



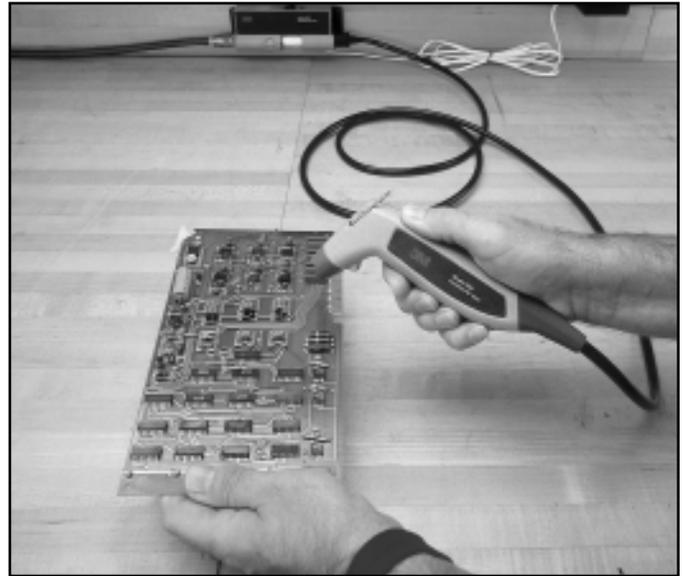
980/980E Ionized Air Gun

Data Sheet

The 3M 980 Ionized Air Gun is an excellent tool for blowing particulate contamination off of any surface, even from the most static-sensitive products. It releases a constantly balanced stream of compressed ionized air or gas that neutralizes static charge that attracts particulate to a surface. A charge of 1000 volts is reduced to less than 100 volts in less than a second. The loose particles can then be easily blown away.

Self-balancing, maintenance-free

The unique ionization system used in the Model 980 is completely self-balancing; no adjustment or calibration is needed. It maintains balance to within +/- 30V of 0V (at a distance of 6 inches). The unit is also virtually maintenance-free; all that is required is occasional cleaning of the housing and the emitter points.



Unique ergonomic design

The Model 980 was designed to be the most lightweight, comfortable, and easy-to-use ionizing air gun available. All components of the system – the hand unit and power supply, air hose and power line, and the mounting console – are extremely lightweight. Unlike the heavy power supplies of most systems that must be tied to the hand unit by means of a bulky high-voltage cable, the compact power supply of the Model 980 is actually molded into the housing of the air gun. The power to the hand unit is supplied via thin, low-voltage wire that runs from the console inside the flexible polyurethane air hose. Thus, the new Model 980 has only a single flexible, lightweight hose between the base and the gun, making it much easier to handle. The total weight of the hand unit and the 7' long air/power hose is only 12 ounces. The shape of the gun fits the hand comfortably and does not cause the operator the wrist hyperextension discomfort that is common with other air gun designs. The nozzle on the tip of the gun is specially designed to provide efficient, uniform delivery of ionized air while minimizing audible noise and air or gas usage.

Safe, low-voltage power

The Model 980 uses safe, efficient, low-voltage power. Each unit includes a transformer that converts line power from a standard outlet (120V for the 980, 230V for the 980E) to 24 volts. This low voltage is not only safer, but also allows the use of much lighter wiring. Standard household telephone wire with familiar RJ-11 snap-in fittings is the only connection required between the plug-in wall transformer and the mounting console. The system also has an extremely low level of electromagnetic emissions, minimizing any chance of interference with other electronic equipment or operations. Model 980/980E units meet all existing industry requirements and carry the UL, C-UL, and CE marks, as appropriate.

Durable Construction

The hand unit and console are molded of rugged, dissipative polycarbonate for exceptional impact resistance. The static-dissipative properties make them safe to use around sensitive electronic components. The air hose is made of tough, flexible polyurethane and is also static-dissipative.

Convenient Mounting Console

The mounting console contains connections for the air lines and power lines and houses the filter attached to the air line. It weighs just 11.5 ounces, measures 8.5”L x 3.0”W x 1.6”H (21.6 x 7.6 x 4.1 cm), and is easily mounted in any convenient location at the workstation. Hardware is included for either permanent (using a metal backplate) or semi-permanent (using hook and loop type strips) mounting.

Replacement/Optional Parts

The air line filter and the emitter points at the tip of the hand unit are the only replaceable parts of the Model 980. When necessary, each can be replaced in just seconds without any special tools. A foot switch for “hands-free” operation is available as an option.

980 Ionized Air Gun Typical Properties

Source power	120V AC (980), 230V AC (980E)
Input power	24V AC, < 10W (both models)
Ion output	Steady state DC
Performance (per ANSI/ESD-S3.1)	
Discharge time (1000V to 100V)	< 0.5 sec @ 6 in, 30 psi
Ion balance	0 +/- 30V
Audible noise	73 dBA @ 1 m, 30 psi
Ozone	< 0.005 ppm (24 hr accumulation)
Conducted EMI	29 dB (mV, 100 Khz to 1.1MHz)
Console	
Construction	Dissipative rigid polycarbonate
Size	8.5L x 3.0W x 1.6H in (21.6 x 7.6 x 4.1 cm)
Weight	11.5 ounces (326 g)
Gas input	20-65 psi, clean dry air or nitrogen
Air fittings	Standard 1/4 in industrial
Power connections	RJ-11 telephone snap-in connectors
Hand Unit	
Construction	Dissipative rigid polycarbonate
Size	8.0L x 3.0W x 1.0D in (20.3 x 7.6 x 2.5 cm)
Weight	12.0 oz (341 g) with 7 ft air hose
Emitter points	Tungsten alloy
Air Hose	
Construction	Dissipative flexible polyurethane
Size	7 ft long, 0.38" OD
Filter efficiency	99.9% for 0.1 micron particle size

Important Notice

Limited Warranty – 3M expressly warrants that for a period of one (1) year from the date of purchase, 3M 980/980E Ionized Air Guns will be free of defects in materials (parts) and workmanship (labor). If 3M receives notice of such a defect during the warranty period, 3M will replace at its expense such product that it determines to be defective. Any defective product must be returned to 3M (postage prepaid) with proof of purchase date.

Warranty Exclusion – THE FOREGOING EXPRESS WARRANTY IS MADE IN LIEU OF ALL OTHER PRODUCT WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, WHICH ARE SPECIFICALLY DISCLAIMED. The express warranty will not apply to defects or damage due to accidents, neglect, misuse, alterations, operator error, or failure to properly maintain, clean, or repair products.

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Electrical Specialties Division

6801 River Place Blvd.
Austin, TX 78726-9000
800/328-1368



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