

Sonic World Certificate

Integrated Sonic Wave Vibrating System

SONIX

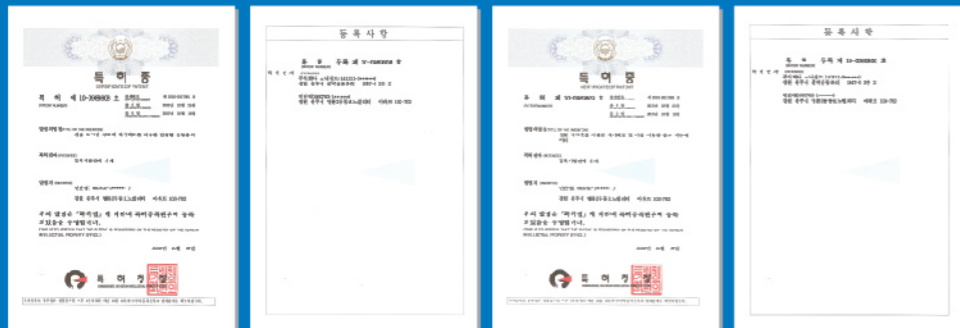
Fantastic **Vibration** for Healthier Life!



기업부설연구소 벤처기업확인서 의료기기제조업허가 의료기기제조품목허가 전기용품안전인증



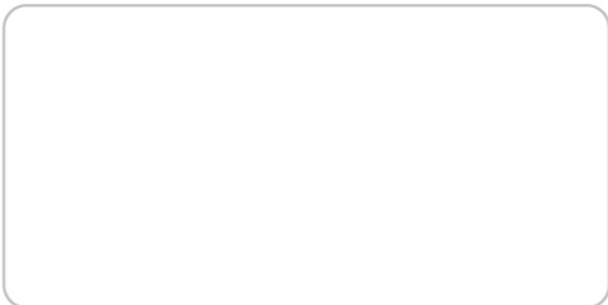
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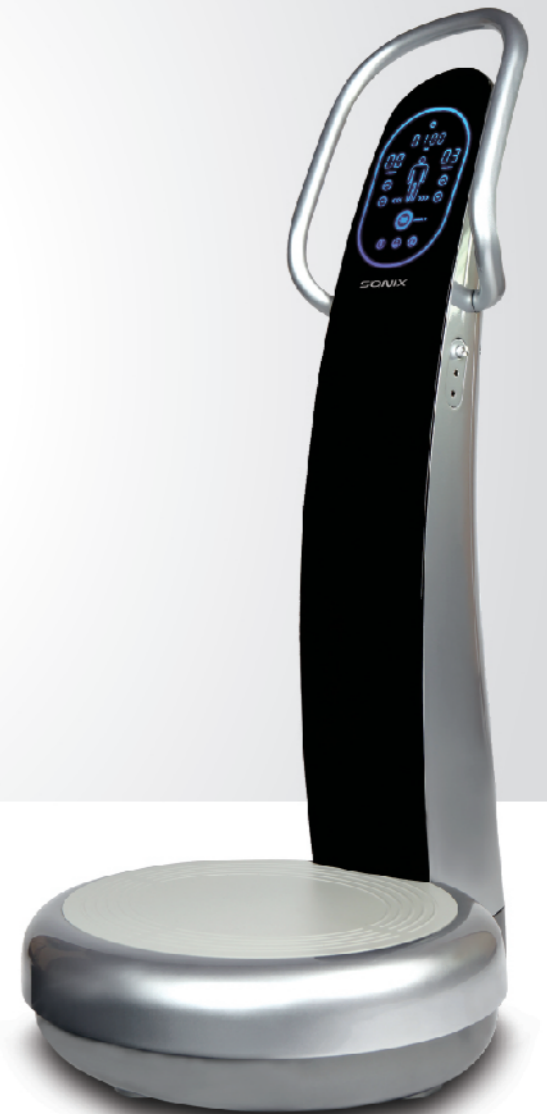
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SONICWORLD
SONICWORLD Co., Ltd.
1-125, Wonju Medical Industry Techno Park, 1720-26,
Taejang-dong, Wonju-si, Gangwon-do, Korea 220-120
Tel. +82-33-813-1813 Fax. +82-33-744-3325
E-mail. admin@sonicworld.kr
www.sonicworld.kr




