Pseudo Code of Voltage Reader VI

While Loop (Producer/ Getting Data)

Read Voltage on DAQ

Put data on the Queue

Wait till Center button is clicked

Disables Center Button

Puts out a nodifier that Center Button Clicked? = TRUE

Wait till Enable Center Button is clicked

Enables the Center Button

End While Loop

While Loop in || (Consumer / manipulating data)

Takes from the queue Data from DAQ

Checks if Y values >= Trigger

If True

Centers the data points that crosses the threshold

Outputs data to the graph (if the buffer is full)

If False

Gets the next data set in the queue

If Center Button is clicked

Enable the Knob and amplifier

Scale X offset to the value of the Knob

End While Loop