

# BIOMEDICAL DEVICES

## AEROIONIZERS

### GREENCARE 2061 WITH 8 NATURE SOUNDS, GREENCARE 2068 WITH AROMATHERAPY, AND PLASMA IONFRESHER AIR PURIFIER



The half-century investigations have shown that ions in air (of the concentration  $\sim 1,000 - 10,000$  ions/cm<sup>3</sup>) essentially influence behavioral effects (coolness/fatigue, relaxation/irritability), and in the long run also the human health: it has appeared that negative ions act anabolically (causing relaxation, and consequently improving the health of the organism), while positive ions act catabolically (giving rise finally to fatigue, and in the long run to disorder). It has also been shown that domestic electrical apparatuses, personal computers, climatizers and industrial electrical machines generate an excess of positive aeroions, giving rise to accelerated human fatigue in their vicinity. Beside artificial sources of poorly influencing positive ions, there are also natural sources, mostly in the form of warm winds (like, for instance, fen - the wind blowing in south Germany and Switzerland). Statistical investigations have shown that during periods of blowing fen an increase of postoperative complications and deaths in intense care units appear, as well as other physical and psychological disorders.

Aeroionizers are electronic devices recommended preventively in living and working closed environments, as they raise concentration of negative ions and compensate the fatigue influence of the excess of positive ions, making a microclimate which can be met in nature near rivers and waterfalls, forests and mountains, after strong rainstorms and pelting rains. Such a microclimate bioengineering has a beneficial significance for raising global level of human health.

They are especially recommended to the persons under stress or suffering of sensitivity on weather changes, chronic headache, dizziness, higher risk of heart attack, allergic breathing problems, asthma, bronchitis, insomnia, fatigue, poor concentration, slow reactions, irritability, anxiety, depression.

Aeroionizers also purify air through electrical neutralization of large positive aeroions of dust, unpleasant odor, tobacco smoke, pollen, and other allergens - thus decreasing their stressful influence upon an organism; besides, airborne bacteria and viruses are removed efficiently by aeroionizers.

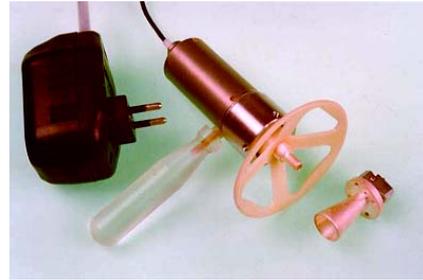
IASC recommends aeroionizers Greencare 2061 (with additional 8 relaxing nature sounds: ocean beach, tropical forest, waterfall, heartbeat, gentle stream, summer night, sunrise, spring rain) and Greencare 2068 (with additional evaporation of essential aromatic oils), as well as Plasma Ionfresher Air Purifier (with additional moderate generation of ozone) - designed for complete pleasure of your living and working environment. The capacity of Greencare ionizers are sufficient for rooms of the surface up to 25 m<sup>2</sup>, while Plasma Ionfresher ionizers are sufficient for working/living places of the surface up to 100 m<sup>2</sup>. The Greencare (of dimensions 8 cm x 14.7 cm x 5.5 cm

and weight of 240 g) and Plasma Ionfresher ionizers (of dimensions 15 cm x 9 cm x 28 cm and weight 690 g) have a.c. power supply of 220 + 20 V and maximal external power of 5-10 W.

IASC recommends aeroionizers as a part of the complete IASC anti-stress therapy. In that context, IASC aeroionotherapy recommends an Indian traditional half-hour rhythmical breathing in the morning and evening relaxing walks, with rhythmicity 6:6:12 (during 6 steps deep inhale, next 6 steps keeping the breath, and following 12 steps the full exhale), with a pause between inhale and exhale, with efficient anti-stress relaxation of the abdominal muscles, regeneration of the overall anabolic/catabolic ionic capacities of the acupuncture system, and anabolic relaxing advantageous influence of the atmospheric excess of negative ions on the body. IASC aeroionotherapy also recommends very efficient traditional Indian anti-stress technique of interrupting brain/nasal ultradian rhythm by forceful short inhaling through the less active nostril (10-15 times) - in stressful situations, colds in early phases, and states of energy deficit. Because of their simplicity, the mentioned techniques are recommended for everyday anti-stress self-aid.

## DEVICES FOR MICROWAVE RESONANCE THERAPY

### MRT DEVICES



Microwave Resonance Therapy (MRT) is a practical realization of the Prigogine theory of self-organization of living systems, which might simplistically be visualized as differentiated at the locations of maxima of three-dimensional standing waves, formed as a result of the reflection of coherent microwave (MW) Frohlich excitations of molecular subunits in the cell membranes, proteins, microtubules etc.