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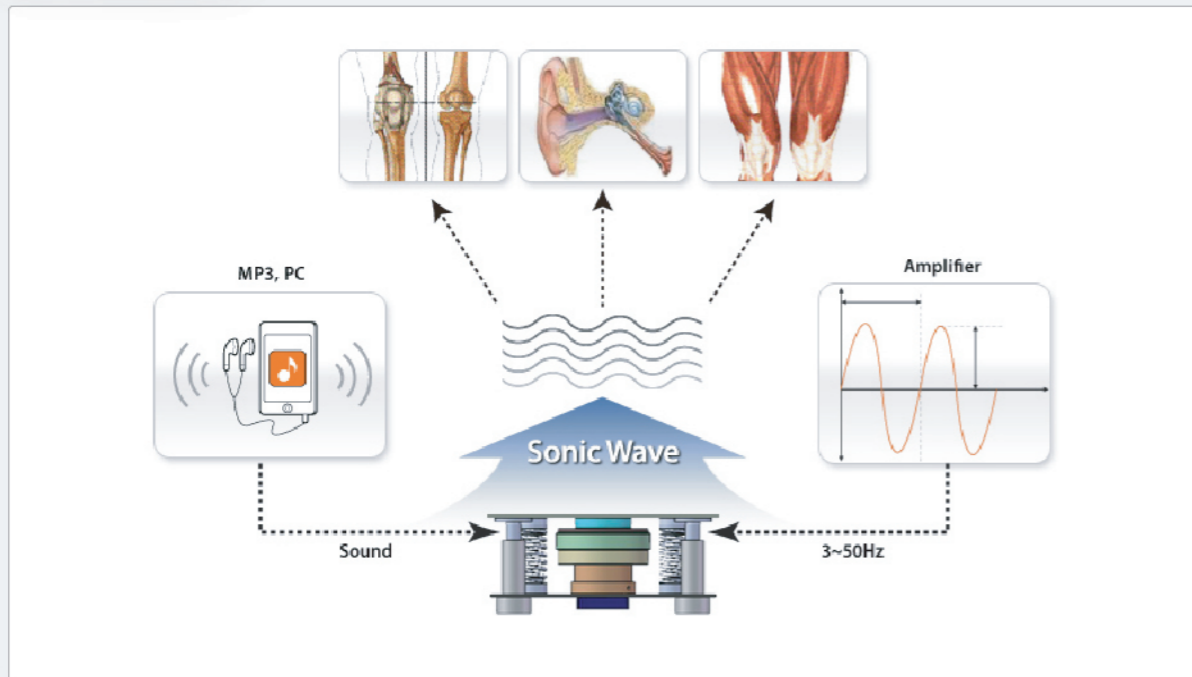


Product Information

SONIX adopted electromagnetic technologies and speaker mechanism to generate sonicwave vibrations with frequencies of 3 to 50Hz. Sonix generates vertical vibrations very precisely and stably which are to be delivered to the person on the plate and these vibrations penetrate deep into the individual organs and cells and stimulate them, giving the effect of physical exercise or workout, or even better effect. Sonix allows you to adjust vibrating frequencies and intensity levels independently, according to your physical conditions.

The beneficial effects of whole body vibration from Sonix include the increase of muscle strength, bone mineral density, and growth hormone and the improvement of blood and lymph circulation, and posture and balance sense. These advantages would be good for the old, the patient, the disabled, the injured, the obese, and not to mention ladies, applicable to all sectors of healthcare industry.

