Data Collection - Passive Stimulus Presentation

This is an example of the steps to record data using the Emotiv. If the data you collect shows good results in offline analysis, make note of it in **BCI2000\data\DataLog.xlsx**. Note things like which channel and frequency band showed good correlations.

- 1. Set up Emotiv headset
 - a. For details, see: \Emotiv\Emotiv_SDK_User_Manual.pdf
- 2. Run \BCI2000\batch\IpsiHand_StimPresentation.bat
 - a. Emotiv must be on and connected to computer
- 3. Press Config

<u>F</u> ile <u>\</u>	<u>√</u> iew <u>H</u> elp				
Funct	ion 1 Function 2	Function 3 Func	tion 4		
Cor	nfig —> Se	t Config —>	Start		Quit
Informa	ation Phase	Waiting for configu	uration Waiting f	for configuration Wait	ting for configurati

a. Something like this will show up:

Data Location	anth in her laund data description		
DataDirectory	\data		Load Para
Session	which the		Configure
SubjectName	Name	ļ,	Configure
SubjectSession	three-digit session number 001		Help
	two-digit run number		
SubjectHun	loo	<u> 7</u>	
Documentation	RCI2000 Switem Cade		-
ID_System		ļ	
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ID H	BCI2000 Cap Montage Code		
ID_montage		<u>1 - 7</u>	
SavePrmFile	save additional parameter file		
StorageTime	ime or beginning or data atorage		

4. Press Load Parameters

Configure Save Configure Load
Configure Save
Configure Load
Help
-

- 5. Load \BCI2000\parms\IpsiHand_LPR_StimPresentation.prm
- 6. Under Storage tab, change SubjectName to your initials

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DataDirectory	\data		Luau Palain
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SavePrmFile	save additional parameter file	j j	
	time of beginning of data storage		
Storagelime		<u> </u>	

7. Under Source tab, set HighPassFilter to 0.1Hz

Configuration			
isualize System Storage S	ource Filtering Connector Application		
Cines/ Evanation			Save Parameter:
Signar repenses	number of digitized and stored channels		1 10 1
SourceCh	14		Load Parameter
	number of samples transmitted at a time		
SampleBlockSize	4		Configure Save
	sample rate		Configure Load
SamplingRate	128	, in the second se	
	list of channel names		
ChannelNames			Help
	Officet for channels in A/D units		
SourceChOffset	000000000000000	ļ j	
	gain for each channel (A/D units -> mul/)		
SourceChGain	0.003 0.003 0.003 0.003 0.003 0.003 0.003 0		
Source Filter	Brune line watch filter		
NotchFilter	disabled		
	Source high gage filler	i i f	
HighPassFilter	at 0.1Hz		
LowPassFilter	disabled		
Low assi itei		1 - Y	
Algnment			
45	align channels in time (U=no, T=yes/		
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	time offsets for all source channels (may be empty)	1	-
SourceUhTimeOffset			
			-1
Online Processina			<u> </u>

- 8. X out of configuration window, DO NOT Save Parameters
- 9. Press Set Config (Emotiv must be connected or BCI2000 will throw a time out error)



10. Press Start, and you should now be collecting data.

Data collection - Cursor Task

Cursor Task can be set up with the same steps as Stimulus Presentation, except in step 2 and 5.

- 2. Run IpsiHand_CursorTask.bat
- 5. Load IpsiHand_LPR_CursorTask.prm