



# BFN-HFG9 IONIZING AIR GUN MANUAL

BFN-HFG9 IONIZING AIR GUN, is a hand static control device, safe and friendly handling, used to eliminate the dusts and charges in a certain area. Applied in clean area like precision electronic production, electronic device assembly site, biological & pharmacy manufacture area.

**▲ Notice:** Carefully read this manual before equipping and using

## Safety

- Unsuitable to use this ionizing air gun under the flammable and explodable environment
- Keep out the humidity, causticity, flammable and dirty surroundings, no water allow enter the gun body
- The pressed air must be clean and dry
- Cut the power supply before you do cleaning and maintaining, if clean the air gun with alcohol or other solvent, have to wait until they fully dry than to connect the power and use
- Not to open and repair this high voltage device by yourself

## Features & Advantages

- Modern industrial design, ergonomical thought-out, friendly handling, bring you high efficiency;
- In-build piezoelectric transducer, no high voltage wire reveal, insure the safety use;
- Perfect decay time and balance, also have failure indicator;
- Special tungsten alloy ion pin, long lasting and abrasion resisting, easy to clean;
- Aviation power plug for power supply insure good connection;
- Convenient optional high effective filter allow to be use in clean circumstance

## Application

Clean area like precision electronic production, electronic device assembly site, biological & pharmacy manufacture area.

## Specification

- Power supply: DC24V/500mA (AC input: 220V/50Hz, 110V/60HZ alternatively)
- Pressure of air:  $\leq 0.6\text{MPa}$
- Windpipe connector spec: Diameter  $\phi 6\text{ mm}$
- Available Range: 100mm~800mm
- Balance:  $< \pm 15\text{V}$
- Decay Time:  $\leq 1.0\text{S}$   
Test condition: 25°C, rH55%, 30cm to wind outlet, according to EOS/ESD S3.1-2006
- Ozone concentration: 0.002PPM
- Operating condition: Temperature 0~50°C, rH20%~80% (without frost)
- Colour: Light grey
- Dimension: W127mm × 198mm × 28mm
- Cable length: 2M
- Material: ABS Fireproofing
- Weight: 250g ± 5g (Gun body)

## Packing list

- |                               |       |
|-------------------------------|-------|
| ■ BFN-HFG9 IONIZING AIR GUN   | 1 set |
| ■ BFN-HFG9 power supply       | 1 set |
| ■ High effect filter (option) | 1 set |

■ Manual	1 set
■ Factory proof test	1 set
■ Warranty Cord	1 copy

## Configuration

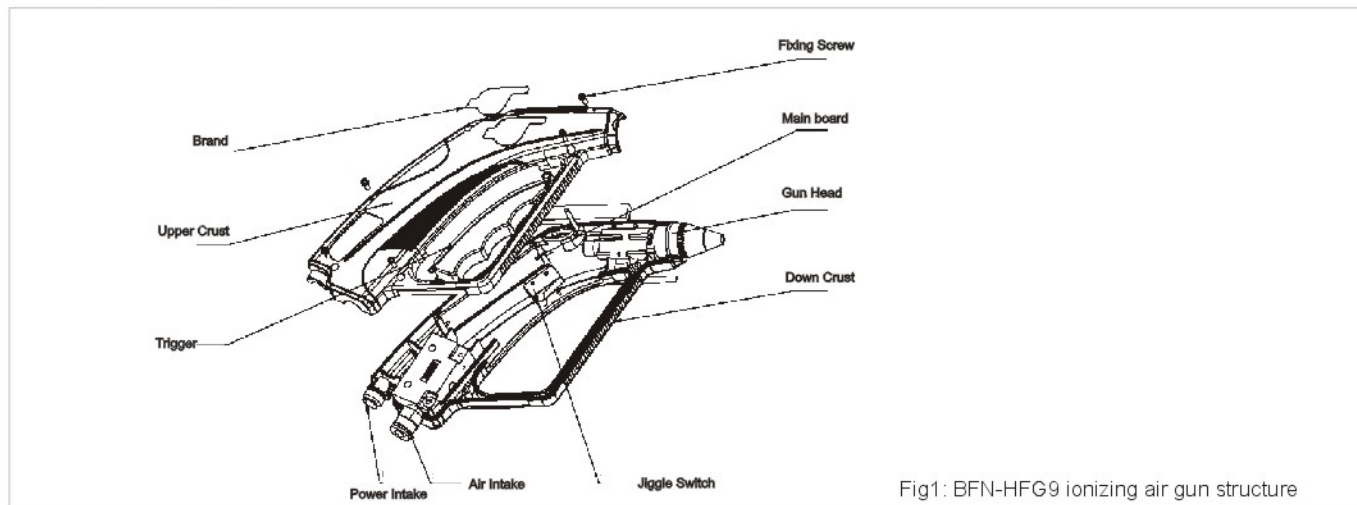


Fig1: BFN-HFG9 ionizing air gun structure

## Equipping and using area

When use, make the air current of BFN-HFG9 lay over the position that need neutralize the charges or spray the air current at the area that need neutralize the charges, let ionised air fully cover the area to be protected.