SONIX Mechanism



"SONIX" Sonic Wave Frequency
Mechanical Frequencies of 3 - 50 Hz

Infra-sonics Less than 20Hz	Audio frequency 20~20,000Hz	Ultra-sonics Over 20,000Hz
Inaudible but sensible	Audible and sensible	Inaudible, other industrial applications



Silver and Rehabilitation

- 1 Vitalize Nervous System for PNF (Proprioceptive Neuromuscular Facilitation)
- 2 Prevent Musculoskeletal and other Degenerative Diseases
- 3 Enhance Metabolism for better blood and lymph Circulation
- 4 Alleviate and Control Physical Pains
- 5 Increase Bone Mineral Density

In order to prevent several diseases arising from aging, it is important to do suitable exercise regularly. SONIX generates Whole Body Vibration which improves blood and lymph circulations contributing to the prevention of metabolic, musculoskeletal, and degenerative disorders. SONIX also vitalizes the muscular and nervous systems so that it is a very efficient physiotherapeutic treatment to rehabilitate the persons who can not work out.



Aesthetic

- 1 Increase FFA (Free Fatty Acid) in the blood plasma
- 2 Reduce Cellulites
- 3 Improve blood and lymph Circulation
- 4 Increase Basal Metabolism
- 5 Improve Digestion Process by stimulating the digestive organs inside the abdomen
- 6 Increase Growth Hormone and Reduce Stress Hormone



Most women want to keep beautiful bodylines and resilient skins. In order to reduce cellulites, increase basal metabolism, and delay the aging process, it is important to maintain normal hormone secretion, circulation, and vigorous digestion. **SONIX** will help you enjoy healthier life..



Fitness and Athletes

- 1 Reduce the risk of athlete injuries via simple and easy stretching
- 2 Help fast recovery of muscle fatigues after workout, training or game
- 3 Increase the flexibility and mobility of joints
- 4 Improve muscle reflex and endurance
- 5 Improve the balance sense through the effect of PNF (Proprioceptive Neuromuscular Facilitation)



SONIX stimulates not only big muscles but also fine muscles through the contraction and relaxation process, so that it allows you to get the better and faster stretching and faster recovery. **SONIX** is also an effective exerciser to increase flexibility and mobility of the joints, leading to improvement of reflex and balance sense.

Features

- Pure vertical movement
- Slim, light, and trendy design
- Easier to move and easier to install
- Convenient LED display panel with touch sensor
- Reliable sinusoidal sonic waves from digital amplifier
- Soft and smooth delivery of sonic wave vibration
- Independent control of frequency and intensity
- Safe with acceleration control sensor
- Developed with unique patent technology

Model	SW-VM10
Size	700 X 820 X 1450 (mm)
Weight	60KG
Range of Frequency	3-50 Hz
Intensity	0-99
Max. Loading Weight	120Kg
Power Source	110-120V, 50/60 Hz 220-230V, 50/60 Hz
Power Consumption	500W
Operating Temperature	40° C (humidity 0~80%)
Program	12 Automatic Modes, Manual Mode
Color	Sliver, White



