

## TECH NOTE :: PMX Adjustment Assistant

Version: 2018-04-13  
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 Status: HBM: Public

### Brief description

This is an instruction for adjusting a sensor with the PMX. The adjustment assistant is especially useful if a sensor is not calibrated, or assembled in a construction, for example in force bypass. There are two approaches available to adjust sensors using the PMX: A reference channel from the PMX can be used, or a reference value can be entered manually. The result in each case is a linear two-point scaling (see figure 1).

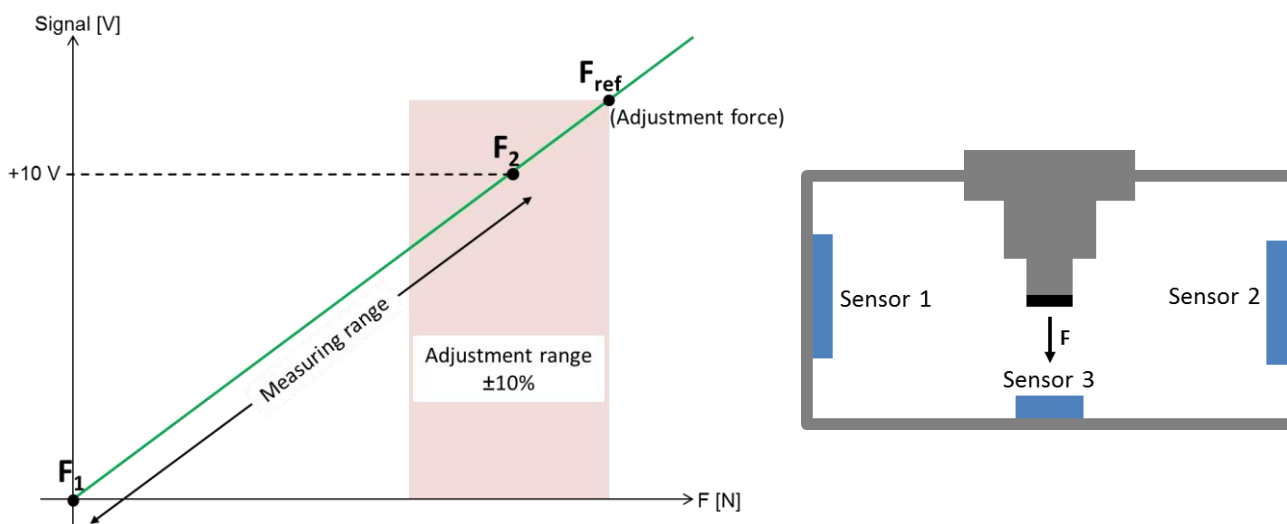


Figure 1: Two-point scaling and force bypass

### Start the Adjustment Assistant

Go to *Settings -> Assistant -> Adjust Channel*.

<b>OVERVIEW</b>	SYSTEM			
	AMPLIFIER			
	CALCULATED CHANNELS			
	FIELDBUS			
<b>SETTINGS</b>	DIGITAL OUTPUTS			
	LIMIT SWITCHES			
	ASSISTANT	ADJUST CHANNEL		

Figure 2: PMX Settings Adjustment Assistant

### Adjust channel and get reference value manually

One of both possibilities to adjust a sensor is to provide a known reference force (e.g. by applying a calibration force). Enter its value in the dialogue window before (figure 3). Afterwards the channel that should be adjusted has to be selected. It is possible to adjust several channels at the same time.

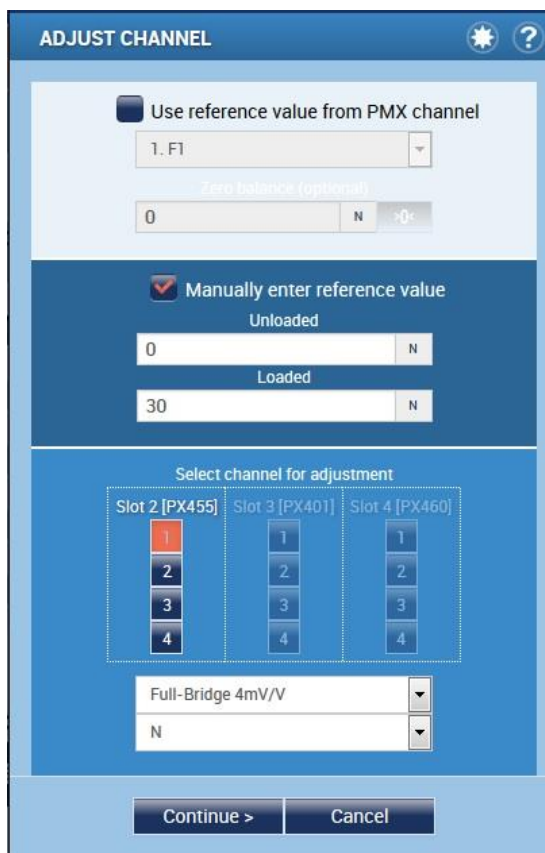


Figure 3: Adjust channel with reference force

Now the adjustment procedure containing three steps is starting:

First the sensor is to be unloaded completely. The second step is to load the sensor with the reference force that has been entered before. In the third step this process can be repeated several times to increase the accuracy if necessary. The Mean and standard deviation is displayed here. If the results are satisfying, the sensor can be adjusted by clicking *Apply*.



Figure 4: Adjustment procedure

### Adjust channels and get reference value from the PMX

In the second examples it is shown how to adjust two channels at once with a reference channel. The general procedure is the same (see figure 4), however instead of a calibration force a PMX-measurement-channel is used as reference value. The channels can be selected below in the same window.

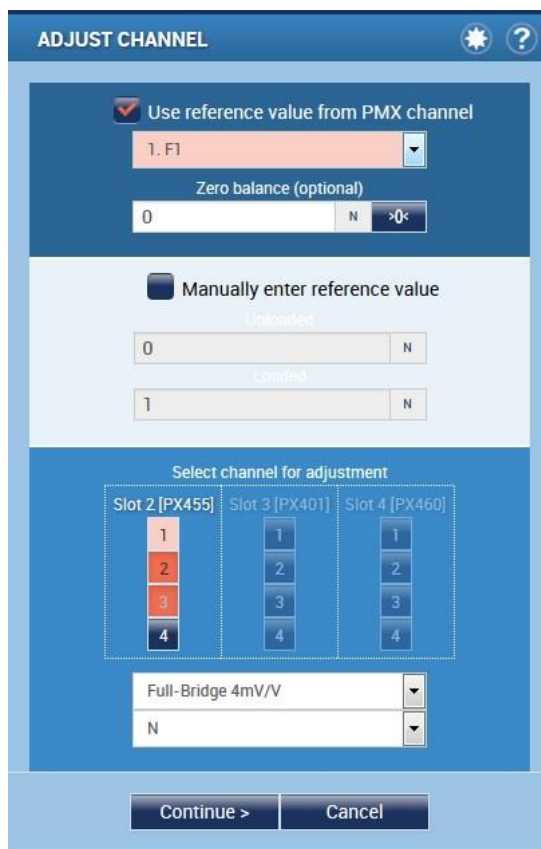


Figure 5: Adjust two channels with a reference channel

Regardless of which approach has been applied, the two-point-scaling is automatically entered in the *Amplifier* menu.



Figure 6: Two-point-Scaling in Amplifier menu

**Hint:** Additionally all the values of the adjustment process are saved in the log-file.

## Disclaimer

These examples are for illustrative purposes only. They cannot be used as the basis for any warranty or liability claims.