

Personalized tCS solutions

Head model creation based on individual MRI

Identify specific areas or lesions on the brain

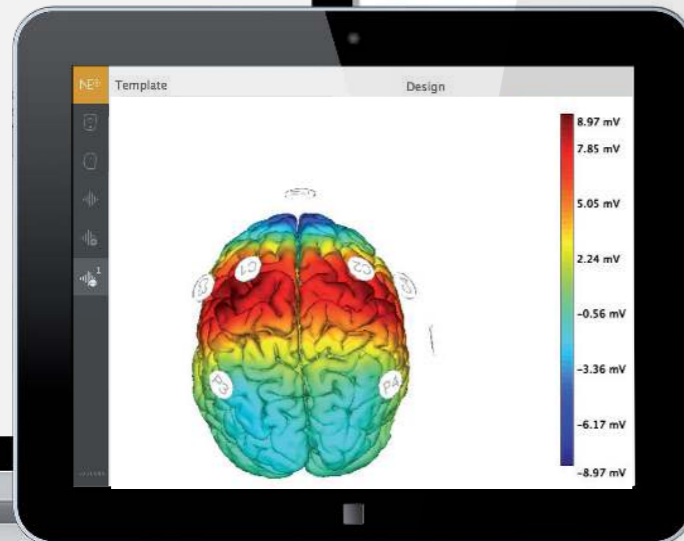
Find the optimal tCS montage

Apply tCS treatment with Starstim

Monitor progress and adjust treatment

Currents uA per electrode

AF4:	568 uA
C4:	-852 uA
F3:	-.000 uA
F4:	-1.000 uA
FC5:	-587 uA
FPZ:	871 uA
FZ:	1.000 uA
Cz:	1.000 uA



Wireless & Hybrid Device
tDCS, tACS, tRNS or user-defined waveform
Multi-electrodes
Real-time EEG during tCS
Sham, active sham and double-blind modes

Applications

- Closed-loop experiments
- Target optimization for personalized stimulation
- NIRS, fMRI, and MEG compatible

Cloud Technology

- At-home telemedicine tCS

Recommended Publications

- Dagan M., et al.,(2018) Multitarget transcranial direct current stimulation for freezing of gait in Parkinson's disease. **Movement Disorders**, 33(4), 642-646.
- To WT, et al.,(2018) Exploring the effects of anodal and cathodal high definition transcranial direct current stimulation targeting the dorsal anterior cingulate cortex. *Nature*, **Scientific Reports**, 8(1), 4454.
- Polanía R., et al.,(2018) Studying and modifying brain function with non-invasive brain stimulation. **Nature Neuroscience**, 1.
- Antal A., et al., (2017) Low intensity transcranial electric stimulation: Safety, ethical, legal regulatory and application guidelines. **Clinical Neurophysiology**, 128(9), 1774-1809.
- Fischer DB, et al., (2017) Multifocal tDCS targeting the resting state motor network increases cortical excitability beyond traditional tDCS targeting unilateral motor cortex. **Neuroimage**, 157, 34-44.
- Ruffini G, et al., (2014) Optimization of multifocal transcranial current stimulation for weighted cortical pattern targeting from realistic modeling of electric fields. **Neuroimage**, 89, 216-225.



starstim^{NE}

non-invasive
neurostimulation in
clinical and
neuroscience research

NE[®]



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NE
neuroelectronics[®]

non-invasive
wireless
hybrid EEG & tCS
neurostimulator

From advanced research to
home-based studies

Starstim has been used in research for the treatment of pain, stroke, rehabilitation, depression, and addictive disorders.

Hybrid EEG & tCS protocols

8, 20, and 32 channels for high-definition tCS and EEG

Wireless & cloud-connected technology

Europe: Starstim is classified as an investigational device.

US CAUTION: US Federal Law classifies Starstim as an investigational device.



Multi-step protocols.

Monitor EEG during tCS experiments.

Cortical visualization of tCS electric field.

The only cloud enabled system for tCS home studies

Starstim is suitable for multi-center studies aiming to expand treatments to the home environment.

Real-time remote supervision and protocol adjustment

Study management dashboard with subject & advanced protocols (including double-blind mode)

Customizable embedded study questionnaires

Study history storage with sessions, events, and impedance values

