

Additional file 2. Statistical results of the ANOVA on the fEEG and fNIRS brain parameters for the circular steering task.

A.	GROUP	HEMISPHERE	HAND	
<i>fEEG</i>				
	Alpha ERD	F (1, 27) = 0.66, p = .424, $\eta^2_p = .02$	F (1, 27) = 1.45, p = .293, $\eta^2_p = .04$	F (1, 27) = 0.42, p = .523, $\eta^2_p = .01$
	Beta ERD	F (1, 27) = 0.08, p = .780, $\eta^2_p = .00$	F (1, 27) = 0.21, p = .654, $\eta^2_p = .01$	F (1, 27) = 0.40, p = .534, $\eta^2_p = .01$
	Alpha ERS	F (1, 25) = 1.28, p = .269, $\eta^2_p = .05$	F (1, 25) = 0.00, p = .956, $\eta^2_p = .00$	F (1, 25) = 2.76, p = .109, $\eta^2_p = .09$
	Beta ERS	F (1, 25) = 0.15, p = .698, $\eta^2_p = .01$	F (1, 25) = 0.00, p = .996, $\eta^2_p = .00$	F (1, 25) = 2.45, p = .127, $\eta^2_p = .09$
<i>fNIRS</i>				
	ΔHbO_2 peak	F (1, 31) = 0.00, p = .967, $\eta^2_p = .00$	F (1, 31) = 0.20, p = .659, $\eta^2_p = .00$	F (1, 31) = 0.45, p = .506, $\eta^2_p = .01$
B.	GROUP x HEMISPHERE	GROUP x HAND	HAND x HEMISPHERE	
<i>fEEG</i>				
	Alpha ERD	F (1, 27) = 0.00, p = .999, $\eta^2_p = .00$	F (1, 27) = 1.04, p = .317, $\eta^2_p = .04$	F (1, 27) = 1.78, p = .193, $\eta^2_p = .06$
	Beta ERD	F (1, 27) = 0.56, p = .461, $\eta^2_p = .02$	F (1, 27) = 0.90, p = .351, $\eta^2_p = .03$	F (1, 27) = 0.25, p = .619, $\eta^2_p = .01$
	Alpha ERS	F (1, 25) = 0.26, p = .614, $\eta^2_p = .01$	F (1, 25) = 0.00, p = .961, $\eta^2_p = .00$	F (1, 25) = 0.07, p = .792, $\eta^2_p = .00$
	Beta ERS	F (1, 25) = 0.03, p = .868, $\eta^2_p = .00$	F (1, 25) = 0.00, p = .924, $\eta^2_p = .00$	F (1, 25) = 1.42, p = .244, $\eta^2_p = .05$
<i>fNIRS</i>				
	ΔHbO_2 peak	F (1, 31) = 0.07, p = .791, $\eta^2_p = .02$	F (1, 31) = 1.40, p = .246, $\eta^2_p = .04$	F (1, 31) = 3.52, p = .070, $\eta^2_p = .10$

A. Effects of Group (Old healthy vs Stroke), Hemisphere (Contralateral vs Ipsilateral) and Hand (Dominant / Non-paretic vs Non-dominant / Paretic) on the fNIRS and fEEG parameters on the circular steering task and **B.** Two levels interactions of the model. In bold, results with $p < .05$ and $\eta^2_p > .0$