






# DAQFactory-LabJack Quick Tutorial


-  **Acquire** one analog input (AIN0)
-  **Convert** to engineering units
-  **Display** as a number and a graph
-  **Control** a digital output (FIO4)
-  **Log** the analog input to disk

## ! Before Starting Complete:

LabJack Windows Quick Start Guide

! Tutorial for one U3/U6/UE9x on USB

Not for U12

 See DAQFactory-LabJack Application Guide

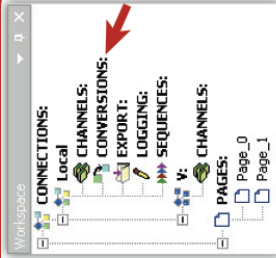
## 1 Start DAQFactory:

Start => All Programs =>  
DAQFactory Express =>  
DAQFactory Express



 Section 2.3

## 2 Click CONVERSIONS: in Workspace



 Section 4.3

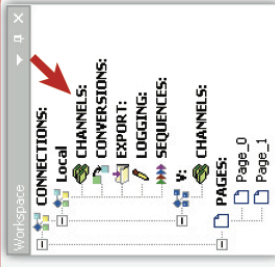
## 3 Click Add, Fill in row:

Conversion Name = PressurePsi  
Formula = (Value + 1) \* 100



 Section 4.3

## 4 Click CHANNELS: in Workspace



 Section 3.1

## 5 Click Add, Fill in row:

Channel Name = Pressure  
Device Type = LabJack (NOT LabJack\_U12!)  
D# = 0  
I/O Type = A to D  
Channel = 0  
Conversion = PressurePsi

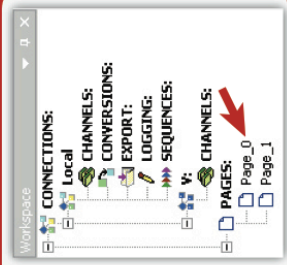
## Click Add, Fill in new row:

Channel Name = Pump  
Device Type = LabJack  
D# = 0  
I/O Type = Dig Out  
Channel = 4



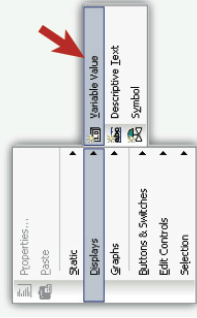
 Section 3.1

**6** Click Page\_0 in Workspace



Section 4.1

**7** Right Click in blank area. Select Displays => Variable Value



(click while holding Ctrl key to move component)

Section 4.2

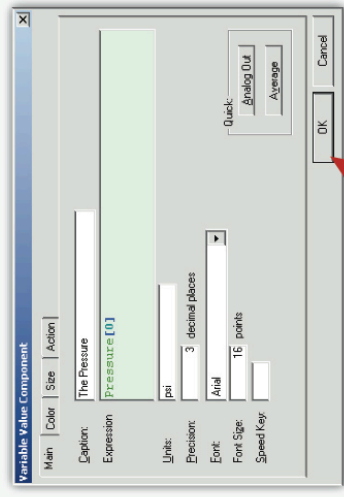
**8** Right Click on Value: 0.000 V. Select Properties...



Section 4.2

**9** Fill in window: Caption = The Pressure

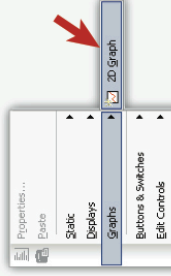
Expression = Pressure[0]  
Units = psi



Click OK

Section 4.2

**10** Right Click in blank area. Select Graphs => 2D Graph

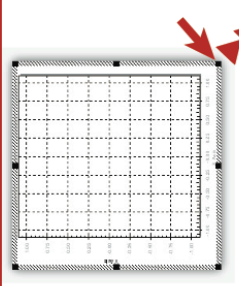


(click while holding Ctrl key to move / resize)

