



# Operating Manual

**Model 954v2**  
**Ionising Airgun**



# Contents

Introduction	3
Unpacking and Inspection	4
General Notes On Operation	4
Installation	5
Compressed Air	5
Electrical connection	5
Performance	5
Technical Specification	6
Maintenance	7
Fault Finding	9
Repairs and Warranty	11
CE Approval	11
Health and Safety	11

Products shown in this document may be covered by one or more patents, patents applied for and/or registered designs and/or trade marks. For further information please refer to our Head Office or visit [www.meech.com](http://www.meech.com).



# Introduction



The Meech 954v2 Ionising Air Gun is an upgraded model, that provides exceptional performance when neutralising static charges and removing dust and contamination on a wide range of industrial processes. The 954v2 has many improvements over its predecessors due to innovations in engineering. These include the use of additive manufacturing that make the 954v2 60% faster and 40% lighter than the previous version.



# Installation

## Compressed Air

The compressed air supply must be clean and dry. Meech recommend the use of a 5 micron coalescing filter. Water or oil in the air will damage this product. The Meech guarantee does not cover this. The use of a pressure regulator will allow the pressure to the gun to be set to the correct level for the application.

A typical operating pressure for the 954v2 is 3.5 bar / 50 psi. This gives a good balance of ionisation and cleaning performance. However, depending on the application, higher or lower pressures may be required. Air Connection to the 954v2 is via a standard 6mm push-fit fitting.

## Electrical connection

Electrical connection is to a Meech Model 904 7kV power supply. Please refer to the 904 Power Supply operating instructions to ensure that your ionising gun is correctly and safely connected to its power supply. A copy of this can be downloaded from [www.meech.com](http://www.meech.com)

## Performance

5000V to 500V decay tests were carried out at 150mm distance in accordance with ESD Association standard S3.1

Pressure PSI	Noise dBA	Decay +5000 to <100V
30	74	0.8
40	76	0.4
50	79	0.4
60	80	0.3
70	80	0.3
80	81	0.3

# Technical Specification

## Model 954v2

Max pressure	:	6.8 Bar/100PSI
Recommended pressure	:	3.4 Bar/ 50PSI
Operating voltage	:	7kV from Meech 904 power unit
Max Temperature	:	85°C.
Construction	:	Gun handles – cast aluminium Nozzle body - Nylon
Weight	:	300 g approx
Cable	:	3 metres of H.T. cable supplied as standard, longer lengths can be specified when ordered.



# Maintenance

Ionisers require periodic cleaning. During normal operation, dirt may build-up on the emitter pin. The rate of this contamination will depend on the cleanliness of the compressed air supply. The contamination will cause a reduction in performance. Typically, weekly inspection/cleaning is sufficient.

The emitter and the inside of the nozzles can usually be cleaned using a cotton bud. If the emitter has become very dirty, it may need to be removed before cleaning. To remove the emitter, insert a 3mm nut spinner into the end of the nozzle and unscrew it counter-clockwise.

The nut spinner Meech uses is a BAHCO (BE-7803)



Once removed, the pin can be cleaned. A toothbrush is deal for this.



The exterior of the nozzle can be wiped down with a damp cloth.



Should you have any additional questions regarding the maintenance of Meech equipment please contact Meech International directly or your local Meech distributor.

# Fault Finding

Tests must be completed by a qualified electrical engineer.  
If in doubt contact Meech head office or your local distributor.

**CAUTION:** Whilst no danger to personnel exists, it is essential that any high voltage ionising equipment, make no contact with water or water based fluids.

Should such an event occur, disconnect immediately and return equipment to the manufacture for water damage assessment.

The 954v2 ionising air gun forms parts of a system, comprising 954v2 ionising air gun and a Model 904 power supply.



If after following the cleaning instruction, the system is believed not to be working effectively, the high voltage electrical supply should be checked.

The 904 power supply features a green neon indicator that will be illuminated if the high voltage output is operation correctly.



If the green neon indicator is illuminated and the nozzle is clean, the system will be working effectively.

If the green neon indicator is not illuminated, consult the operating manual for the 904 for further troubleshooting information.

For further help consult your local Meech distributor, or contact one of our worldwide offices. Contact details are available on the Meech website: [www.meech.com](http://www.meech.com)

# Repairs And Warranty

The 954v2 is warranted by Meech Static Eliminators Ltd to the original purchaser against defects in material and workmanship for one year after purchase. Should any malfunction occur, please return the bar directly to Meech Static Eliminators or your local distributor. All products returned to the factory MUST be accompanied by a return authorisation number and must be shipped prepaid. For prompt service, ship the unit to the factory with the return authorisation number shown clearly on the label. Be sure it is well packed in a sturdy carton with shock absorbing material.

Include a note stating the nature of the problem as specifically as possible, and also include instructions for returning the bar to you. We will pay one-way return surface shipping costs on any repairs covered under the warranty.

Field repairs should not be undertaken during the warranty period. Repair attempts by unqualified personnel will invalidate the warranty.

# CE Approval

An EC declaration of conformity for this product exists in respect of the Low Voltage Directive :72/23/EEC ("LVD") & Electromagnetic Compatibility Directive : 89/336/EEC ("EMCD")



# Health And Safety

Ozone: Considerably below international standard of 0.1ppm

Dead End Pressure: Meets 30 psi safety pressure at maximum usage pressure of 100psi







#### **Meech International**

2 Network Point  
Range Road, Witney  
OX29 0YN, UK

Tel: +44 (0)1993 706700  
Fax: +44 (0)1993 776977  
email: sales@meech.com

#### **Meech Static Eliminators (Shanghai) Co. Ltd**

7G, 7F, LP Tower  
#25 Xiangfeng Road  
201103 Shanghai  
China

Tel: +86 400 820 0102  
Fax: +86 21 6405 7736  
email: china@meech.com

#### **Meech Static Eliminators USA Inc**

2915 Newpark Drive  
Norton, OH 44203  
USA

Tel: +1 330 564 2000 / 1 800 232 4210  
Fax: +1 330 564 2005  
email: info@meech.com

#### **Meech Shavotech**

29/2, Kharadi  
Off Pune-Nagar Road  
On Old Kharadi Mundhwa Road  
Pune : 411014 , Maharashtra  
India

Tel: +91 (0)703 093 8211 / +91 (0)741 000 4817  
Fax: +91 (080) 28395963  
email: india@meech.com

#### **Meech Elektrostatik SA**

Kaiserbaracke 166  
B-4780 St.Vith  
Belgium

Tel.: +49 (0)6555 3733 399  
+32 (0)80 670 204  
Fax: +32 (0)80 862 821  
email: mesa@meech.com

#### **Meech International (Singapore) Pte. Ltd.**

7 Temasek Boulevard  
12 - 07 Suntec Tower One  
Singapore  
Singapore  
038987

Tel: +65 65918859  
email: singapore@meech.com

#### **Meech CE**

Gábor László utca 2  
Budapest 1041  
Hungary

Tel: +36 1 7977039  
+36 30 2803334  
email: ce@meech.com