

***Air Purifier***

***INSTRUCTION MANUAL***



**SIZE:116\*80MM**

# Air Purifier

## What is the anion

According to physics, geodesy and geographic Joint Commission International Union adopted the theory of atmospheric air anion of formula is  $O_2-(H_2O)_n$ , or  $OH-(H_2O)_n$ , or  $CO_4-(H_2O)_n$ . Mentioned here are eco-friendly air anion mainly refers to the first two small molecular ions. Negative ions can be restored from the atmospheric air pollutants, nitrogen oxides, produced by cigarettes and other reactive oxygen species (oxygen radicals), reactive oxygen species reduce the excessive harm to human body; in and positively charged air particulates without charge after the settlement, purify the air. Tourmaline is a permanent release of negative ions of natural mineral materials, and manual methods were compared to negative ions, negative ions do not release the energy of tourmaline, do not produce ozone and active oxygen, made of soft decoration textiles, can improve indoor air quality in a small environment It is an ideal green environmental protection material. Permanent release of negative ions in the mechanism of tourmaline There are several explanations, one of which is attributed to tourmaline water electrolysis:  $4H_2O$  electrolysis  $OH^- + H^+$ , hydrogen ion by the weak current between the electrodes of tourmaline been e;  $2H^+ + 2e^- \rightarrow H_2 \uparrow$ , hydroxyl ions and water molecules form a negative air ions:  $OH^- + nH_2O \rightarrow OH^-(H_2O)_n$  according to this theory, tourmaline releases negative ion concentration and its effect of the strength of the spontaneous polarization necessary condition.

Since 1889, Elster and Gaertel German scientists discovered the existence of negative air ions to other 1902 Ashamasi confirmed the biological significance of air ions, have the company in 1932, Hamsun U.S. RCA invented the world's first a negative ion generator, air medical, from half a century, the air ion research in Europe, American, Japanese and has gone through a long development application stage.

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## Specification

Product Type: GL-130

Power:  $\leq 1W$

Current: 21mA

LED lightness: 10 ~ 20Lux at night

Anion production:  $4.5 \times 10^7$  pcs/cm

## Help

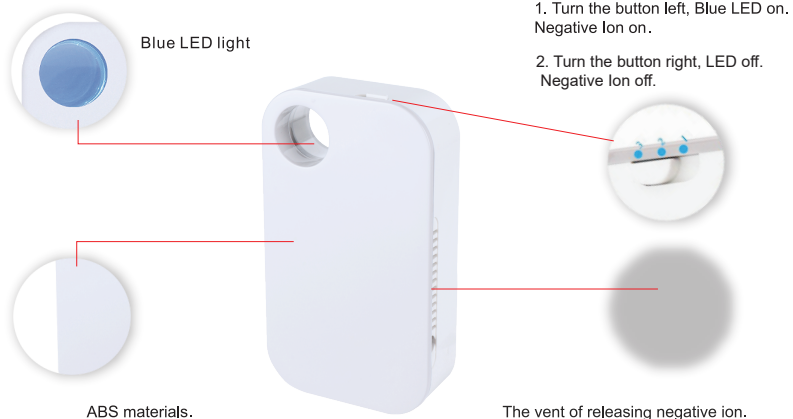
Bedrooms, corridors, toilets, bedrooms, staircases, and other space or room, such as the children room or any space of weak lights at night.

## Use

Need to use the product in the local national standard socket installation standards, the product can be plugged into the outlet. The best installation height for the product: 1.5 m above the ground. Install a good product, keep don't cover anything in front of the product.

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## Product Structure



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## What is the anion

China, since 1978, Dr. Shahawate Iran, the introduction of an electronic device - biological filter (biological filter), the forerunner of China's negative ion generator, has the air of negative ions in our country has gone through the early 80s, 90 Two early surge of development. Advances in modern biomedicine, animal experimental results, the deepening of environmental awareness, and improve air ion test equipment, and promote the mechanism of the air of negative ions, negative ion generator air production and application of medical treatment in has become a paramedic means. In the environmental assessment as a measure of negative air ion concentration in the air quality has been an important parameter. For to create a comfortable environment, the existence of the effect of negative air ions, has been opened to bring people to a new level of awareness. Guangdong Provincial Bureau of daily gas ion concentration prediction. <http://www.grmc.gov.cn/tqyb/tqyb.htm>, said: anion known as the "longevity factor" on high blood pressure, asthma, influenza, insomnia, arthritis, burns and other favorable treatment; on prevention rickets, scurvy benefit the development, but also to improve the lung ventilation function, promote metabolism, improve immunity. Also to inhibition of the cerebral cortex to strengthen and adjust brain function; to bronchial smooth muscle relaxation, relieve their spasms; to slow erythrocyte sedimentation rate and coagulation time; to kidney, liver, brain, enhancing oxidation.

