

## Pre-Lab 4 - Fall 2008

Please build the following VIs prior to this lab:

### 1. `yourname_MotorDrive_Tacho.vi`

Build a VI to generate a DC voltage to drive a motor and read the tachogenerator voltage.

- Open the VI “`DAQ_MotorDrive_Tacho_F08.vi`” located in the melab share drive
- Save this VI as `yourname_MotorDrive_Tacho.vi` to the desktop or your network drive.
- Go to the front panel.
  - Select **Pointer Slide** from the Numeric subpalette and place it on the front panel and change the label to “Motor Drive Input Control”.
- On the block diagram
  - Wire the Pointer Slide to the DAQmx Read.vi.
  - Wire the Pointer Slide to the Merge Signal icon that is connected to the Voltage Signal Chart. This displays the Motor Drive Voltage on the Voltage Signal Chart.
- To make the digital display corresponding to the Pointer Slide visible, right-clicking on the Pointer Slide >> Click on Visible Items >> Click on Digital Display. You can now set the the Motor Drive Voltage using the Pointer slide or entering a number in the Digital Display.
- Set the Pointer Slide properties by right-clicking on the Pointer Slide and selecting Properties from the Pop-up menu
  - “Data Range” tab
    - Range: -5.0, +5.0
    - Increment: 0.01
- Save this completed VI as `yourname_MotorDrive_Tacho.vi`. It should look similar to Figure 1 and Figure 2.

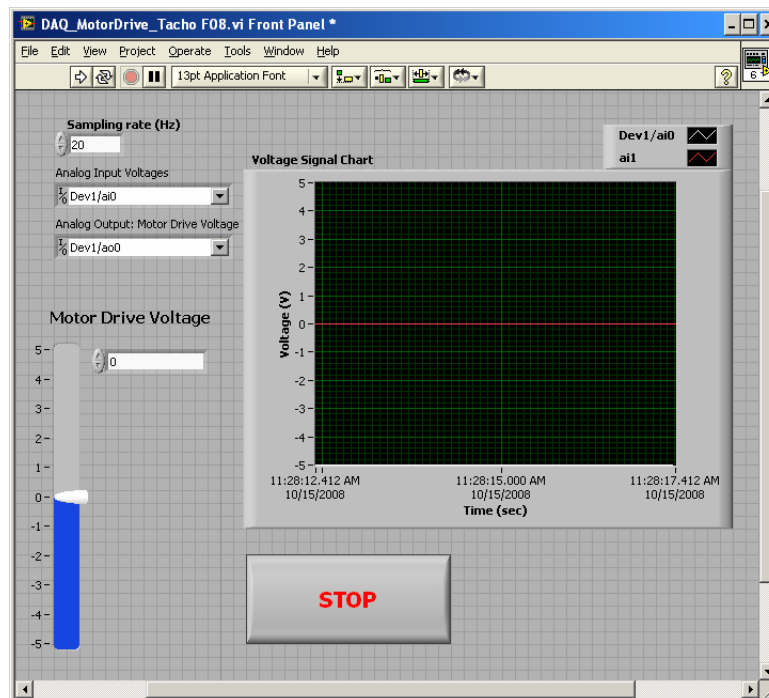


Figure 1. Front Panel for `yourname_MotorDrive_Tacho.vi`

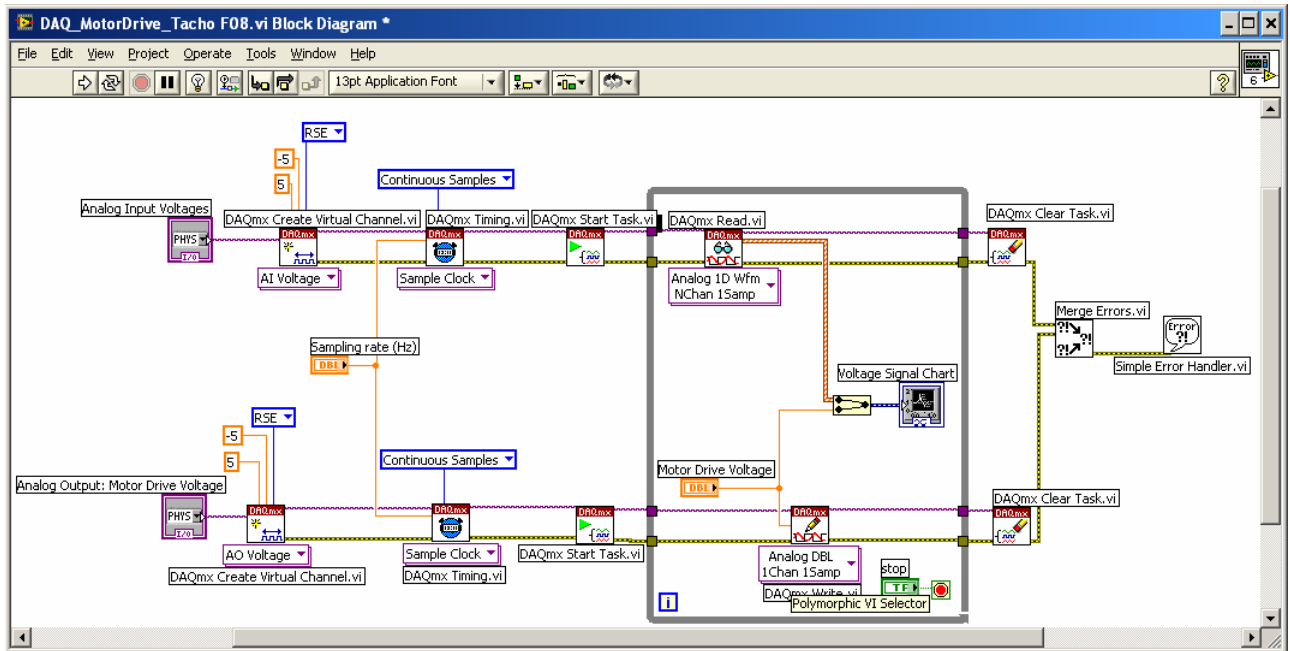


Figure 2. Block Diagram for yourname\_MotorDrive\_Tacho.vi