

**CAUTION: READ INSTRUCTIONS THOROUGHLY BEFORE OPERATION OF UNIT**

# **Ozone Generator**

## **O<sub>3</sub> ARIA ACQUA**

### **Manual**

**BELLINI SYSTEMS SRL**

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Dear Customers,

Many thanks for your choice of STARK's ozone generator. Your satisfaction is our continuous motivation, we will provide you with the best service from beginning to end. STARK Series ozone product come with high quality and good performance. In order to facilitate your usage, please read this manual carefully before operation. Welcome to inquire and provide valuable advice if you have any questions. Because of possible product improvements, your purchase product's introduction maybe completely consistent, hereby apologize.

## 1. Preface

ARIA ACQUA series ozone machine is high-tech environmental protection appliances, integrated with power protection, sound and light warning, timer or output concentration regulation, is widely applied to air purification and water treatment.

### Using Environment

Ambient temperature:  $-10^{\circ}\text{C}\sim 37^{\circ}\text{C}$ ;

Ambient humidity:  $\leq 55\%$ ;

There shall be no flammable and explosive gas and conductive powder dusts in the room. It's not permitted to install the equipment in a place where alkaline air is easy to leak or with risk of explosion.

The ground for equipment installation must be horizontal, and the equipment shall be placed on ground or supports steadily.

There must be draft fan or air conditioner to keep air dry and the operating environment in good ventilation.

### Characteristic

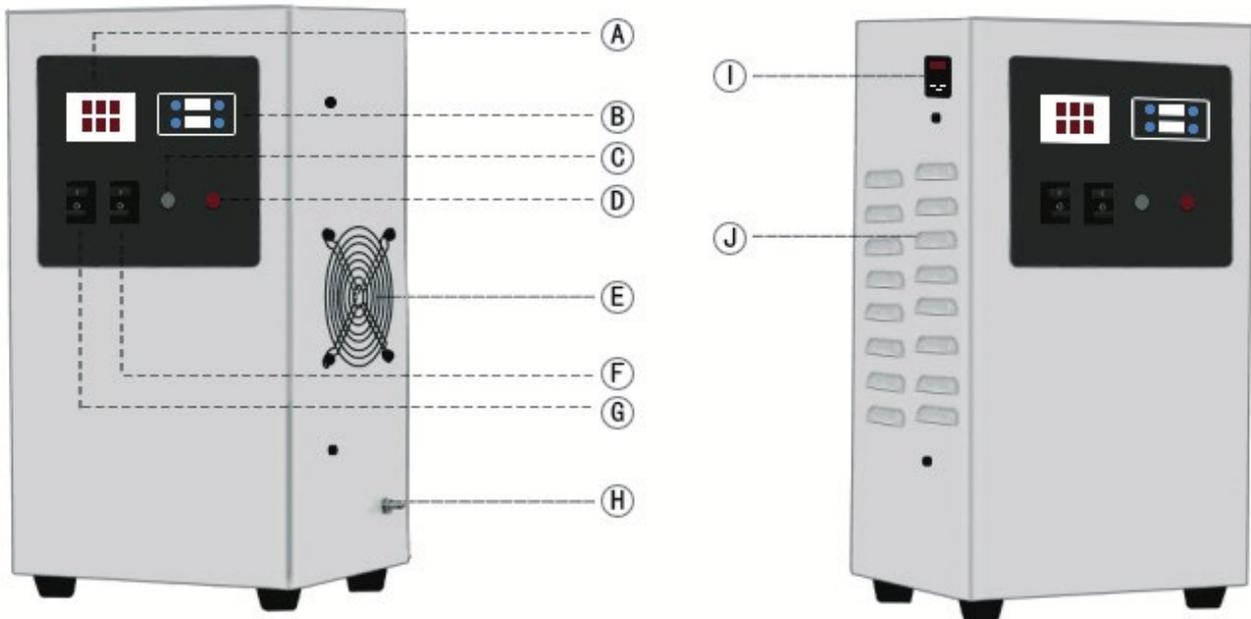
- Unique air-cooled technology, adjustable ozone output, easy operate
- Stainless steel 304 external house, atmospheric and beautiful, durable
- High conversion efficiency, low energy consumption, long service life
- Air-compressor integrated
- Clean dry air feeding, **CE, Rohs Certificate**

