

## **USER MANUAL**

## VIBROACOUSTIC COUCH WITH RESONANT EFFECT FOR THE TREATMENT OF CELLULITE AND ADIPOSITY

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## The vibroacoustic perception

The story goes that, in the last years of his life, almost totally deaf, Beethoven asked to cut off the legs of his piano, so that, laying on the floor, he could "hear" to the music through the vibrations.

For those who plays the cello or the double bass, the perception of the vibrations that the instrument spread to the body is a familiar feeling and someone can affirm that the quality of the sound is influenced from the "sympathetic" vibrations that go through the body of who's playing.

It is quite easy to see how any sound could inspire a mood or any emotions, through the auditory canal, that gets the sound message across the brain. What maybe, could be not so easy to get, is how the sound can get to the brain also through the skin, the bones and the inner organs.

The vibratory perception is less clear that the sound, but the effects of the low frequency in particular, are likewise important, maybe also greater.

Just think about a running train or about the "pumping up" of the music at the disco. We get these sound through our hears, obviously, but also our whole body get the same message.

The Norwegian researcher Olav Skille assumes: "Life is vibration, Matteri is vibration. The lotas vibrate, the Univers vibrates. Sound is vibration. Light is vibration. Temperature is vibration. Massage is vibration".

The only difference between all these vibrations is given just from every single pulse-cycle speed (that means from the frequency).

In the last years we tried to make systematic the therapeutic effect of the sound vibrations.

After several hours of studies, we could finally point out that at specific frequency some parts of our body resonate and produce in this way a kind of self-massage, that spread from the inside to the outside.

The technology of GA.IA, discovered and patented in Italy, thanks to the studies of Diego Kriscak, has find its pace in the European research, that has led to the discover and the verify of the positive effects of the low-frequency vibrations on our body.

# The vibroacoustic therapy in Europe and the Kriscak Studies

The vibroacoustic is a discipline that has found very important therapeutic applications, most of all in the Anglo-Saxon lands, starting from the seconda half of 1900s. The inventor of VAT (Vibro-acoustic therapy) is the Norwegian Olav Skille (1939), who has studied together with Juliette Alvin the use of the vibrations for therapeutic use -between 30HZ and 120Hz- at the beginning of the '70s. The vibro-acoustic therapy is a kind of sound low-frequency massage, that can reduce aches and unease and deeply improve life's quality. The vibroacoustic rises from the consideration that the human body can get the sounds not only by means of the hear, but also with other parts of it. The scientific principle at the base of its operation is that, the sound vibrations that our body get let the sound to be transformed into energy. By receiving sound vibrations, the human body is exposed to an "internal massage" that revitalize it, by producing energy that has to move the tissues involved from the vibrations. This process has been initially calles "Music Bath", to be than changed in "Low-Frequency sound Massage". You can connect this "Inner Massage" to a resonance effect. If we let a tuning fork vibrate nearby another tuning fork, also the second one will start to vibrate, thanks to the effect of the sound resonance. The same is for our body which, by receiving sound vibrations, resonances itself and produces a self-massage, produces energy which give vitality to the cellular tissue of specific part of our body. The studies has shown that, the more important frequency for the VAT goes from 40 to 80 Hz. Le lowest frequency, from 40 to 55Hz, produces a resonance in the lumbar area, the pelvic one, to the hips and legs. By raising the intensity, the sound has resonance effects in the upper part of the chest, in the neck and in the head. Olav Skille has found the physic and mental problems on which the VAT has positive effects. These are: stress conditions; depression; autism; asthma; aphasia; bedsore; cerebral palsy; flow of blood unease; cystic fibrosis; diabetes; pulmonary emphysema; fibro-myalgia; alcoholism; headache and migraine; immune system unease; insomnia; kidney stones; backache; menstrual unease; Bechterew disease; multiple sclerosis; muscular spasm; myalgia; edema; constipation; Parkinson disease; rheumatisms; spasm; sport-accident traumas; varicose vain; whiplash unease.

In the last years Diego Kriscak, one of the main Italian researcher of this subject, has found other positive applications of the sound vibrations, creating a specific vibro-acoustic technology for them. It's about the vibro-acoustic couch GA.IA for the reduction of the adipose tissue and cellulite. The couch GA.IA can be used also for relaxing massage in the cervical, thoracic and

lumbar areas of our body, most of all when these areas are submitted to stressful conditions.