SONIX Training Program

Pectoralis



PUSH UP
10Hz-14Hz



PUSH EACH
HAND
9Hz-13Hz



PECTORALIS
STRETCHING
8Hz-12Hz



Back



PULL
DOWN
13Hz-18Hz



ROWING
BACK
13Hz-18Hz



ROLLING UP
SPINE
13Hz-18Hz



Shoulder



LATERAL
RAISE
5Hz-8Hz



SHOULDER
PRESS
10Hz-14Hz



NECK&SHOULDER
STRETCHING
10Hz-14Hz



Arm



TRICEPS DIP
11Hz-15Hz



PRAY
EXERCISE
6Hz-9Hz



WRIST
STRETCHING
13Hz-16Hz



Legs



SQUAT
12Hz-16Hz



T-BALANCE
13Hz-17Hz



QUADRICEPS
STRETCHING
14Hz-18Hz



TRUNK
FLEXION
15Hz-20Hz



CALF RAISE
12Hz-18Hz



CALF
STRETCHING
12Hz-18Hz



Core



CRUNCH
10Hz-14Hz



LEG CIRCLE
11Hz-14Hz



OBLIQUE
STRETCHING
18Hz-22Hz



HORIZONTAL
ROTATION
18Hz-22Hz



COBRA
9Hz-13Hz



VERTEBRA
STRETCHING
11Hz-15Hz



Competitive Analysis Sonicwave WBV & Conventional WBV

	Motor type	Crank type	Seesaw type	Sonix
Effective freq (Hz)	above 20 Hz	above 30 Hz	above 18 Hz	3 - 50 Hz
Intensity adjustment	No	No	No	Yes
Vertical vibration	No	Yes	No	precisely YES
Motor noise	louder	moderate	moderate	not at all
Durability	low	low	low	semi-permanent
Low freq expansion	No	optional	No	available
Mechanical reliability	moderate	low	moderate	superior



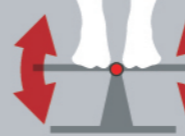
Motor Model

based on action and reaction mechanism, easier to produce, very common in markets; generates inaccurate vertical movements, louder noises, and frequent malfunctions; and forces imbalanced body movement and heavy impacts on the bones and joints



Crank Model

Rotary cam generates vertical vibrations by pushing the pedestal up and down. Undesirable lateral movements are generated at lower frequencies. Power strength depends on acceleration, forcing significant negative impacts on the human body at higher frequencies.



Seesaw Model

Crank model moves in a seesaw fashion, i.e, left-up and right-down, generating undesirable lateral movement. Vibration is concentrated on the lower part of body, causing hip and spinal injury.



Sonix

SONIX adopted electromagnetic technologies and speaker mechanism to generate precise vertical vibrations. Sonix works effectively at lower frequencies with little mechanical frictions, minute noise level, and infrequent malfunction. SONIX is the first product developed with independent control of frequency and intensity, according to individual physical conditions.

Family Foot Health Care

DREAM FOOT

The Foot Massage for your health and beauty



► Red



► Black

Rated Voltage	- AC 100~2400(Free) - Frequency : 50~60Hz - Consumption power : 65AV - Time : Maximum 15 min per use
Motor	- Voltage used : DC24V (terminal voltage) - Number of rotation : 2700 RPM
Size	570(length) X 430(width) X 350(height)

Product Feature

Touch type (LED mark)

Designed with a new type other than the previous PUSH button type. It starts to operate only by touching it softly without pushing it hard. It is a convenient touch button type.

Insteps Massaging Board designed by applying the human body

The blistering adult form, which is soft like pressed air, and 65 projections on four insteps massaging boards repeat acupressure and massage on insteps, ankles and anklebones. This function belongs only to this product and is the greatest proud of our product incomparable to any other devices.

Height control function

As two stages of height control is possible, you can get massage on your foot with a convenient position according to your body form.

Foot Pouch

For sanitation and cleanliness, it was designed in a way that the foot pouch can be detached and exchanged. You can detach and wash the foot pouch whenever needed.

3 axis 3 rotation type design

As it rotates maximum 45 times per minute, you can have an amazing experience by getting acupressure and massage on every part of the sole, both strong and soft.

Vibration Test Equipment for Research and Development



Applications

- 1 vibration test of lab animal
- 2 cell culture test
- 3 vibration test of electronic component
- 4 vibration test of small apparatus
- 5 replacement for small electromagnetic shaker system

Scope of Customization

- Size and Weight
- Range of Frequency
- Max. Allowable Acceleration
- Max. Allowable Loading Weight
- And others to be discussed

Model	SW-R3.0
Size	200*200, 4cell
Weight	25Kg(Actuator), 20Kg(Controller)
Range of Frequency	1~ 500Hz
Max. Allowable Acceleration	5G
Max. Allowable Loading Weight	20Kg
Power Source	110~120V, 50/60Hz 220~230V, 50/60Hz