Section 4.5

**11**

While pressing the Ctrl key, click and drag bottom right corner to resize



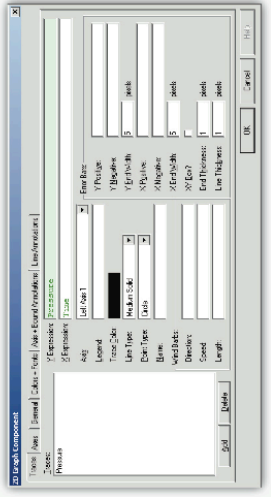
Section 4.1

**12** Right Click on graph. Select Properties...



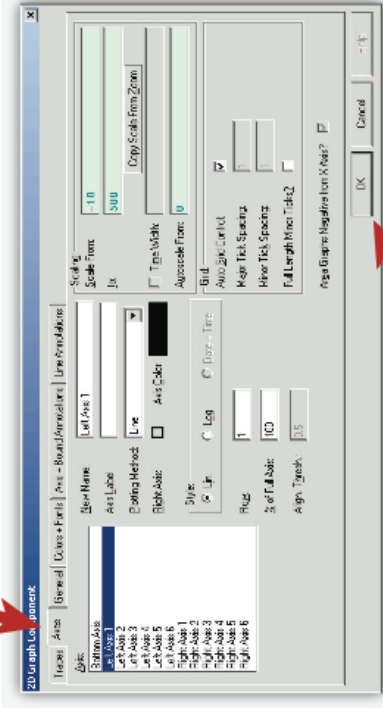
Section 4.5

**13** Fill in window: Y Expression = Pressure



Section 4.5

**14** Click Axes tab.  
Fill in window:  
Scale From = -10  
Scale To = 500



Click OK

Section 4.5

**15** Right Click in blank area.  
Select Displays =>  
Descriptive Text



(click while holding Ctrl key to move component)

Section 4.4

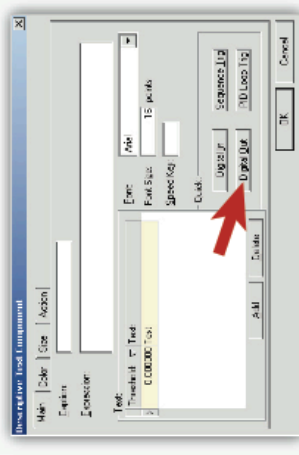
**16** Right Click on Text.  
Select Properties...



Section 4.4

**17**

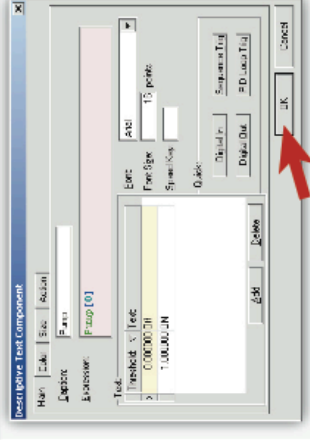
Click  
Digital Out



Enter Pump.  
Click OK



Click OK



Click Pump to toggle FIO4 output



Section 4.4 / 4.6

**18**

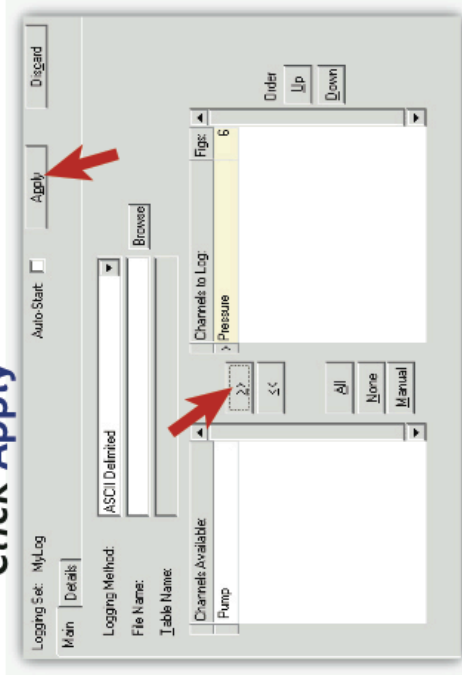
**Right Click  
LOGGING: in  
Workspace.  
Select Add  
Logging Set**  
**Enter MyLog.  
Click OK**



**Section 5.1**

**19**

**Fill in window:**  
File Name = c:\mydata.csv  
**Click the >> button**  
**Click Apply**



**Section 5.1**

**20** **Click + next to LOGGING  
in Workspace.**

**Right Click MyLog.  
Select Begin Logging Set**  
**(Click Page\_0 to  
return to graph)**



**Section 5.1**

**samples\QuickTutorial.ctl**  
**DAQFactory - LabJack  
Application Guide**  
**DAQFactory Express Users Guide**  
**www.daqexpress.com**

**DAQFactory Pro Trial**

**25 day trial included on the CD or at  
www.azeotech.com**

Unlimited pages, 30 more screen components,  
connectivity to other devices, more allowable  
I/O points, and much more...