## 2. Technical Parameters

| Parameters<br>Model | Ozone capacity<br>(g/h) | Cooling way | Dimension (mm) | Weight<br>(kg) | Power<br>(W) | Voltage<br>V/Hz |
|---------------------|-------------------------|-------------|----------------|----------------|--------------|-----------------|
| DNA-10G             | 10                      | Air cooled  | 320*250*525    | 8.1            | 140          | 220/50          |
| DNA-30G             | 30                      |             | 400*300*730    | 21             | 300          |                 |

Note: because of the different conditions of using location, the technical parameters listed above may be deviation./

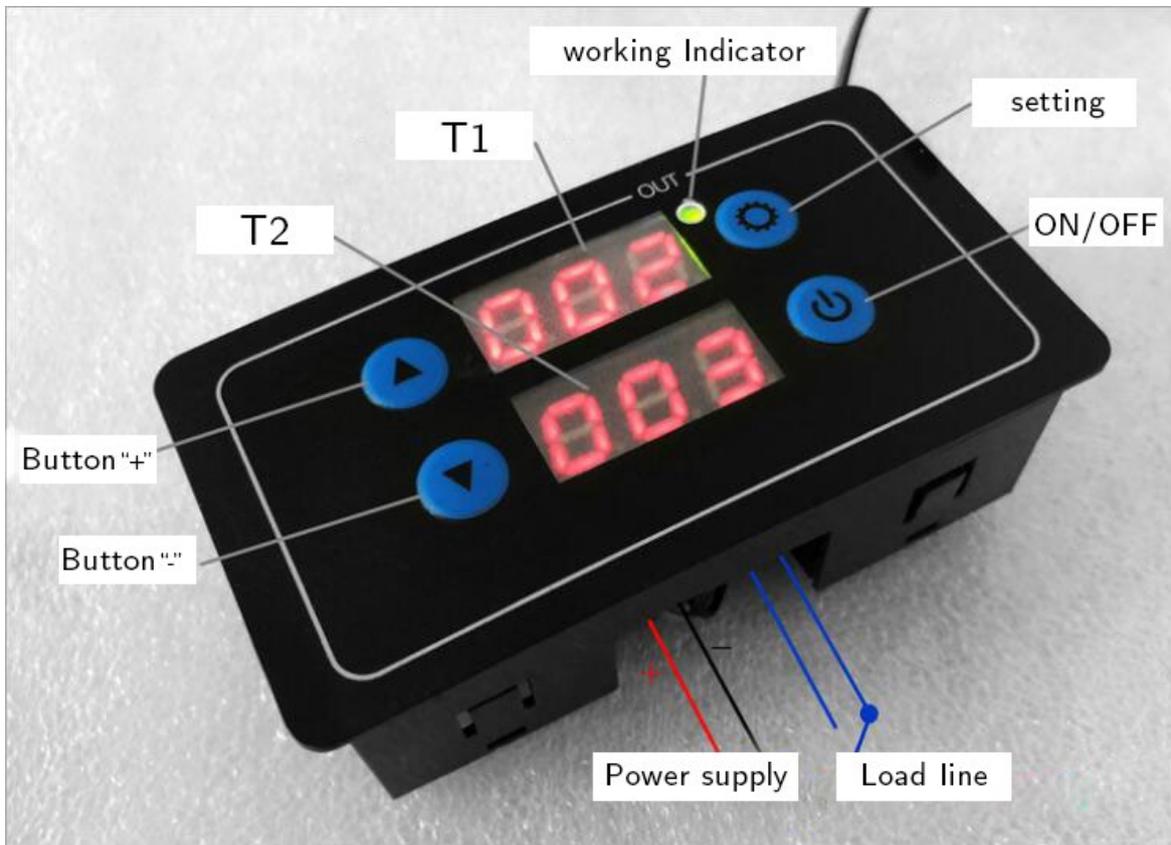
## 3. Control panel description



- A. Ammeter/Voltage meter
- B. 0-999 hours digital timer
- C. Ozone indicator
- D. Air pump indicator
- E. Cooling fan
- F. Air pump switch
- G. O3 switch
- H. O3 outlet
- I. 220V power cord
- J. Cooling port