" Rehabilitation & Silver "

- **Effect of whole body vibration exercise on muscle strength and proprioception in females with knee osteoarthritis** *The Knee* 16 (2009) 256-261
T. Trans, J. Aaboe, M. Henriksen, R. Christensen, H. Bliddal, H. Lund
- 3 groups were assigned randomly ; 1. WBV exercise on a stable platform (VibM ; n=7 (mean age, 61.5 9.2), 2. WBV exercise on a balance board (VibF ; n=18 (mean age, 58.7 11.0), 3. control group (Con ; n=18 (mean age, 61.1 8.5)
This study showed that WBV exercise on a stable platform (VibM) yielded increased muscle strength, while the WBV exercise on a balance board (VibF) showed improved TDPM (Proprioception - Threshold for Detection of Passive Movement).
The WBV exercise is a time-saving and safe method for rehabilitation of women with Knee osteoarthritis (knee OA)
- **Effect of knee flexion angle on neuromuscular responses to whole-body vibration**, Abstract presented at NSCA National Conference, July 2005 Abercromby, Amonette, Paloski, Hinman:
- **Neuromuscular responses to two whole-body vibration modalities during dynamic squats**, Abstract presented at NSCA National Conference, July 2005 Amonette, W., A. Abercromby, M. Hinman, W.H. Paloski:
 - More motor units (and the correlating muscle fibers) are activated under the influence of vibration than in normal, conscious muscle contractions. Due to this, muscles are incited more efficiently
- **Human skeletal muscle structure and function preserved by vibration muscle exercise following 55 days of bedrest**, *Eur J. Appl Physiol*, 2006, Vol. 97, S. 261-271 Blottner D., Salanova M., Puttmann B., Schiffli G., Felsenberg D., Buehring B., Rittweger J
 - The Berlin Bedrest Study (BBR) proved that 10 minutes of vibration training 6 times a week prevented muscle and bone loss in total bedrest over 55 days

" Aesthetic "

- **"Plantar vibration improves leg fluid flow in perimenopausal women"**, *Am J Physiol Regul Integr Comp Physiol*. 2005 Mar;288(3):R623-9. Epub 2004 Oct 7 Stewart JM, Karman C, Montgomery LD, McLeod KJ.:
- **Increased skin temperature after vibratory stimulation**, *Am J Phys Med Rehabil*. 1989 Apr;68(2):81-5, Oliveri DJ, Lynn K, Hong CZ
 - Subjects often experience this as a tingling, prickling, warm sensation in the skin. It is described the appearance of vasodilatation (widening of the blood vessels) as a result of vibration.
- **The effect of whole body vibration on lower extremity skin blood flow in normal subjects"**, *Med Sci Monit*. 2007 Feb;13(2):CR71-6 Lohman EB 3rd, Petrofsky JS, Maloney-Hinds C, Betts-Schwab H, Thorpe D.:
 - Immediate effect of WBV is an improvement of circulation. The rapid contraction and relaxation of the muscles at 20 to 50 times per second basically works as a pump on the blood vessels and lymphatic vessels, increasing the speed of the blood flow through the body
- **Hormonal responses to whole-body vibration in men / European Journal of Applied Physiology (2000) 81: 449-454 C. Bosco, M. Iacovelli, O. Tsarpela, M. Cardinale, M. Bonifazi, J. Tihanyi, M. Viru, A. De Lorenzo, A. Viru**
 - "We have shown that acute exposure to whole-body vibration causes increased plasma concentration of testosterone and growth hormone, and a decreased plasma concentration of cortisol. The increases in neuromuscular effectiveness and testosterone concentration were simultaneous but independent responses, however the two phenomena may have a common mechanism.