In that context the explanation for efficiency of the MRT, as noninvasive nonmedicamentous medical treatment, should be sought: some disorders in the organism give rise to deformation in the standing wave structure of electrical field of the organism in MW region, which influences corresponding changes in spatial structure of the acupuncture system, and consequently resonant frequencies of its meridians, resulting in some disease. During the therapy, applying the MW sound at corresponding acupuncture point the excited acupuncture system of the patient is relaxing to the previous healthy condition, while reaching its normal resonant frequencies' responses upon the wide spectrum MW source - and following to physiological mechanisms of the acupuncture regulation the organism biochemically overcomes the disease.

By affecting the appropriate acupuncture points with MRT generation of high frequency microwaves, remarkable clinical results of the treatment are being achieved in prevention and therapy of stress, as well as in many psychosomatic disorders (cardiovascular, respiratory, gastrointestinal, nefro-urologic, endocrine, gynecological, neurologic, psychiatric, dermatological, orthopedic and traumatologic, oftalmologic, ORL, stomatologic, pediatric, addictions ...) - with average efficiency of 82% in chronic and up to 100% in acute diseases, tested on population of over 500,000 patients of different pathologies in more than 1,500 MRT cabinets in Ukraine and Russia.

The recommended MRT treatment at an acupuncture point is maximum 10 minutes, while the duration of the whole treatment is maximum 20 minutes, applied daily. The 10 treatments in a course are applied, with optimal pause of one month in the case a repeated course is necessary. The specific course of prophylaxis is advised at every 6 months. The procedure is painless, noninvasive, and completely harmless, both for physician and patient. On the other hand, MRT is rarely contraindicated (only in the cases of acute pain in abdomen demanding an operation, pregnancy, and menstruation cycle).

In the IASC offer there are 2 types of MRT wide-range devices, successfully applied in polyclinics and hospitals. Their working frequency range is 54-78 GHz, they have extremely low spectral density down to  $10^{-19}$  W/Hz, nominal a.c. power supply of 220 + 20 V and maximal required external power of 5 W. The maximal time of continuous work is not less than 8 hours, and nominal operating time not less than 5,000 hours. Their dimensions are about 100 mm x 50 mm x 50 mm, and overall mass less than 0.5 kg.

## ELECTRODERMAL COMPUTERIZED DIAGNOSTIC SYSTEM



Electrodermal Computerized Diagnostic (ECD) system is based on quick measurement of the temporary electrical parameters of the representative reflexogenic biological active zones of the skin, and subsequent expert system analysis and convenient computer graphic presentation of the degree of deviation from the normal condition - which gives objectified information on the functional state of the acupuncture related organs and organic systems.

This segmental electrodermal diagnostics, based on investigations of Voll, Pflaum, Kramer and Leonard, was originally implemented in contemporary medical practice twenty years ago, with further scientific-clinical improvement for investigation of the health state of Russian astronauts and pilots, with subsequent application to wider population of all ages in hundreds of Russian hospitals and polyclinics of different levels - with average reliability of the functional diagnostics up to 80% and up to 2 years before appearance of symptoms of diseases, clinically investigated in several big medical institutions of Russia.

ECD diagnostic system consists of measuring block governed by personal computer, six measuring electrodes (for feet, palms, forehead), and accompanying software. During the process of diagnostics the applied test-signal is completely harmless and painless for patient. Information on the patient's condition is obtained from multiple cross scanning of electrical test-signal along 22 directions and subsequent statistical analysis of the degree of deviation from normal condition of the volume electroconductivity of the representative biological active zones of the skin and related organs and organic systems. The computer graphic presentation enables both to physician and patient to discriminate clearly the condition of organs and organic systems as a degree of deviation from normal healthy state. Textual information comments on the state of functional relationships within organism, while computer-physician-patient dialogue enables verification of the results of examination.

Alongside with MRT therapy, ECD diagnostics creates an optimal and continuous diagnostics-therapy-diagnostics technological cycle, which enables optimization of the process and results of prevention and curing. Having in mind broad spectrum of diseases which can be diagnosed and cured by the ECD/MRT complex, it represents a mini-polyclinic for 2,000-4,000 patients per year, which might be supported by two specialized physicians. In the field of economical efficiency ECD/MRT diagnostic-therapeutic complex is not comparable with anything known in medical practice.

ECD measuring block has autonomous battery supply, it is table-installed and bag-transported

with its electrodes, of the overall mass of 5 kg. The time of continuous work is up to 8 hours. By using Lap Top personal computer, the whole system is easily portable which enables ECD recordings in outdoor conditions, with subsequent analysis and printing of results on the stationary ink-jet color printer.