E-prime Triggering Oximeter or LED

When you wish to trigger the oximeter from E-prime in an experiment you must do 4 things. They are simple yet *critical*.

- 1. Activate the Parallel Port
- 2. Turn the Trigger (Pins) Off
- 3. Trigger Oximeter when stimulus is presented
- 4. Turn Pins Off
- 1. Activate the Parallel Port
 - Once in E-Studio find the Structure Window
 - Click on the Blue 'E' It says experiment object
 - Go to Devices
 - Click Add
 - Click on Port
 - Click OK
 - Now Double Click on the Port Icon to View Its Properties It should read
 - Collection Mode: Presses Only
 - o Address: 888
 - o Size: 8
 - o Invert: No
 - Mask: -1
 - o Eumulate Device: None

2. <u>Turn the Trigger Pins Off</u>

- This is in general good practice just in case the pins were left on.
- Place an 'InLine' object from the Toolbox into the begging of your experiment GUI
- Write the following 'WritePort 888, 0'

3. Trigger Oximeter When Stimulus is Presented

 In the same InLine or in a new InLine type the following *YourStimulusObjectName*.OnsetSignalEnabled = True *YourStimulusObjectName*.OnsetSignalPort = &H378 *YourStimulusObjectName*.OnsetSignalData = &H01 YourStimulusObjectName.OffsetSignalEnabled = True YourStimulusObjectName.OffsetSignalPort = &H378 YourStimulusObjectName.OffsetSignalData = &H00

- Where *YourStimulusObjectName* is the name you have given to the stimulus object (e.g. TextDisplay, ImageDisplay, a Sound, a Checkerboard)
- This will turn the trigger on at the beginning of the stimulus and turn it off at the end
- The only requirement is that this *InLine must be placed somewhere before the Stimulus*
- 4. Turn Pins Off
 - Insert another InLine object at the end of the program
 - Type the following 'WritePort 888, 0'
 - This is to ensure that all the pins are off. Good Practice.

Signaling the LED Trigger

To Trigger the LED do the same as above yet in place of step 3 (if just testing the LED timing) or in addition to step 3 (if you would like to trigger both the oximeter and the LED) type the following *YourStimulusObjectName*.OnsetSignalEnabled = True *YourStimulusObjectName*.OnsetSignalPort = &H378 *YourStimulusObjectName*.OnsetSignalData = &H02

YourStimulusObjectName.OffsetSignalEnabled = True *YourStimulusObjectName*.OffsetSignalPort = &H378 *YourStimulusObjectName*.OffsetSignalData = &H00

Good Luck!