Diego Kriscak is the inventor of GA.IA and the scientific responsible of the technical staff DIREDI SRL, the company that produces GA.IA. Highly creative, with a solid humanistic and musical culture, has studied "music-therapy" until he gets the degree of "music-therapist" at the university Jean Monnet in Bruxelles.

He is registered to the college "Specialistes in Disciplines Psychologiques" in the Federation Europeenne des Ordres Professionnels.

He is a member of Isva (International Society for VibroAcoustics) and of IIAV (International Institute of Acoustics and Vibration).

Has been in the past researcher to the Center for Advances Reseacher and mental Aid of Mailan (Centro Carma) in convention with the "Università Cattolica", where he started to test the new technology he invented for GA.IA, for the emission of the sound vibrations, of which he is in Italy one of the most specialist.

The experimentation on several patients and the studies of the factors together with other researcher led to the final creation of the couch GA.IA. During the years has been printed some publications on specialized magazines and has been organized several conferences. The innovation made on GA.IA has been recognized from a national and European patent.

#### Bibliography

- D. Kriscak, Musicoterapia e Vibroacustica, in "Braining", 2, 2007
- D. Kriscak, *Vibrazioni che guariscono*, in "BioGuida. Trimestrale di ricerca olistica", 2008.
- D. Kriscak, *Musicoterapia e vibroacustica*, in "BioGuida. Trimestrale di ricerca olistica", 2009.
- D. Kriscak, A. Raffaelli, "Le ultime frontiere per il trattamento del dolore: realtà virtuale 4D e lettino vibroacustico", in AA.VV, *Psicologia clinica del dolore,* a cura di E. Molinari, G. Castelnuovo, Springer 2010.
- D. Kriscak, "Percezione sonora e vibroacustica", in AA.VV., *Le voci del corpo*, a cura di C. Furlanetto e C. Tondo, Mimesis, Milano-Udine 2015.
- O. Skille, *Il suono a bassa frequenza nella terapia musicale*, Aracne, Roma 2010.

## Slim body treatment

GA.IA is a precious wood couch, born from a very careful artisan job, covered with a soft mattress, which uses the healthy effects of the low-frequency vibrations in order to produce a restful massage all over the body, which gives a real reduction of the adiposity. This characteristic make it a great instrument for the body care in the specialized SPA center.

The couch GA.IA produces in a natural way some sound harmonious vibrations whit whom our body resonate. Laying on GA.IA is like diving your body in a bath of reinvigorating sound vibrations. The main effect is a deep muscular and mental relax. Moreover, the main aesthetic effect is a natural elimination of the adiposity, with a reductions of the belt line, hips and thigh circumference.

The acoustic vibration penetrates through the skin and creates a massage, in particular in the area from the chest to the knees, with fantastic effects for the regeneration of subcutaneous tissue.

It has to be clarify that they are not mechanic vibrations, but sound, so they are not invasive and have no side effects on the articulations and on the bones-structure, that, on the contrary, take advantage from this acoustic massage.

The study done by the researchers of DIREDI SRL, coordinated by Doc. Diego Kriscak, led to the realization of a national and European patent, that recognize the innovation of GA.IA and the real efficacy of its results.

The applications of GA.IA are connected to the research of Olav Skille in the 70's in Norway, which led to the development of the Vibroacoustic Therapy (VAT), amply used for medical reasons in the Anglo-Saxon lands.

#### RESULTS OF ONE TREATMENT ON A PERSON WITH ADIPOSITY

L THIGH	R THIGH	BELT-LINE	HIPS	TREATMENT
67,5 cm	67 cm	87 cm	106 cm	Begin
65 cm	64,5 cm	85,5 cm	105 cm	First
63 cm	63 cm	83,5 cm	105 cm	Second
64 cm	63 cm	83 cm	101 cm	Third
62,5 cm	61,5 cm	81 cm	100 cm	Forth
60,5 cm	60 cm	80 cm	98 cm	Fiveth
- 7 cm	- 7 cm	- 7 cm	- 8 cm	Total 5 tratments

On a sample of a set of ten persons (also non-overweight persons) has been observed these medium values: (expressed in cm)

- 5,2 cm	5 cm	5,5 cm	5,7 cm	Reduction 5 treatment
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With climax of (overweight persons):

- 7,5 cm	7,5 cm	8 cm	11 cm	Reduction 5 treatment
7,5 (111	17,5 (111	10 011	11 0111	Ineduction 3 deadines

The scientific principle at the base of the reduction of the adiposity, given by the low-frequency vibrations, has been deeply studied from the physics, and is the one of the sound resonance: if we let a tuning fork vibrate nearby another tuning fork, also the second one will start to vibrate.

