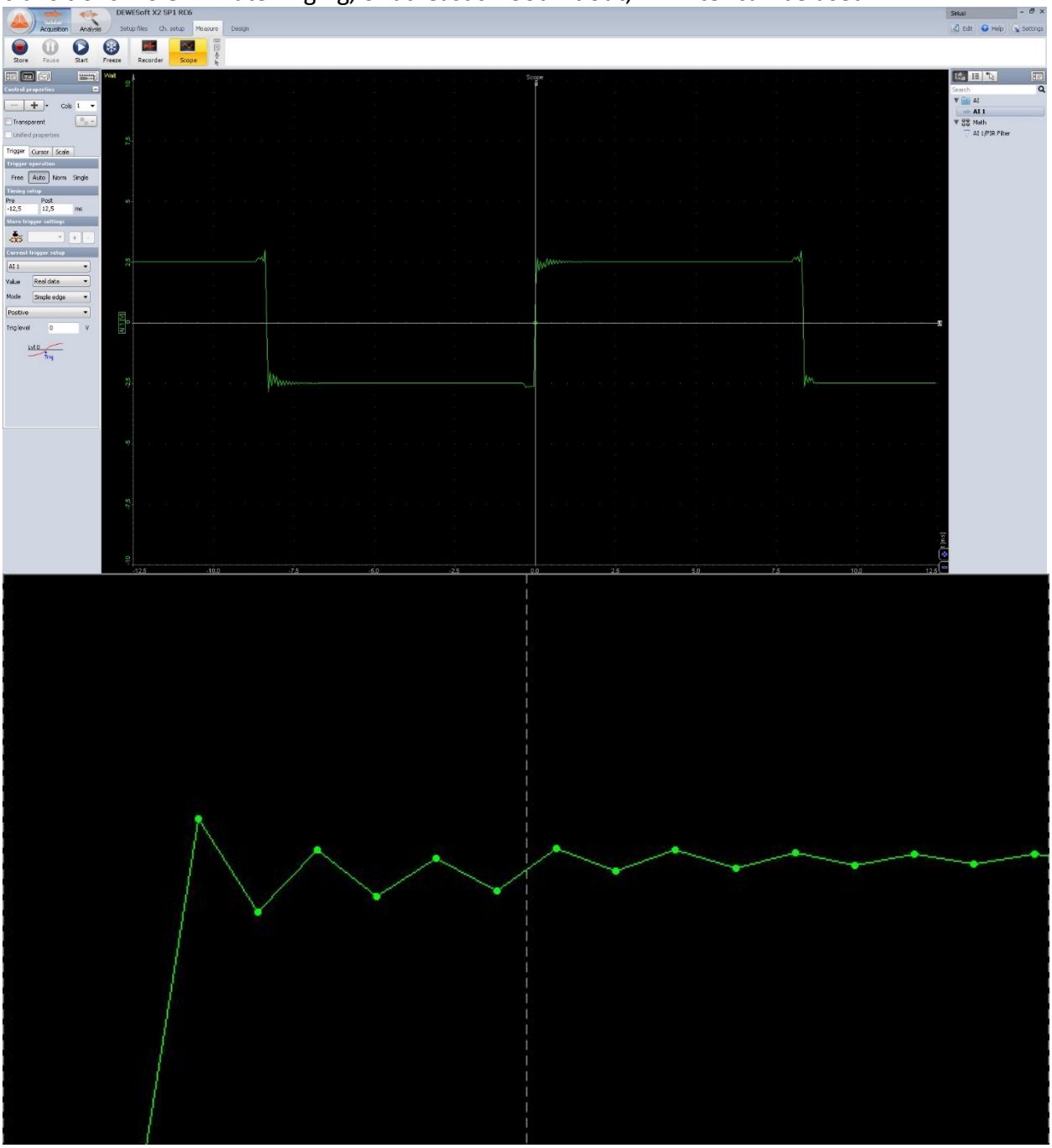
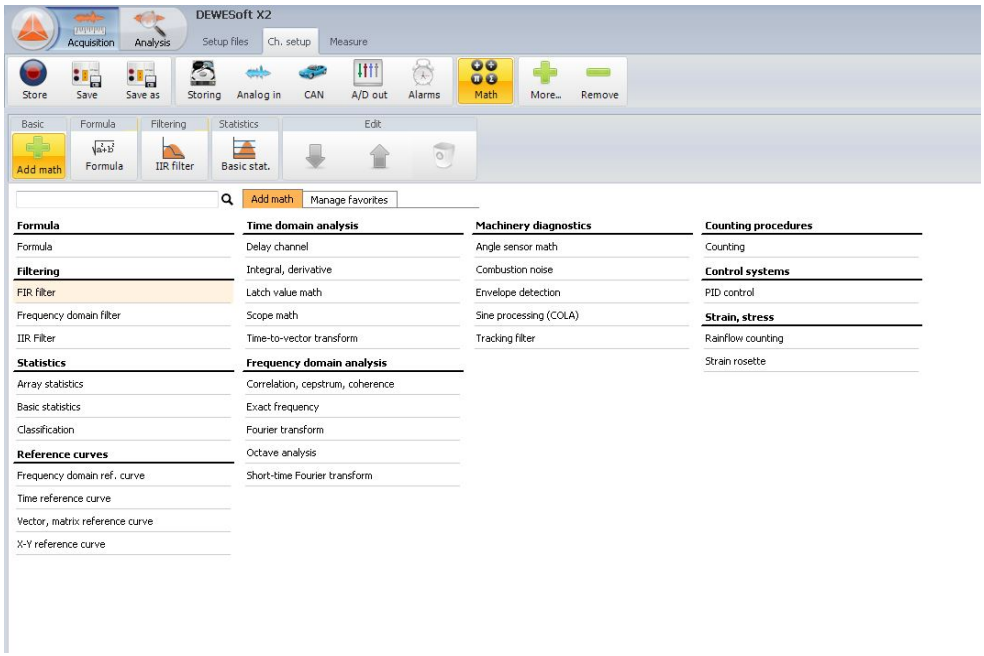
Reduce ringing on signal with FIR filter

