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
       o Collection Mode: Presses Only
       o Address: 888
       o Size: 8
       o Invert: No
       o Mask: -1
       o Emulate Device: None

2. **Turn the Trigger Pins Off**
   - 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!**