The sound waves produced by GA.IA penetrate through the skin and reach the adipose tissue, on which will be created sympathetic or reflexed resonance, that produce a deep massage, that spreads from the inside to the outside.

The low-frequency vibrations produce a massage in the hips and belt-line, reaching also the most distant areas, like arms and knees. The results are reached thanks to a relaxing vibro-acoustic massage, with sound waves that can be perfectly heard, so natural and not invasive.

In the website is possible to read the main results obtained with GA.IA from the 2012 till today; they are the scientific confirmation of the studies of Kriscak. The scientific-technologic innovation of the couch GA.IA produced by DIREDI DRL has been certificated with national and European patent.

## Controindications

In case of following deseases it's raccomanded to consult a doctor before to submit to the treatment:

Diabetes.

Hemorragie (menstruation excluded).

Pregnancy.

Acute inflammation.

Low blood Pressure.

Head or neck lesions after accident.

Kidney deseas.

Pacemaker patient.

Psychosis.

#### Route for one treatment

- 1. Before to submit the treatment with GA.IA, please fill the informed conset, which gives to the client the informations about the few, but anyway possibile, controindications.
- 2. The operator takes the measures of line-belt, hips and thigh (eventually also knees and arms)
- 3. Lay on GA.IA.
- 4. Once you are laying, you can feel the effect on your body of the vibrations that the operator chooses, and you decide for the one more intensive for the area that has to be treated.
- 5. You have to wear stereophonics earphones to hear to a specific music, studied to relax and accompany the positive effects of GA.IA.
- 6. You can now totally relax and leave yourself to the vibrations of GA.IA.
- 7. The treatment lasts 30 minutes.
- 8. At the end of the treatment the operator reduces the volume of the vibration and of the music. Just wait some seconds on the couch.
- 9. You can now stand up, so to measure the belt-line, hips and thigh circumference (eventually knees and arms too).
- 10. Tell, please, the operator your sensations and impression about the treatment.

## Route for the correct use for the operator

The controls of GA.IA have been studied in order to be used with the best facility possible; with just a few hours of trainings the operators are able to use in the best way the functionality of the couch.

- 1. Get the treatment started, describe with a few words the main characteristics of the couch GA.IA and advise the customer about the possible contraindications. If the customer belongs to the treatment, please let him subscribe the informed consent.
- 2. Take the measures of belt line, hips, thigh and eventually of knees and arms.
- 3. Switch on the whole couch, after you have connected it to a system compliant with legal standard. Before to let the treatment started, please check that the volume of the program that creates the frequency has to be to the minimum. The volume of the amplifier is set up from the technician of DIREDI and must not change.
- 4. Let the customer lay on GA.IA and suggest the use of a cotton cloth or towel in order not to waste the body's heat during the treatment.
- 5. Verify the real frequency of the application, through ranges of the frequency (A-B-C-D-E-F-G), with light volume's variations, until you reach the requested effect, that means the perception of the customer of the resonance effect in the body's area that has to be treated.
- 6. Switch the music in the headphones on, so to make the customer more comfortable during the treatment.
- 7. Set again the parameter to the minimum and reach gradually (in 1 minute) the requested volume (fade in).
- 8. Please, ensure that the customer doesn't need anything and leave him alone in the room. The treatment must not last more than 30 minutes; in this time the operator can get into the room again once or twice, to verify that everything is going on well and if the customer needs anything 8if he is cold, if he can hear good to the music...). In the last minute the operator has to reduce to zero the volume of the program (fade out); after that the amplifier will be switched off.
- 9. Let the customer lay a minute on the couch, before to let him get off of it to take again the measures of the belt line, hips and thigh.
- 10. Collect eventually the sensations and feelings of the customer about the treatment.

