



# Cranial Electrotherapy Stimulation (CES) For a state of relaxed awareness and greater mental clarity...

## WHAT IS IT?

CES, cranial electrotherapy stimulation, is a therapeutic procedure using mild battery-powered electronic stimulation for the treatment of anxiety, depression, and insomnia.

The stimulation is applied using ear clips or electrodes attached to the ear lobes. Usually, the patient experiences the electrical stimulation as a gentle tingling sensation, although sometimes no sensation is felt.

CES is typically administered once a day for 30-60 minutes, though frequency of usage may vary depending on the patient’s needs and condition. Positive results may be experienced immediately, though for some, it takes up to three or four weeks. For lasting benefits, treatment should be continued at regular intervals, or on an as-needed basis.

## AN INTERNATIONAL TREATMENT MODALITY FOR 50 YEARS

CES was originally developed in the former Soviet Union in the 1940s with a primary focus on treating sleep disorders; hence its designation as “electrosleep.” However, treatment of insomnia was soon overshadowed by psychiatric application for depression and anxiety.

East European nations picked up CES as a treatment modality, and its use spread worldwide. By the late 1960s, animal studies on CES had begun in the United States. Human clinical trials soon followed at the University of Texas Medical School in San Antonio and the University of Wisconsin Medical School. Studies on CES flourished during the ‘70s and ‘80s.

Most recently, the dramatic evidence on the efficacy of CES entails use of computerized EEGs or topographical brain mapping, validating that CES alters the electrophysiology associated with drug/alcohol abuse and other organic brain conditions as well as improving other dysfunctional brainwave patterns.

Research at Swingle Clinic further extended the use of CES to the treatment of learning disorders. A report in 2000 presented evidence showing that CES could **increase learning efficiency by over 40%**. There are many studies on the benefits of CES in scientific publications.

The CES unit is slightly larger than a cell phone, fitting comfortably in the palm of the hand. The user receives the current through bilateral lead wires culminating in ear clips, which are placed onto the ear lobes. Each unit comes in a convenient carrying case with a 9-volt battery, solution, lead wires, and ear clips.

SAFE	EASY TO USE
<ul style="list-style-type: none"> <li>▪ Non-invasive</li> <li>▪ Battery operated</li> <li>▪ Minimal sensation</li> <li>▪ Non-addictive</li> <li>▪ No pharmaceutical side effects</li> </ul>	<ul style="list-style-type: none"> <li>▪ Simple non-irritating application</li> <li>▪ Single control setting for current</li> <li>▪ Automatic timer: settings for 30, 60 minutes; continuous</li> <li>▪ Comfortable ear clips</li> </ul>
EFFICIENT	CONVENIENT
<ul style="list-style-type: none"> <li>▪ Automatic shut-off</li> <li>▪ Low battery indicator</li> </ul>	<ul style="list-style-type: none"> <li>▪ Compact</li> <li>▪ Portable</li> </ul>

# The CES Experience

## INITIAL USAGE

- Pleasant tingling sensation
- Gradual relaxation

## FIRST TWO-THREE DAYS

- Normalization of sleep patterns
- Decreased nervous energy and frenetic behavior
- Faster onset of sleep
- Feeling of being rested on waking in the morning
- Elevation of mood
- Fewer and shorter periods of waking up at night

## WEEK ONE

- Diminished depression and mood swings
- Fewer episodes of irrational anger and irritability
- Improved impulse control
- Greater sense of balance, centeredness, and calm
- A pleasant, detached state and a quieting of the mind

## WEEKS TWO AND THREE

- Diminished mental confusion
- Heightened clarity and alertness
- Improved task concentration
- Normalized information recall
- Heightened ability to focus
- Increased mental energy
- Accelerated learning



## RECOMMENDED TREATMENT REGIMEN

**As prescribed and monitored by the health care professional: once a day for 30-60 minutes for a period of one month, after which the frequency can be reduced to twice or three times weekly, or as needed during periods of stress.**

### CONTRAINDICATIONS / PRECAUTIONS

There are no known contraindications for use of CES. However, there are circumstances in which its safety has not been tested. Accordingly, CES should not be used without on-going supervision in the treatment of severe depressives, stroke victims, cancer patients and those known to be epileptic or pregnant.

Side effects are rare. Perhaps three out of one hundred report a slight headache when using CES. This is usually alleviated by simply turning the current down. Many users report a feeling of induced relaxation while using CES. Though this relaxation response should not impair reaction time, it is recommended that CES not be used while operating dangerous equipment or while driving.

As with the use of any medical device, the health care provider prescribing the CES should be advised of any change in the patient's medications, neurotransmitter blockers, and if in use, cardiac pacemakers or other electronic devices.

**For Patient Care: Federal law (USA) restricts the CES unit sale by or on the order of a licensed healthcare professional.**

### Technical Specifications:

**Power source:** 9-volt alkaline battery  
**Time Controls:** 30 minutes, 60 minutes, Continuous  
**Output:** Frequency: 0.5 Hz and 100 Hz  
Current: 0-.750 / 0-.900 ma