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APPLICATION NOTES

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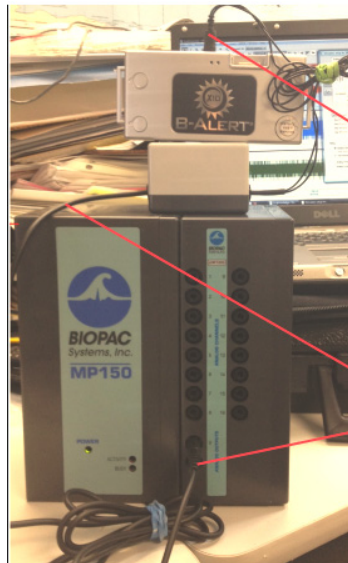info@biopac.com |support@.biopac.com

8/24/2012

Application Note 271   Synchronize B-Alert and MP150 systems running on separate computers

1. Connect the hardware as shown in the figure below.

Attach to the EKG (ECG) input of the B-Alert System

Attach the 3.5 mm phone jack connector to the Analog Out (A0) on the front of the UIM100C

2. Set up the **MP150 System** and Acq*Knowledge* software as required for the experiment.

3. In the Acq*Knowledge* software for the **MP150 System:**

   - Choose **MP150 > Set Up Stimulator** and set parameters as shown in the following figure:
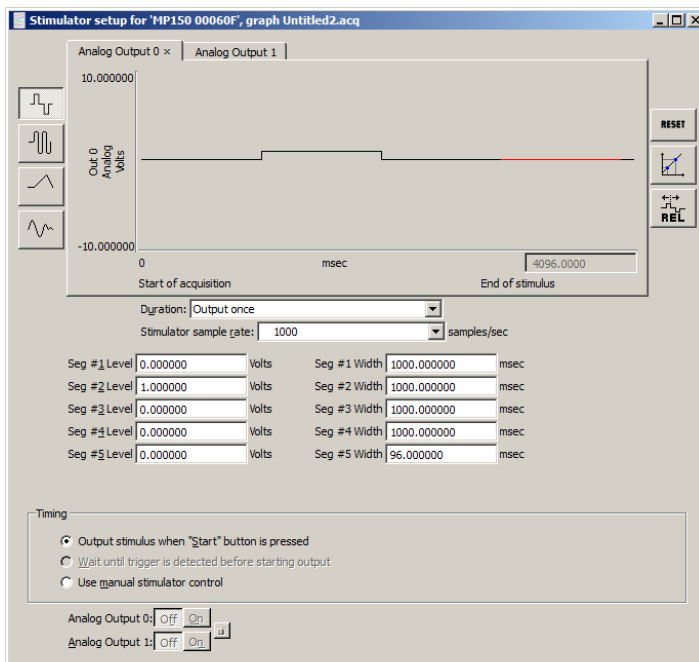
4. In the Acq*Knowledge* software for the **B-Alert System:**

   - Choose **B-Alert > Set Up Channels.**
   - Check **Acquire and Plot** for Analog Channel 1 **(A1/EKG).**

5. Click the **Start** button in the Acq*Knowledge* Software for the **B-Alert System**.

   <mark>**IMPORTANT!**</mark> **You must start Acq*Knowledge* for the B-Alert System before starting Acq*Knowledge* for the MP150 system.**

6. Click the **Start** button in the Acq*Knowledge* software for the **MP150 System**.

7. Observe the **B-Alert** data. A negative and positive spike***** should appear and resemble the figure below. (It may be helpful to autoscale CH1 and hide additional channels if necessary for a better view.)

   - The event marker shows the beginning of the stimulus. (This marker was added manually for reference.)

   * Due to filtering applied by the EKG channel, the square wave will appear truncated in the B-Alert waveform. If desired, an AC-coupled sine wave can be used instead for a more accurate representation.

8. After data recording is complete, return to the beginning of the **B-Alert** graph where the stimulus occurred.

9. Highlight all data before the stimulus, and choose **Edit > Clear.**
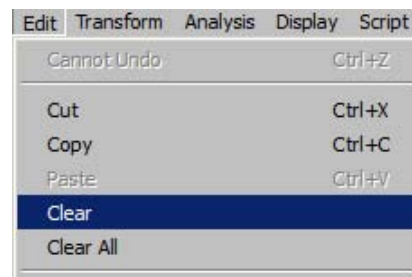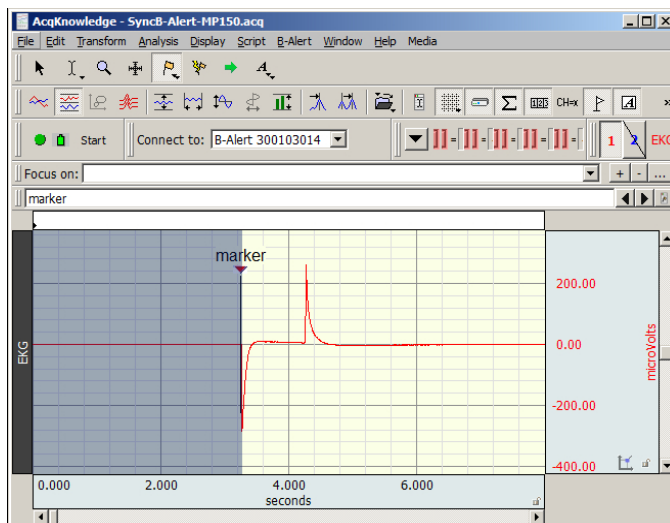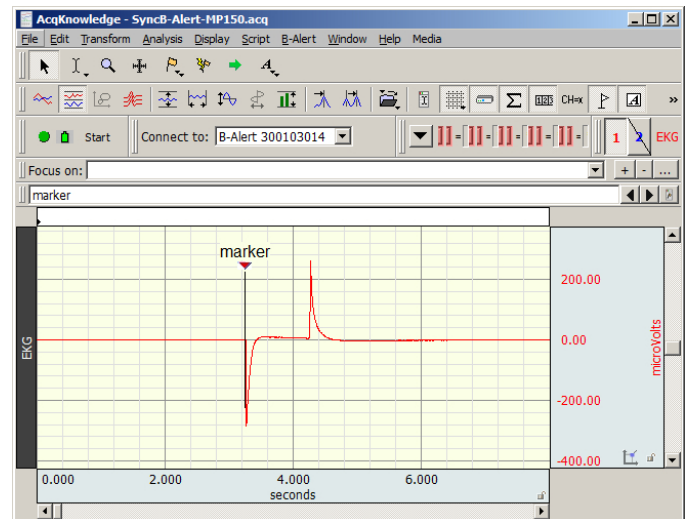
10. **MP150** Data is now synched to **B-Alert** Data (time point 'zero' of the **MP150** data file equals time point 'zero' of the **B-Alert** data file).