## **Technical Sheet**

EQUIPMENT	GA.IA <sup>(TM)</sup>		
PRODUCER	DIREDI SRL		
MANUFACTURER	DIREDI SRL		
FUNCTIONAL DESCRIPTION	VIBROACOUSTIC COUCH WITH RESONANCE EFFECT		
SOUND AMPLIFICATION	MAX 100 WATT; SUPPLY 220 V/50 HZ		
MASSAGGE'S LOUDSPEAKERS – RATED OUTPUT	800 W		
UNIT CONTROL SUPPLY	C 12 VOLT 6 AMP – INPUT: 100-240V, 50- 60 HZ – OUTPUT: 12V, 2A		
TOUCH SCREEN	FEATURES – 15,6" LVDS DISPLAY – USB CAPACITIVE TOUCH SCREEN –		
HEADPHONES	STEREOPHONICS HEADPHONES		
COUCH SECTION	WOOD STRUCTURE, PVC TUBES, LEATHER MATTRESS		
DOCUMENTATION	TECHNICAL SHEET OF THE SINGOL DEVICES AT DISPOSAL IN DIREDI SRL		
DIMENSIONS	2,20 m x 0,84 m; h 0,80 m		
TOTAL WEIGHT	120 Kg		
DEVICES' SUPPLY	220 VOLT 50 HZ		
CLASS (CON RIF. EN 60335 - 1)			
CATEGORIZATION	CLASSE 10 E0133 AESTHETIC (MASSAGGE DEVICE); M0226 AESTHETIC MASSAGGE (DEVICES FOR); M0227 MASSAGGE (DEVICES FOR); V0283 VIBRO-MASSAGGE.		
REF. LEGISLATION	2006/95/CE		

## Applied norms and certification

The equipment follows what forseen from the DL 110 of 15<sup>th</sup> May 2011

INFO-TECHNICAL SHEET n. 6 Class: MASSAGGES' DEVICES d) Electric oscillating vibrators

#### **TECHNICAL APPLIED RULES**

Rule CEI EN 60335-1:2004 Security of the use of electronic devices for domestic and similar use.

Rule CEI EN 60335-1/A1/A11 2006

Legislation 2006/95/CE of the European Parliament and Council of the 12<sup>th</sup> December 2006, concerning the rapprochement of the Member States, about the electric material that has to be used within certain potential difference edges.

Legislation 2004/108/CE of the European Parliament and Council of the 15<sup>th</sup> December 2004, concerning the rapprochement of the Member States, about the electromagnetic compatibility, that abrogates the legislation 89/336/CEE.



## Legend



You have to read carefully the instruction before to use the device

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The producer

REF

The name of the device; for any contact with the company, please, ref. to this name

SN

Device's serial number. For any contact with the company, please, ref. to this number

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Potential difference used

CE

Device branded CE, as per legislation 2006/95/CE



Information for the device's end-life.

Pursuant to art. 13 DLGS 25 July 2005 n.151 "Affect of the legislations 2002795/CE and 2003/108/CE, about the reduction of dangerous materials in the electric or electronic devices, and about the removal of residues, the symbol on the device indicates that this product should be group apart from other garbage.

The recycling of this product, at the end of its life, is organized from the supplier. The user that wants to eliminate it should take contact with the producer or with an agent of it, in order to support the recycle of this device.

## Security and Maintenance Methods

Before to use the device, please, read carefully the instructions and respect all the recommendations.

- Ask for all the necessary informations, during the installation of the device, before to use it for the first time.
- The incorrect use of the device is not contemplated.
- Kids, disabled persons or unfit to plead persons should not approach to the device alone.
- The device should be used with the operator, who will control time by time the correct use.
- Please, check that the potential difference is 220 Volt 50 Hz and that the electrical system is compliant with legal standard.
- Periodically check the power cable and the plug; both of them should be in perfect conditions: if not, please contact the Technical Service DIREDI.
- Plug and unplug correctly the power cable, without pulling when disconnecting the plug.
- Protect the cables from oils, hacks and heat.
- do not put the device nearby heat source.
- The device could not be used in spaces where flammable gas are present in the air.
- The devise should be submit to inspection, maintenance and test, pursuant to the legislation in force.
- Keep the electrical parts of the device in a ventilated ambient for a correct circulate of the air.
- Don't keep switch on the electrical parts of the device if not necessary, especially the amplifier.
- In case of malfunction, not mentioned in this manual, please, abstain from any intervention or reparation temptation. The reparation has to be done only from a technician DIREDI or from a company mentioned from DIREDI SRL.
- The device could be used from specific operators and from music-therapists, and also from qualified personnel of DIREDI SRL.
- The couch doesn't need a particular maintenance: the wood parts have to be clean with a damp cloth non-abrasive and the electronic part should only be dusted.

The product is delivered complete with all the accessories mentioned in the technical sheet, already packed and is tested from our technician before the use.

The product must be use away from heat source and not near water.



#### Produced and distribuited from:

#### **DIREDI SRL**

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