As the picture below shows, there can be some ringing on analog signals with sharp transitions. To eliminate ringing, or at least smooth it out, FIR filter can be used.

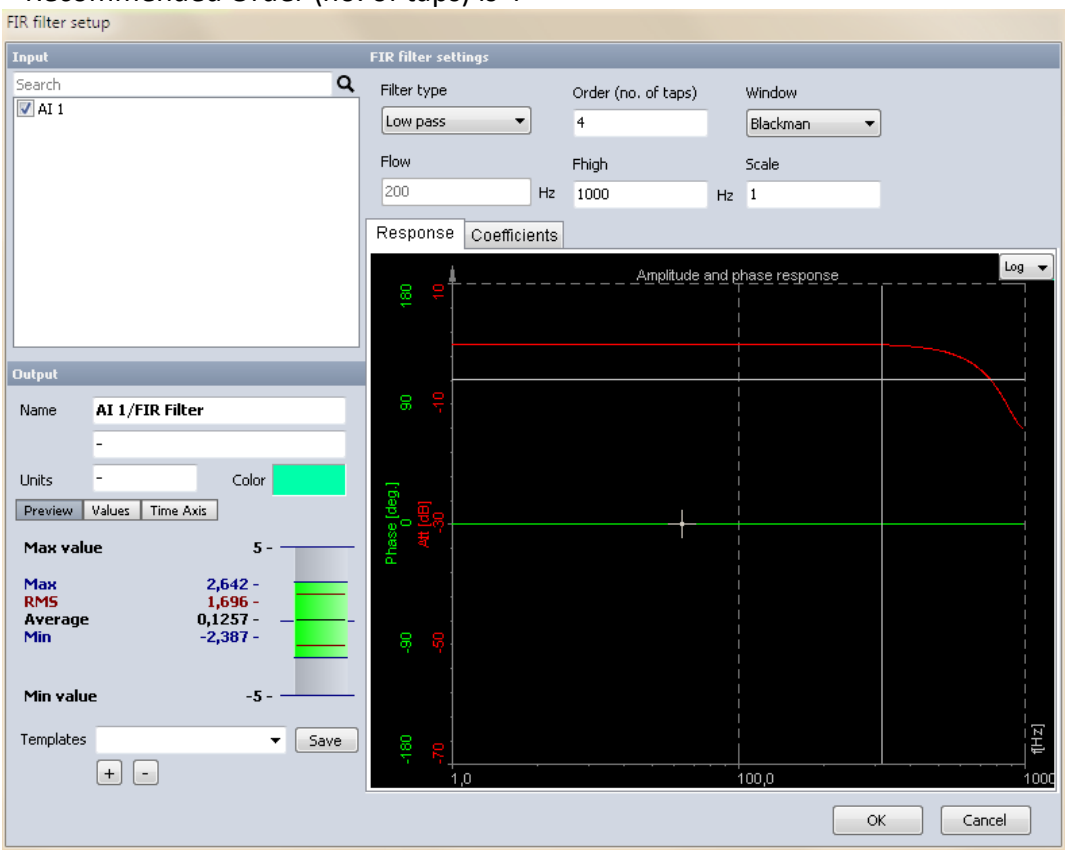


First we need to add the FIR filter to our Math Channels. We can find filters by clicking “add math” button under “math” tab.

