

# Brain Electrical and Magnetic Combined Stimulation Device



## Is it rTms ? not only rtms!

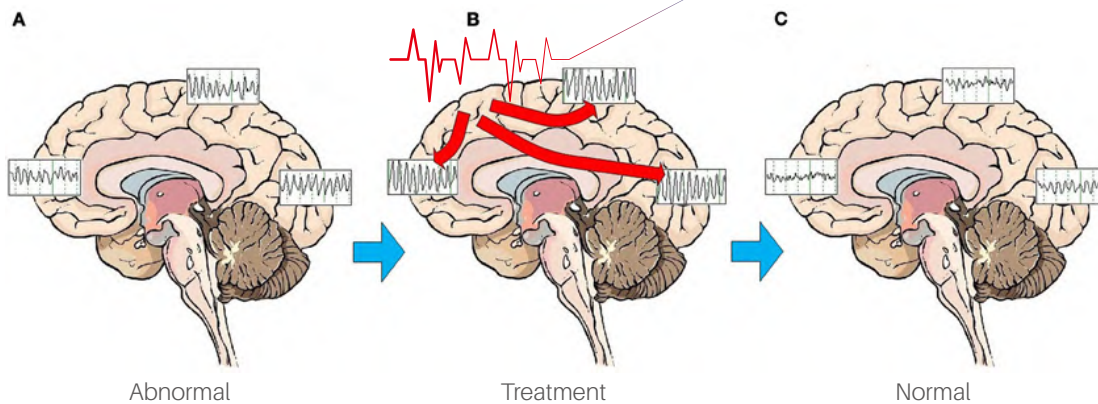
Approval valid & better treatment for brain disease: Depression, Parkinson, Stroke, Insomnia, Cerebral Palsy, AD...

Did you have bad experience of treatment or refuse to suffer strong stimulation for brain dysfunction?

What will happen when electronic stimulation and magnetic stimulation work for brain simultaneously?

# Principle

Bioinformatics uses computer simulation technology and software combine to produce bio-electric and magnetic field simulation. Through respectively and human electrode sheet and a special magnetotherapeutic cap effect, increasing blood flow to the brain, protection. Nerve cells, promote the recovery of neurological function.



# Function



## 1 Fastigial nucleus stimulation(FNS) - the main pole(low-frequency therapy)

Through the electrodes pasted on the ear 'mastoid acupoint', the equipments use the bionic biological current (disorderly wave) to stimulate the cerebellar fastigial nucleus(FN) to achieve the treatment effect.



## 2 Limb neuromuscular electrical stimulation(NMES) - auxiliary pole(intermediate frequency therapy)

Through the electrodes pasted on the motor nerve of the limb muscle nervous system, the equipments use the bionic biological current to stimulate the limb muscle nervous system to develop the conduction of nervous system.



## 3 Repetitive transcranial magnetic stimulation (rTMS) - the therapeutic cap

Through the caps on the brain, the equipments use induced current generated by alternating electromagnetic field to stimulate the brain to achieve the treatment effect.

## 4 frequency vibration massage - therapeutic cap

Alternating vibration massage function to enliven or relax brain nerve cells.

# Indication



Children with Cerebral Palsy



Stroke



Depression



Insomnia



Parkinson



Alzheimer's Disease

## Cerebral Ischemia:

cerebral infarction periods, cerebral hemorrhage recover period, insufficient blood supply and so on.

## Cerebral Injury:

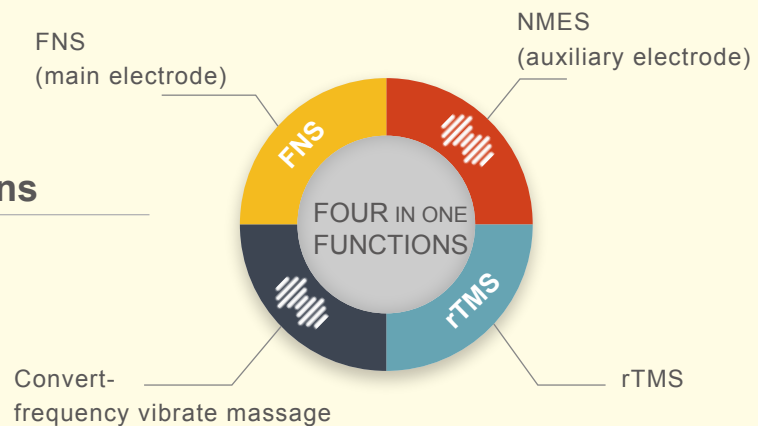
cerebral trauma recover period, cerebral trauma awake period, cerebral palsy, stroke, toxic type cerebral trauma, hypoxia type cerebral trauma.

## Cerebral Functionality Obstacle:

migraine, neurasthenia, insomnia, cognition impairment, senile dementia, parkinson, AD, encephalatrophy, depression, brain fatigue syndrome.

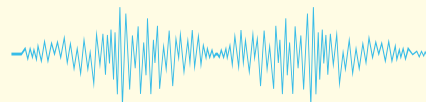
# Features

## 1. Four in one functions



## 2. Four unique therapy frequency that will randomly appear

23.81HZ, 15.87HZ, 15.87HZ, 11.90HZ



**3.** LED screen with one key shuttle



**4.** Built-in **11** therapy prescriptions

For different types of disease and varying degrees of damage corresponding to the recommended prescription.