" Fitness & Sports "

- **"Effects of whole body vibration training on muscle strength and sprint performance in sprint-trained athletes"**, *Int J Sports Med*. 2005 Oct;26(8):662-8 Delecluse C, Roelants M, Diels R, Koninckx E, Verschueren S.:
- In order to have any effect on the body in the long term it is vital that the body systems experience fatigue or some sort of light stress. As in other kinds of training, when the body is overloaded repeatedly and regularly, the principle of supercompensation applies. This principle is the cause of the body adapting to loading. In other words: performance will increase. This effect has been proven several times in scientific research for both young and elderly subjects
- **"Acute whole body vibration training increases vertical jump and flexibility performance in elite female field hockey players"**, *British Journal of Sports Medicine*, 2005, Vol. 39, S. 860-865 Cochrane DJ., Stannard S.R
"Improving strength and postural control in young skiers: whole-body vibration versus equivalent resistance training", *J Athl Train*. 2006 Jul-Sep;41(3):286-93 Mahieu NN, Witvrouw E, Van de Voorde D, Michilsens D, Arbyn V, Van den Broecke W
 - Important difference between conventional training methods and WBV is that there is only a minimum of loading. No additional weights are necessary, which ensures that there is very little loading to passive structures such as bones, ligaments and joints. That is why WBV is highly suited to people that are difficult to train due to old age, illness, disorders, weight or injury. On the other hand, it is also highly suitable for professional athletes who want to stimulate and strengthen their muscles without overloading joints and the rest of the physical system
- **Strength increase after whole-body vibration compared with resistance training / Medicine & Science in Sports & Exercise (2003)**
 - "In conclusion, this is the first study that demonstrates that the stimulation of proprioceptive pathways provoked by WBV and the resulting increase in muscle activity have the potential to induce strength gain in the knee extensors of previously untrained subjects to the same extent as resistance training at moderate intensity. The findings of this study clearly indicate that strength increases after 12 wk of WBV training are not attributable to a placebo effect. The CMJ height increased significantly in the WBV group only. The results of this study suggest that strength increases recorded in the WBV group are mainly resulting from neural adaptations and can be ascribed to a more efficient use of sensory information in the production of force. It is clear that more research on WBV is needed to clarify the mechanisms of muscle contractions and strength gain."



- **Good vibrations and strong bones?**, *Am J Physiol Regul Integr Comp Physiol*. 2005 Mar;288(3):R555-6. Jordan J
- **Defining Osteopenias and Osteoporoses : Another View (With Insights From a New Paradigm)**, *Bone* Vol. 20, No. 5, Mai 1997 Frost H.M
- **Struktur und Funktion des Knochens**. *Pharmazie in unserer Zeit* 30(6), S. 488 - 493 (2001), ISSN 0048-3664 Felsenberg D
 - Other than its influence on the muscles, WBV can also have a positive effect on bone mineral density. Vibrations cause compression and remodeling of the bone tissue -Mechanostat, activating the osteoblasts (bone building cells), while reducing the activity of the osteoclasts (cells that break bone down). Repeated stimulation of this system, combined with the increased pull on the bones by the muscles, will increase bone mineral density over time. It is also likely that improved circulation and the related bone perfusion due to a better supply of nutrients, which are also more able to penetrate the bone tissue, are contributing factors.
- **Effects of whole body vibration training on postural control in older individuals : a 1 year randomized controlled trial**, *Gait Posture*. 2007 Jul;26(2):309-16. Epub 2006 Oct 30 Bogaerts A, Verschueren S, Delecluse C, Claessens AL, Boonen S
- **Effect of whole-body vibration exercise and muscle strengthening, balance, and walking exercises on walking ability in the elderly"**, *Keio J Med*. 2007 Mar;56(1):28-33 Kawanabe K, Kawashima A, Sashimoto I, Takeda T, Sato Y, Iwamoto J
 - In preventing falls and the bone fractures that often result from them, enhancing bone mineral density is not the only important issue. Increased muscle power, postural control and balance are also factors worthy of consideration. Studies involving elderly subjects have shown that all of these issues can be improved using whole body vibration.