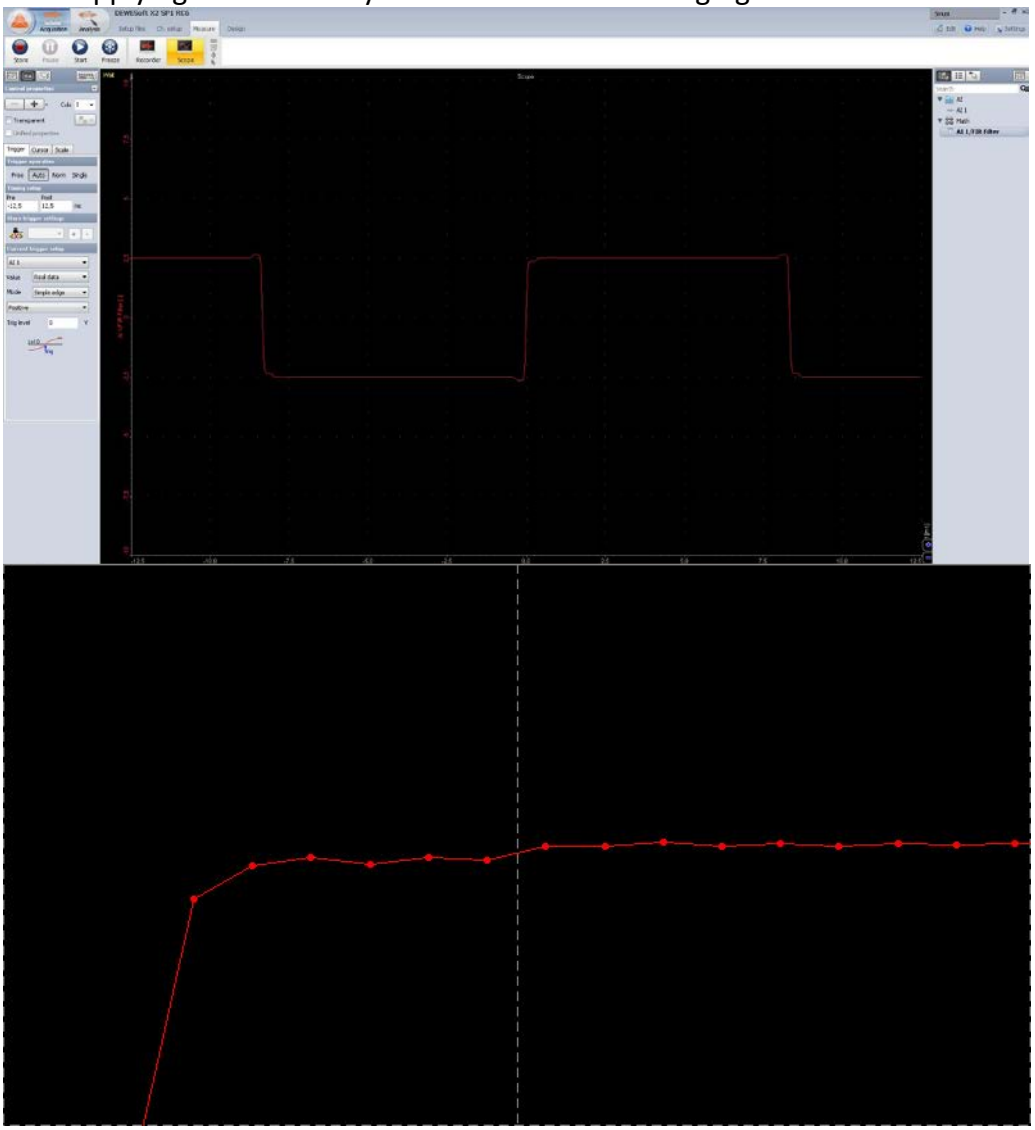
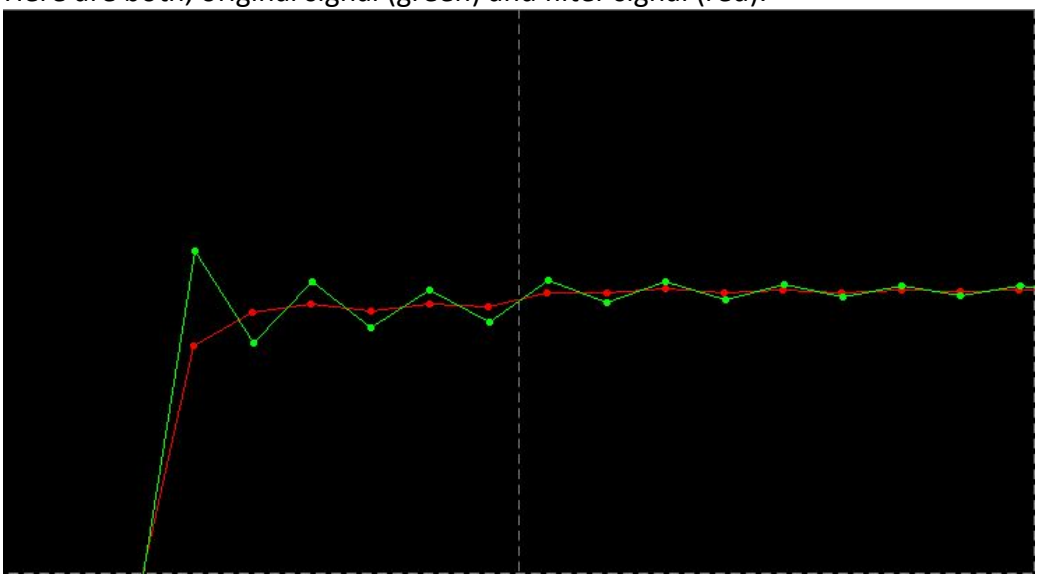


For best results, this is how to set up the filter:

1. On the left, select the channel or channels on which filter will be applied. .
2. Use the low pass filter type
3. Set the Fhigh to 1000 Hz.
4. Recommended Order (no. of taps) is 4



After applying the FIR filter you can see below the ringing is smoothed:



Here are both, original signal (green) and filter signal (red).