## 4. Digital Timer Setting Instruction

**Time range:** Any time from 0.1 second to 999 hours can be adjusted



### Timer Work Mode:

**P1--1:** The timer starts working after T1 time delay.

**P1--2:** The timer working for T1 time and stop.

**P1--3:** After T1 time delay, the timer work for T2, then stops working and ends.

**P1--4:** Timer work for T1 setting time, stop for T2, the timer starts to work again.

**P1--5:** After T1 time delay, the timer work for T2 time, repeat cycle.

**P1--6:** The timer working T1 time, stops for T2 time, repeat cycle.

## Key Settings :

Button "+": adjust time add

Button "-": adjust time reduce

ON/OFF key: start/stop

## The decimal point time statement

**XXX:** Time range: 1 to 999 seconds

**XX.X:** Time range of 0.1 seconds to 99.9 seconds

**XXX.:** Time range is 1 minute to 999 minutes

**XX.X.:** Time range is 1 hour to 999 hours

**Time setting:** Press and hold the **SET** button, T1 digital tube will flash and display P1--1, Press "+" or "-" button to choose working mode. Short press the **SET** button again, T1 digital tube will flash, and display **000**, Press "+" or "-" button to set T1 from 0-999, during this time, short press **ON/OFF** to choose timer range. Short press **SET**, T1 digital tube will flash, and display **000**, Press "+" or "-" button to set T1 from 0-999, during this time, short press **ON/OFF** to choose timer range. Press the **SET** button or ON/OFF button to save the data.

After setting, press ON/OFF one more time, the timer will start working according to the setting.

For example, customer needs to turn on the machine for 10 seconds, shut down for 20 seconds, and cycle. Setting method as follows:

**Work model choose: P1--6**

**T1 sets time 10, T2 sets time 20**

**Time range choose: XXX (time range is 0-999S, 1=1 second )**

## 5. Safety considerations

This series of products using 220V/50Hz AC power source, if the voltage and frequency fluctuation range is heavy, may cause damage, abnormal or equipment failure;

The power cord plugs should keep in contact with the socket firmly, otherwise may cause abnormal electricity or even get an electric shock, endanger personal safety;

Users should regularly check the power cord; Don't let the standing legs, or other heavy objects live on the power line; Please be careful when moving machine, don't roll or damage the power cord; replaced a new one when the power cord was damage.

Please do not use in environment with explosion danger products;  
High voltage inside the machine, it is strictly prohibited to open the back door, touching or putting hands inside the machine;

When it don't work or need to do the maintain, unplug the power. Strictly prohibited to spray, rinse with water.do not place it in the damp, not ventilated place in case affecting the product electric insulation performance;

Prohibited to remove, modified this product, maintenance must be conducted by a professional or trained personnel;

Please do not use this product near the high precision electronic equipment, as wave interference may cause wrong operation or other problems;

Avoid excessive damp, water or other liquid go into this product may cause leakage or other faulty.

Avoid using volatile solution or organic solvent cleaning the equipment, it might damage the surface of equipment.

Using qualified safe and reliable grounding connected to avoid eliminate fire hazards;

Forbidden staff working in the high concentration of ozone space, necessary protective measures must be applied when it must go inside.

## **6. Warranty and Maintenance**

### **Warranty terms:**

Thank you again for choosing STARK products. To ensure you enjoy the perfect after-sale service from STARK, please read through this manual carefully after receiving the product, and keep it properly.

All products (not including consumable material, accessories) from STARK are warranted for one year and lifetime maintenance from the date of purchasing.

