

Chronic pain is maintained in the brain

Sooma tDCS™ modulates the cortical pain networks to restore pain control — non-invasive, drug-free, in clinic or at home

Sooma tDCS™ delivers transcranial direct current stimulation to the cortical networks that control chronic pain. It is non-invasive and drug-free, with no risk of dependency, used on its own or alongside existing analgesic therapy. Patients self-administer each session — in your clinic or at home — while you set the protocol and monitor dose, adherence, and outcomes for every session.



Pain that outlives its cause

Pain perception results from ascending pain signals being modulated by higher brain centers that can exacerbate or mitigate the overall pain sensation. In persistent pain, the networks that process nociceptive input become imbalanced – the pain-facilitating pathways gain too much control while the inhibitory pathways adopt a less active role.

As a result, the system signals pain more readily and more strongly, persisting even after recovery from the initial injury. The primary motor cortex (M1) has a key role in controlling the pain signaling through its extensive connectivity across

different pain processing networks, making it one of the main targets for brain stimulation therapies in chronic pain.

In contrast to analgesic medications, tDCS can be targeted directly to the relevant pain-processing networks and the neuronal mechanisms underlying chronic pain, to the root of the problem.

Two scalp electrodes deliver a constant current of 2 mA. Anodal stimulation over the primary motor cortex shifts resting membrane potential toward depolarisation — it does not force neurons to fire, it changes how readily they respond.

Repeated daily sessions induce neuroplasticity and consolidate longer-lasting changes in excitability and connectivity, strengthening descending inhibition.^{1,2,3}



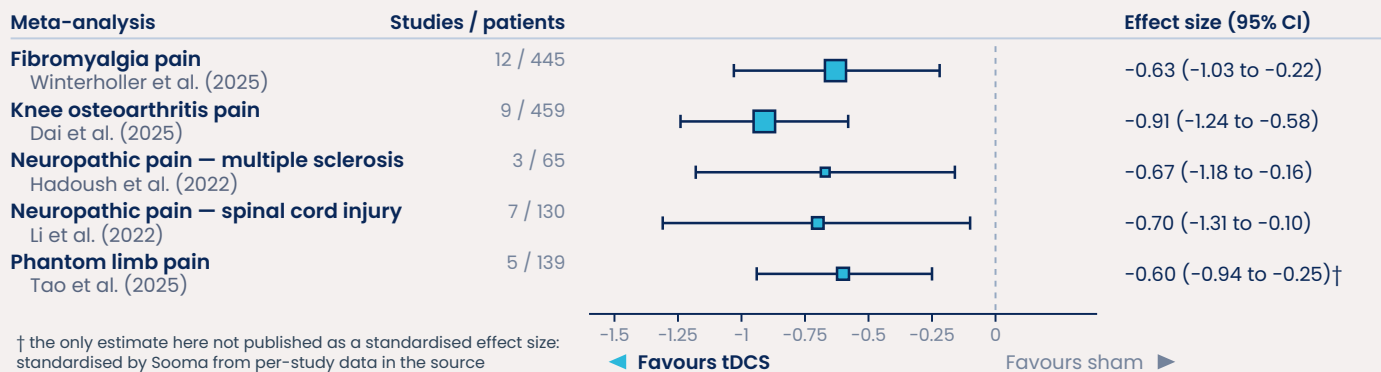
Intended purpose

Sooma tDCS™ is indicated for the treatment of adults with chronic pain due to fibromyalgia, knee osteoarthritis, or neuropathic pain associated with multiple sclerosis, spinal cord injury or phantom limb syndrome. It may be used as a stand-alone treatment or as an adjunct to analgesic drugs or other therapy.

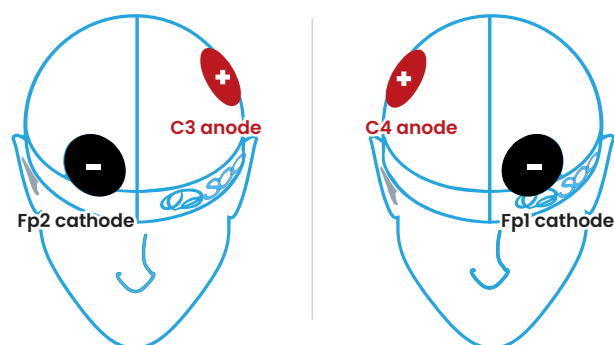
- **EU MDR certified:** Class IIa medical device, CE 0598. The first EU MDR-certified tDCS system.
- **Quality management:** Designed and manufactured in Finland under ISO 13485.

Evidence across the indicated conditions

The 2021 international evidence-based guidelines give tDCS a Level B recommendation for both neuropathic pain and fibromyalgia.³ Published meta-analyses report reductions in pain intensity versus sham across the conditions.



Treatment protocol



Right-sided or right-handed

Left-sided or left-handed

Current intensity 2 mA

Session duration 20 minutes

Frequency Once daily, 5 days/week

Initial course 6 weeks

Maintenance 6-month periods, 2–3 sessions/week

Anodal stimulation of the primary motor cortex contralateral to the painful side; in diffuse or central pain, the dominant hemisphere. In fibromyalgia a bilateral DLPFC montage (F3–F4) is also effective.³ Benefit accumulates across sessions, with typical signs of response in weeks 2–4. Assess at the end of week six; responders continue in six-month maintenance periods.

Which patients to consider

Adults with chronic pain in an indicated condition who:

- have not responded adequately to medication
- cannot tolerate, or wish to reduce, avoid medications
- wish to boost the effect of analgesics
- are seeking an option with no dependency risk

Safety and tolerability

No serious adverse events have been reported in the literature or in clinical use. Side effects are transient and mostly mild: tingling, warmth or burning sensation, or itching under the electrodes, skin redness, or transient headache.⁴

Contraindications: devices or metal objects on or inside the skull; acute eczema or broken skin at the stimulation site.

Clinic or home, one system

The DUO stimulator can serve many patients in the clinic. For at-home treatment, you set the protocol in the Sooma Clinician Portal, and dose, adherence, and outcomes return to you after every session. Protocols are day-locked, so treatment stays governed by the prescribing clinician.

Bring Sooma tDCS into your Practice

Tell us about your patient group, and we will go through the protocol, the evidence, and how the system fits your workflow.

Contact: sales@soomamedical.com

Sooma Oy · Finnish medical device manufacturer of neuromodulation solutions for routine care. Designed in Finland under ISO 13485.

www.soomamedical.com · sales@soomamedical.com · +358 10 328 9811 · Atomitie 5 C, 00370 Helsinki, Finland

References. 1. Bai et al. Neurocircuitry basis of motor cortex-related analgesia as an emerging approach for chronic pain management. Nat Ment Health. 2024 May;2(5):496–513. 2. Wang et al 2024 Mechanisms of transcranial direct current stimulation (tDCS) for pain in patients with fibromyalgia syndrome. Front Mol Neurosci. 2024 Jan 30;17:1269636. 3. Fregni et al 2021 Evidence-Based Guidelines and Secondary Meta-Analysis for the Use of Transcranial Direct Current Stimulation in Neurological and Psychiatric Disorders. Int J Neuropsychopharmacol. 2021 Apr 21;24(4):256–313. 4. Bikson et al 2016 Safety of Transcranial Direct Current Stimulation: Evidence Based Update 2016. Brain Stimul. 2016 Sep–Oct;9(5):641–661.

MK-ENI29 V1.0 · © Sooma Oy 2026

