Notion Tasks		
Id	Source	Color	Hide	Y Axis		
1	<user defined=""></user>	-		Default		
3	<ul> <li>2 Velocity loop error (VL.ERR)</li> <li>3 External feed-forward (VL.BUSFF)</li> <li>4 Velocity feedback (VL.FB)</li> <li>5 Unfiltered Velocity Feedback (VL.FBILTER)</li> <li>6 Velocity loop model (VL.MODEL)</li> <li>7 Velocity overall feed-forward (VL.FF)</li> </ul>					
	<user defined=""></user>	(, , ,		-		

4. Replace "<User Defined>" with 0x2000186e.s16".

Chan	nels Time-base and Trigger	Service Mo	otion   1
Id	Source	Color	Hide
1	0x2000186e.s16		
	None		
3	None		
4	None		
5	None		
6	None		

5. Now click on the "TIMEBASE AND TRIGGER" tab. Set up as seen below:

Sampling			Trigger	
Recording time:	10000.0000 🗦	ms	Source: Immediate	•
Sampling Frequency:	500.000	Hz	Level: 0.000	
Number of samples:	5,000		Position: 1000.0000 📑 ms	
Sampling Interval:	2000	μs	Slope: 0 - Negative	-

6. When your ready to plot the feedback, click on the "START RECORDING" button (on the right side). Your plot will record for 10 seconds.

			Time [milliseconds]	
Channels Time-base and Trigge	Service Motion	Motion Tasks   Servo Gains   Observer   A	II Gains AR Filter Save and Print Measure Cursors Display Settings	
Sampling		Trigger		
Recording time: 10000	).0000 🕂 ms	Searce: Immediate		Idle
Sampling Frequency:	500.000 Hz	Level: 0.000		Stop Mition
Number of samples:	5,000	Position: 1000.0000 - ms		Enable
Sampling Interval:	2000 µs	Slope: 0 - Negative		
More >>	epeat Arming			Start Recording Refresh
		71.0000		

7. To save a plot to email me, click on the "SAVE and PRINT" tab. Save the plot as a "CVS" so I can use Excel to review it

Channels Time-base and Trigger Service Motion Motion Tasks Servo Gains Observer All Gains AR Filte	r Save and Print M
Save Image As Save csv File Load csv File	
Print Image Page Setup	

8. The results are in counts. The signal is  $(\sin^2 + \cos^2)/2$ . What we are looking for is for this signal not to dip below 5347 counts or go above 15000 counts with ~12000 being the typical.