**5.** Four different therapy modes



**6.** Magnetic therapy and electrotherapy can be operated independently or simultaneously



**7.** Seven treatment points for therapeutic cap



**8.** The magnetic field intensity is 3-17 MT, frequency is 50HZ±2%

## Specification



HB510B	HB520B	HB510D	HB520D
single channel	dural channels	single channel	dural channels
table type		cabinet type	
main electrode: 1~80mA, adjustable		main electrode: 1~80mA, adjustable	
auxiliary electrode: 1~90mA, adjustable		auxiliary electrode: 1~90mA, adjustable	
110/220VAC, 50Hz		110/220VAC, 50Hz	



# Components



Therapeutic cap



Output wire

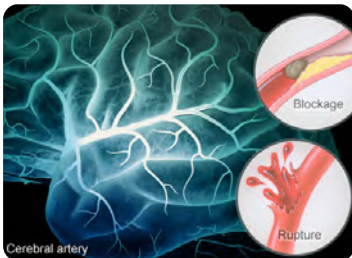


Moon electrode sheet



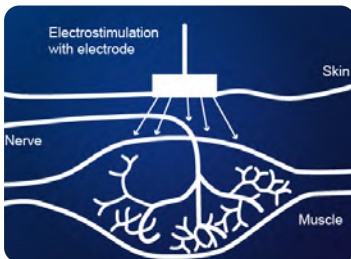
Non-woven square electrode sheet

# How effective treatment



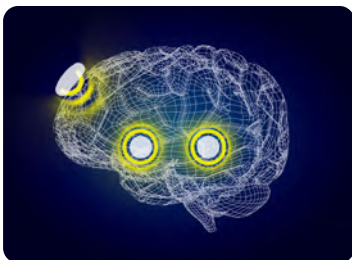
## **FNS(main electrode):**

- Improve the micro circulation of the brain;
- Increase the partial CBF;
- Increase the brain metabolism;
- Promote the recovery & reconstruction of the cranial nerve.



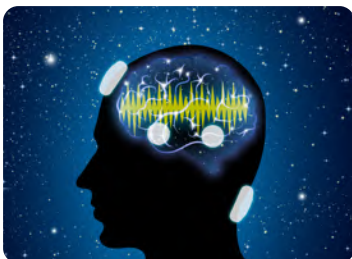
## **NMES(auxiliary electrode):**

- Excite the muscle to prevent nerve muscle shrink & increase the limbs exercise.



## **rTMS--therapy cap:**

- Increase the cell activity & the vessel elasticity;
- Improve the condition of the metabolism & increase the recovery of the brain function;
- Lead the patient's EEG into a normal state.



## **Convert--frequency vibrate massage cap:**

- Relax the brain muscle;
- Improve the blood circulation;
- Relieve the fatigue;
- Decrease the pressure.

## How believe effective

We have one series( four function in one) with four models, there are more than ten thousand patients using the brain electrical and magnetic combined stimulation device everyday in China. Any medical institution or scientific research units can find a brain dysfunction treatment apparatus.

### Clinic data & report

Authors/Sponsor	Type	Subjects	Intervention
Cinara Stein, et al. 2015	Review and meta-analysis	940	Neuromuscular electrical stimulation
<b>Conclusion</b>			
The study collected the total of 5066 titles, 29 randomized clinical trials were included with 940 subjects. NMES provided reductions in spasticity and increase in range of motion when compared with control group after stroke. NMES combined with other intervention modalities can be considered as a treatment option that provides improvement in spasticity and range of motion in patients after stroke.			
Authors/Sponsor	Type	Subjects	Intervention
David L. Dunner, et al. 2014	Clinical trial	257	Repetitive transcranial magnetic stimulation
<b>Conclusion</b>			
Compared with the baseline before TMS treatment, there was a statistically significant reduction in mean total scores on the clinical global impressions-severity of illness scale, 9-item patient health questionnaire, and inventory of depressive symptoms-self report at the end of acute treatment (all $P < 0.0001$ ), which was sustained throughout follow-up. TMS demonstrates a statistically and clinically meaningful durability of acute benefit over 12 months of follow-up.			

### Domestic & Oversea Application

**Domestic:** There are over ten thousand patients using our HB-500 series Brain electrical and magnetic combined stimulation equipment in the market and have benefit from the treatment everyday, it is very mature.

**Oversea:** We already sold our HB-500 series Brain electrical and magnetic combined stimulation to all over the worldwide, including Iran, Iraq, India, Georgia...the market is quickly blooming.



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## FAQ



If the treatment could be used at home and be operated by Non-medical staff?

Yes, treatment is safe. To arrive in target result of treatment, we suggest that the device should be used under doctor's guide.



How about of treatment process of patient's feeling?

The process of treatment is comfortable, no anesthesia, no pain, no-invasive, no-side effect, no-noice hallucinated, improve treatment experience mostly. 100% security for home useness!



Why use these four fre to the patient at random ways?

The specific fre is proved of validity & comfort & security to the patients, at random ways, to avoid our brain to develop habit for specific fre and reduce treatment effect.



Which application sections in hospital we could use or patient could find this kind of treatment?

Applicable department: rehabilitation department, psychiatry, geriatrics, acupuncture department, pediatrics and so on.



What's the treatment?

20~30min/once, 1~2times/per day, 10 days as one treatment, 3~5days rest for next treatment.



Is it ok for Children?

Yes, we have adult mode and children mode, if you need the device to have treatment for children, we will supply smaller children therapeutic cap.



If we could use electrical stimulation and magnetic stimulation at the same time?

Yes.



Become One Of Our Reputation Agent In Your Local City At Once,  
Bring Benefit To Your Patient, People, And Business.

