

# Transcranial Magnetic Stimulator(MEP, TMS Solution)

## A proven non-drug treatment for depression

# TAMAS

It is non-invasive & painless  
and is used in diagnosis,  
prognosis and more for clinic



**REMED**  
Rehabilitation Medical Company

# What is TAMAS(TMS)

TAMAS – Transcranial magnetic stimulation(TMS) is a safe, non-invasive therapy method that uses rapidly changing magnetic field to stimulate the neurons in the brain. It is indicated for the treatment of Major Depressive Disorder(MDD), and other certain conditions, in adult patients who have failed to achieve satisfactory improvement from prior antidepressant medication.

Using highly focused, MRI strength magnetic pulses, TMS activates a specific region of the brain which regulates mood. This precise focusing of magnetic field that can pass through tissues and bones will enable stimulation without surgery.

**Serving as a unique research tool for the investigation of broad variety of issues in different fields:**

**Cognitive Neuroscience** – in studying mental processes related to memory, speech, perception and functional connection

**Psychiatry** – to influence specific brain function within the dorsolateral prefrontal cortex

**Neurophysiology** – used in the stimulation of the peripheral and central nerve pathways

**Rehabilitation** – used in the promotion of muscle recovery and the relief of nerve spasticity







## Benefits & Features of TAMAS

TMS is an outpatient procedure and does not require anesthesia or sedation, so you can go back to your daily life right after a treatment. There is no need to disrupt your usual routine. Unlike other treatments, such as electro-convulsive therapy(ECT), TMS does not cause cognitive side effects or memory problems.

## TMS is created about 3 Tesla magnetic field.

Built-in cooling system for coil overheating prevention.  
Touch screen interface offers access to easy operation.  
The transducer of figure-of-eight design allows precise focusing.  
It can be linked to biological signal instruments like EMG.

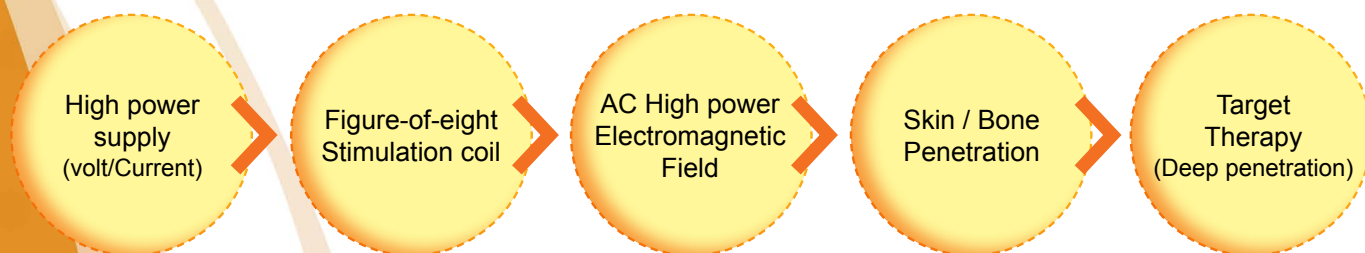


## Contraindications

TAMAS is contraindicated in patients with implanted metallic devices or non-removable metallic objects in or around the head.

If you have anything other than braces or metal fillings, you should consult a physician.

## Mechanism



## Clinical Application

Neuropsychiatry		Rehabilitation
Depression	Tinnitus	Multiple Sclerosis
Obsessive Compulsive Disorder	Hallucination	Epilepsy
Schizophrenia	Insomnia	Facial Palsy
Bipolar Disorder	Headache	Stroke
Anxiety	Panic	Parkinson Disease

## Specification

Peak magnetic energy	0.5~3.0 Tesla@100% output
Repetition rate	15Hz@100% output
	20Hz@80% output
	30Hz@50% output
	50Hz@30% output
Train Duration	User selectable in 0.1sec increment
Output waveform	Symmetric biphasic pulse
Pulse width	350µs
Trigger input/output	TTL(Active low or high: via D-type connector)
Operating	Color TFT LCD touch screen
Weight	50kg
Power supply	200~240Vac 50/60Hz 5A, Single phase
Software	Integrated color touch screen display
	3 stimulation modes(single, repetitive, burst)

## Company History

- 2003** Corporate Establishment  
Releasing CR-3000 for the magnetic treatment of joint pains  
Permit of medical instrument manufacturing business(KFDA)
- 2004** New product introduction/announcement of TAMAS for the magnetic evoked potential(Kangnam St.Mary's Hospital)  
Establishment of corporate R&D center  
Selected as the managing company for the government project sponsored by the Ministry of Commerce, Industry & Energy  
Developing brain map diagnosis system(MEG) using biomagnetic field
- 2005** Selected as the managing company for the government project sponsored by the Ministry of Health & Welfare  
Developing X-ray detector with Photon Counting Method capabilities  
Certificate of Venture company(Small and Medium Business Administration)  
Acquisition of Certificate EN ISO9001-2000
- 2007** Development of combined stimulator(Salus-Talent) for medical purpose  
Acquisition of permit for manufacture of laser irradiation instrument for medical purpose  
Patent application of TAMAS  
Patent application of Salus-Talent  
Acquisition of ISO13485  
TAMAS receiving Excellence Award from Technology Exhibition of Healthcare Industry  
President & CEO Geun Yong Lee receiving award from Commissioner of KFDA
- 2008** Development of body age measurement system(developed collaboratively with SMT Germany)  
TAMAS certified for quality by Korea Health Industry Development Institute  
Acquisition of GH Mark  
Acquisition of INNO-BIZ  
Releasing Salus-Talent  
Acquisition of Salus-Talent CE certificate
- 2009** Acquisition of TAMAS CE certificate  
Patent for ESWT created using electromagnetic  
Acquisition of Salus-Talent III for ESWT/pain solution
- 2010** Releasing ESWT Rosetta



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