The air strength of BFN-HFG9 can be adjusted by the air gun trigger, pulling the trigger more and get more ionized air. The user can adjust the air strength by hand or by additional adjust valve.

The pressed air for BFN-HFG9 must less than 0.6Mpa, exceed this could reduce the efficiency of BFN-HFG9, or damage it.

Decay time relate to the strength of ionised air current, the more the distance to the air outlet, the long the decay time. Suggested distance of BFN-HFG9 using is 100mm~800mm..

Air gun is not continues operating device, suggest not to use it continuously.

### ⚠ Caution:

- Before use, make sure the pressure of pressed air less than 0.6Mpa, exceed this could reduce the efficiency of BFN-HFG9, or damage it;
- If the red alarm LED lights up, stop use the air gun, check it to know if it work properly, better to send it back to factory;
- Aviation power plug must insert and pull out without electricity, or may cause the device failure;
- Keep out the humidity, causticity, flammable and dirty surroundings, no water allow enter the gun body;
- The pressed air for BFN-HFG9 must be clean and dry .

## Operation direction

### ■ Use

Make sure the power supply of BFN-HFG9 is power off, insert the power plug to BFN-HFG9 power jack, then connect the pressed air windpipe, point the air gun to the air to be protected, pull the trigger, the green LED (power) of the air gun lights up, ionized air come out, adjust the trigger to control the air strength, now the air gun can be use.

**⚠ Caution:** Before use, make sure the pressure of pressed air less than 0.6Mpa, exceed this could reduce the efficiency of BFN-HFG9, or damage it. If the red alarm LED lights up, stop use it. nform the maintenance engineer to clean the air gun head.

### ■ High effective filter connection

BFN-HFG9 air gun can add high effective filter to double insure the clean of the ionized air meet the clean room request.

The 2 ends of high effective filter is quick windpipe connector, when applying, connect one end to pressed air,



another end connect to BFN-HFG9 air juncture.

**⚠ Caution:** High effective filter have single way air through request, the connection of the air-in and air-out must follow the direction.

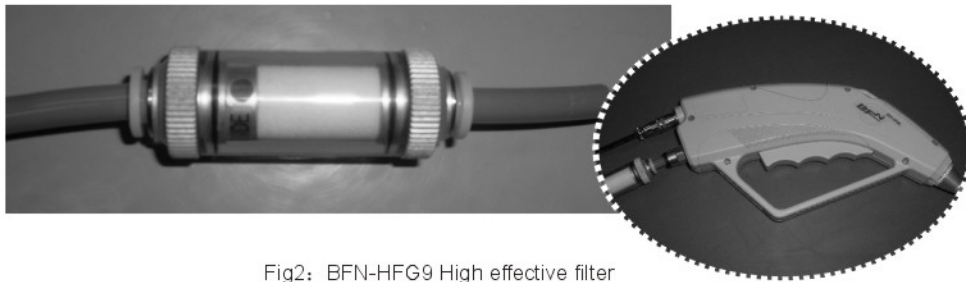


Fig2: BFN-HFG9 High effective filter

### ■ Daily maintenance

BFN-HFG9 doesn't release the particle itself, suitable to use in any class clean room. Some time the particle could accrete on the air gun body in some circumstance. The water and oil in the pressed air also could pollute the air gun from inside, therefore, it's very important to clean the air gun, make it work properly.

When you clean and maintain BFN-HFG9, disconnect the power supply and windpipe connector. Clockwise turn the air gun head out, reveal the ion pin, clean it with sticker or wiper fully, if clean the air gun with alcohol or other solvent, have to wait until they fully dry than to connect the power and use (normally 24 hours later) Otherwise could injure the individual or damage the air gun. Be careful when you dismantle the air gun head, the ion pin is sharp could be hurt.

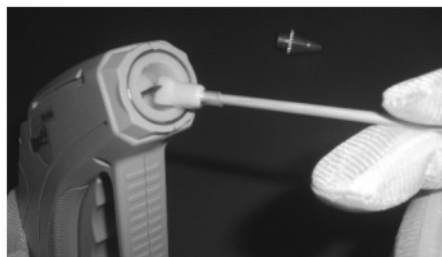


Fig3: BFN-HFG9 Head dismantling

Can clean with sticker or wiper, or use cotton sticker applying 35% industrial alcohol to clean the ion pin and air gun body. Suggest clean it once per week, or in accordance with your work condition.

**⚠ Caution:** When clean and maintain BFN-HFG9, must disconnect the power supply. If clean the air gun (even outside) with alcohol or other solvent, have to wait until they fully dry than to connect the power and use. Otherwise could injure the individual or damage the air gun. Be careful when you dismantle the air gun head, the ion pin is sharp could be hurt.

### Calibration

BFN-HFG9 ionizing air gun is reliable, sometimes, the parameter could change due to the AC voltage undulation and temperature, humidity of environment.

Must use charge plate monitor to do the decay time and balance test in lab.

Suggest have once calibration per year.

The operation manual only for BFN-HFG9 users, it includes the components, operation and some concerning Information, some upgrading property with continuing stability, slightly difference will be allowed with operation and manual.



Suppliers Information



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