The following occasions are excluded from the warranty, and STARK may charge for the repairing materials.

Damage due to natural disaster or other majeure reasons;

Product damage by human during transportation;

Product damages due to unauthorized operation unless instructed by STARK or authorized distributor;

Product damages due to high humidity working environment or flooded by water;

Fail to provide proof of purchase or warranty card.

If on-site service is required, customer will be required to pay for the cost of traveling, and STARK or distributor can decide to come or not according to the distance.

***In the case of sterilization standard is not met due to improper operation or malfunction of the product, STARK does not take any responsibility.***

**Maintenance**

Fan filtering net cleaning/replacement: the dust net needs regular cleaning due to accumulate dust from the air (refer to the maintenance cycle table below). Turn off the power before cleaning, and take off the cover of the fan. Then take out the stainless-steel fan filtering net, clean it with clean water, and do not re-assemble it until it is dry.

High voltage parts water removal: during humid season, there is moisture on connecting cable of the transformer (the high voltage unit), transformer, and the connecting cables of the ozone module. Dry it with cloth and hair dryer. Otherwise, it may lead to damage of the equipment.

Ozone module inner chamber, discharge tube cleaning/ replacement: If inner chamber and electrode get dirty, it will lower the ozone production and concentration. Hence, they need to be cleaned regularly.

**Maintenance cycle table**

| Item  | Content          | Circle |           |          |          |            | Remark  |
|---|------------------|--------|-----------|----------|----------|------------|---|
|   |                  | month  | Half year | One year | Two year | Three year |   |
| Fan filter net                                | Clean<br>replace | ☆      |           | ●        |          |            | Cycling clean   |
| Dry moisture on high voltage parts            | Clean            | ☆      |           |          |          |            | Maintain during humid season                          |
| Inner side of internal and external electrode | Clean            |        |           | ☆        |          |            | Regular clean when used in beverage and food industry |
| Internal electrode                            | Replace          |        |           |          | ●        |            | Replace if high demanded                              |
| External electrode                            | Replace          |        |           |          |          | ●          | Replace if high demanded                              |

Note:

☆ : means inspection, adjust or clean; ● : means replacement

The above table is the suggested maintenance/ replacement cycle from manufacturer and customer can also conduct the maintenance/replacement according the actual operation environment and intensity of work

All maintenance/replacement can only be conducted when the power is off and pressure release,

ensuring the safety of the operation personnel.

#### 5.4 Trouble analysis and inspection

| Number | Problem                    | Analysis  | Inspection   |
|--------|----------------------------|---|--|
| 1      | No power                   | 1、 Power plug loose<br>2. No power from power socket<br>3. Fuse burn                        | 1、 tighten plug<br>2、 input right voltage<br>3、 replace fuse   |
| 2      | No flow from ozone outlet  | 1.Gas source is<br>2.not connected<br>3.Internal piping leakage<br>4.Internal piping folded | 1.re-connect gas source<br>2.reconnect the piping<br>3.Check if there is leakage in the connectors, and tighten it if any is found |
| 3      | Water store inside machine | 1、 backwater into machine<br>2、 High humidity   | 1、 dry inner machine<br>2、 Adding air dryer  |
| 4      | Equipment                  | 1. Over temperature/heat<br>2. Over load  | 1. Change cooling fan for pcb or install air conditioner<br>2. Low down the load   |

#### Note:

If the problem still exists after the above inspection, please contact our company or local distributor. All maintenance/replacement can only be conducted when the power is off and pressure released, ensuring the safety of the operation personnel.

#### Warranty Card

|                  |  |                       |  |
|------------------|--|-----------------------|--|
| Purchaser        |  | Purchase Date         |  |
| Contact Person   |  | Telephone & Email     |  |
| Address          |  | Post code             |  |
| Product Name     |  | Series Number         |  |
| Client Signature |  | Distributor Signature |  |

Please fill in the table and send the card to our company. After receiving this form, we will confirm to you and the warranty is valid.