### **In Nature, there are three mechanisms produce negative air ions**

- 1, the atmosphere by ultraviolet radiation, cosmic rays, radioactive substances, thunderstorms, storms, soil and air and other factors occurring radiation was released by the ionizing electron quickly and neutral molecules in the air, and become negative ions, or anion.
- 2, Falls shock waves push small volume loss of rainfall or other natural water course of the action of gravity, high-speed flow, the molecules break and produce negative ions.
- 3, forest trees, leafy shoots point discharge and the formation of the photoelectric effect of photosynthesis of green plants, the air ionization and negative ions.

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## What is the effectiveness of negative ions

Air of positive and negative ions, the size of their mobility, can be divided into large, medium and small ions, ion mobility is greater than  $0.14 \text{ cm}^2 / \text{V.s}$  for small ions, but only a small ion, or so-called small-ion group to enter the organism, of which a small negative oxygen ions, or call a small group of negative oxygen ions, there are good biological activity, inhaled human body is more negative oxygen ions and carbonate groups in the Hydrate oxygen ions Mission conjugate-based. Researchers studied a small group of negative oxygen ions on the human body's role, it is mainly through the lungs breathing in three ways:

- 1, partial airway epithelial ciliary movement can be accelerated;
- 2, body fluids into the blood, the release of charge, act on the cell, protein, and then oxidation, inhibition of blood in the 5-HT;
- 3, to stimulate reflection within the receptors, the nervous system conduction, while the effect on the brain and the autonomic nervous system, its charge through the blood-brain barrier into the cerebrospinal fluid, until the impact of neurological function.

Therefore; negative oxygen ions in the medical, early hypertension, closure, spastic vascular diseases, neurasthenia, chronic gastritis, upper respiratory tract inflammation, Bronchial asthma, atrophic rhinitis, burns, Ave him stomatitis, were effect. And experiment prove that the air negative ions can reduce the blood of 5-HT, increased neural inhibition; have sedative, hypnotic, lower blood pressure, brain wave frequency to speed up, speed up the motor and sensory time value, erythrocyte sedimentation rate slows, the blood viscosity decreased, plasma protein, red blood cell hemoglobin increased, so that kidney, liver, brain, oxidation enhanced oxygen to the lungs, carbon dioxide emissions increase function, reduce blood sugar and lactic acid in muscle and improve function of the system network within the cortex

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## What is the effectiveness of negative ions

to promote in vivo synthesis and storage of vitamins and basal metabolism, and promote protein metabolism, strengthen the immune system, on health care, promotion of biological growth and development have a good effect.

Nature of air positive and negative ions in the ultraviolet cosmic rays, radioactive substances, lightning, storms, waterfalls, ocean waves generated under the impact, both continue to produce, they have disappeared, to maintain a dynamic equilibrium state. At the same time; for the formation of terrestrial ionosphere for the atmospheric electrostatic field, the ground for the negative results; air exclusion of negative ions by the ground, the air of positive ions are attracted by the ground, so, in general, to the surface of positive ions than negative ions, positive anion concentration ratio of often more than one, positive and negative ion concentration of each  $400-700 / \text{cc}$  or so.

Forests, crown, leaf end point discharge, and lightning, waterfalls, under the impact of waves, the formation of a higher concentration of small air ions, so that fresh air and exhilarating. The densely populated city, industrial pollution areas, enclosed air-conditioned rooms, contaminants and pollutants generated by liquid, solid, and a variety of organisms and air, aerosols, a large number of small air ion ion binding National Cheng Kung University The settlement, loss of activity, and to reduce the concentration of small air ions, and the emergence of positive and negative ions is very unbalanced state, people feel discomfort or even dizziness, headache, nausea, vomiting, agitation, difficulty breathing, decreased efficiency and even cause some symptoms of unknown diseases.

Therefore, negative ions to improve the environment of artificial air negative air ion concentration in order to maintain its proper balance between positive and negative ions, which improve the air quality of the environment, have become an increasing concern.