fNIRS Triggers

How to add triggers to E-Prime experimental paradigms

Maggie Ugolini 1/28/14
Creating your E-Prime Experiment

Be sure to choose a “professional” template (either blank or basic) when starting work with E-Prime.
Adding the Serial Port Device

Double click on “experiment object,” then click the devices tab and “Add...”
Adding the Serial Port Device

Select the “Serial” icon and click OK
Configuring the Serial Port Device

Select “Serial” and click “Edit…” Make sure that your parameters match the values in the “Serial Edit” window above.
Determine what you want to trigger

Triggers can be sent relative to a various events associated with the above E-Prime objects
Configuring the Serial Port Device

Double click the object in the structure that you want to add triggers to. Click the properties icon in the window that pops up.
Adding a Trigger

Click the task events tab in the window that pops up, then click “Add…”
Adding a Trigger

Now click the “…” in the Task Events tab and add the “Serial” task device.
Adding a Trigger

Your window should now look something like this
Modify the Task Event

Decide on a delay and trigger value (in the field “custom”). These particular settings will make E-Prime send a trigger, value of 1, 0 ms after the Fixation object starts. Click “Apply” when you are happy with your settings.
Adding a Trigger Off

Add another “Fixation. OnsetTime” object. Again, click the “…” to choose “Serial” as your task device.
Adding a Trigger Off

These settings will turn your trigger off (custom: 0) 150 ms after the Fixation object starts. You must have a Trigger Off after every trigger. 150ms is a good delay time.

Click apply when you are happy with your settings.
Trigger Hints

• Continue to add triggers in this fashion for every object that needs to be triggered.
• Your triggers will show up as vertical lines in your data
• Remember to use 1, 2, 4 & 8 as your trigger values. This value goes in the “custom” field. A value of “0” turns the trigger off.
• Contact maggieu@umich.edu with questions