

MVC Normalization in MyoResearch XP Post-Process Method

This document explains how to create the MVC record, then apply those values to analyze your study data (Post-Process). However, we recommend that you calculate and apply the MVC values in Real-time.

Create the MVC

- 1) Record and save the data.
- 2) In the Record Viewer window, select "Signal Processing"
- 3) Insert Rectification, Smoothing and Amplitude Normalization (in that order).
- 4) Ensure that Rectification and Smoothing have the desired selections.
- 5) Highlight "Amplitude Normalization". The typical selections are:

Normalize to: Peak Value

Window: 1000ms

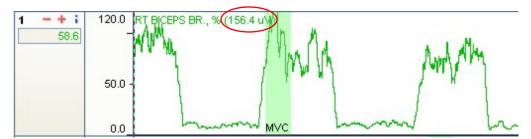
NOTE: We recommend using a value greater than 100ms to prevent spikes from being selected as the MVC. Refer to the "ABC of EMG" manual for more information.

<u>Restrict Value to</u>: Most of the time this option will be left blank. It is only used when you want to use a section of the record for the MVC.

- 6) Click OK to the Signal Processing Menu.
- 7) A dialog box will ask "Update MVC Stack?" Click Yes
- 8) The green highlighted areas in the Record Viewer are the MVC values.

NOTE: The data you are viewing is now in percent and not in "uV" (microvolts).

9) The MVC "uV" value is located by the channel name.



NOTE: The MVC is not one point. The software averages the values in the specified window (1000ms) to determine which average is the highest and assigns that value to the MVC. This method reduces the chance that a spike in the data will be used as the MVC.

10) You can now analyze this MVC record or use this MVC record to normalize your study data.



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Apply the MVC values

- Measure and save another record or select one from the Database.
- 2) From the Record Viewer Screen, select the Signal Processing Menu.
- 3) Ensure that Rectification and Smoothing have the desired selections.
- 4) Highlight "Amplitude Normalization". The typical selections are:

Option 1:

Normalize to: MVC stack

Option 2:

Normalize to: Values From Other Record

Record: Select record from list (Select the one you created in step A)

NOTE: You can select "MVC Stack" if you have just "Updated the MVC Stack" prior to applying the MVC. However, if you are not sure which values are in the MVC Stack, we recommend you select "Values From Other Record".

- 5) Click OK to the Signal Processing Menu.
- 6) Click "Yes" to "Update MVC Stack"
- 7) Analyze the data as desired.

NOTE: The study data values are now in percent.