

# 3M™ Mini Air Ionizer 960

## User's Guide



# Table of Contents

Section	Page
Safety Information .....	3
1. Description.....	4
2. Performance .....	4
3. Power Requirements.....	4
4. Installation.....	4
5. Operation.....	5
6. Maintenance .....	5
7. Specifications .....	6
8. Package Contents .....	6
Customer and Technical Service .....	7

## INTENDED USE

The 3M™ Mini Air Ionizer 960 is designed to supply and deliver a stream of ionized air. Its intended use is to neutralize excess static electricity buildup on electronic devices and work surfaces. It is meant to function as a standalone device. The Mini Air Ionizer 960 is not intended to supplant proper grounding of personnel as the preferred method of controlling static buildup and discharge.



### CAUTIONARY STATEMENTS

- The Mini Air Ionizer 960 is designed for use with input electrical power of AC 24V, and should be supplied with power by the 3M™ Transformer 960/980X. Usage of this unit with the incorrect electrical voltage could result in diminished performance and an unsafe operating condition. If an alternate power source is desired, please contact 3M for further information.
- To prevent the risk of fire, do not connect more than 4 units together.
- Not for use with telecommunications networks.
- HIGH VOLTAGE present inside unit. The Mini Air Ionizer 960 has no user-serviceable parts. Do not remove the grilles or disassemble the unit in any way. If service other than that recommended in this manual is needed, please contact 3M for information. UNAUTHORIZED SERVICE WILL VOID THE WARRANTY.
- The Mini Air Ionizer 960 is NOT designed for usage in hazardous environments where the possibility of explosion or fire exists.
- This equipment should be inspected frequently and collected dirt removed from it regularly to prevent excessive accumulation that may result in flashover or a risk of fire. During cleaning of the Mini Air Ionizer 960 case or ionizing electrodes, disconnect the unit from electrical power.

To reduce the risks associated with environmental contamination, which if not avoided could result in environmental contamination related injury:

- Dispose of the electrical instrument and accessories in accordance with local, state, and federal regulations.

### cULus Statement

Meets cULus requirements.

## 1.0 Description

The 3M™ Mini Air Ionizer 960 is a self-contained ionizing air blower designed to remove static charges from non-conductive objects. The proprietary circuitry contained in the blower generates balanced levels of positive and negative ions, and maintains correct balance despite variations in line voltage, fan speed, and emitter point condition.

## 2.0 Performance

The Mini Air Ionizer 960 reduces a static charge of 1000V to 100V in less than 6 seconds (the discharge time) at a distance of 1 foot. Testing is performed in accordance with the ESD Association ionization standard ANSI/ESD S3.1. Ion balance variation is within 20 volts of zero at a distance of 1 foot.

## 3.0 Power Requirements

The Mini Air Ionizer 960 requires AC 24V power, supplied through a RJ-11 power socket located on the back of the unit. The 3M™ Transformer 960/980X, available as a separate item, is used to supply power to the Mini Air Ionizer 960 via a phone cable with an RJ-11 connector. It is possible to connect four (4) Mini Air Ionizer 960's together in series and power them off of one (1) Transformer 960/980X.

To reduce the risk of electric shock, the Transformer 960/980X uses a grounding plug that has a third (grounding) pin. This plug will only fit into a grounding-type power outlet. If the plug does not fit into the outlet, contact qualified personnel to install the proper outlet. Do not alter the plug in any way. If an alternate power source is used, please make sure that it conforms to the power input requirements as listed in the Specifications section. For further questions concerning the power-input requirements, please feel free to contact 3M Technical Service.

## 4.0 Installation

The Mini Air Ionizer 960 mounts easily in a variety of positions using the provided tilting bracket/stand. Place the unit on the work surface and point it at the area or object to be neutralized. Alternatively, the mounting bracket may be attached directly to or above the workstation, or on another supporting structure.

Please note that placement of the 3M™ Mini Air Ionizer 960 is important in controlling its effectiveness. Its distance from the target object will affect the ionizer's performance. As distance increases, the discharge time will increase.

Determine the location of an AC 24V power supply (with a power cable using an RJ-11 plug) and insert into the RJ-11 socket on the back of the Mini Air Ionizer 960. Since the Mini Air Ionizer 960 does not have a power switch, supplying power to the unit automatically turns it on.

## 5.0 Operation

Supplying power to the Mini Air Ionizer 960 through the power socket in the back of the unit will turn it on. A green monitor light is also illuminated on the front of the unit, which indicates that the ionizer is on, and that power is being applied to the ionizing electrodes.

## 6.0 Maintenance

Occasional cleaning of the case and of the ionizing electrodes are the only routine maintenance procedures required.

Cleaning the case: wipe the case with a soft cloth moistened with water. If a stronger cleaning solution is required, mild soap with water may be used. The use of any other cleaning solutions is not recommended.

Cleaning the ionizing electrodes: when the ionizing electrodes become dirty, the internal circuitry of the ionizer will be automatically adjusted to emit an equal amount of positive and negative ions. Particulates on the electrode may, however, inhibit ionization to a limited degree. The emitter points are located between the fan blades and the rear grille. A jet of clean, compressed air can be used to remove dirt on emitter points. If a more rigorous cleaning method is needed to remove particulate, clean the points with a cotton swab. Access to the points is available through the rear grille. Be careful not to damage the points during cleaning.

## 7.0 Specifications

### 3M™ Mini Air Ionizer 960

Item	Typical Property
Input Voltage	24VAC
Power	5.5 watts
Power Input Connection	RJ-11 socket
Size	4.5" (H) x 3.3" (W) x 2.0" (D) (including bracket)
Weight	0.75 lb.
*Offset Balance @ 1ft.	+ 20V
*On Center Decay @ 1ft.	<7 seconds
Air Flow Velocity (@ 1 ft. in front of grille)	250 ft./min.
Certifications	UL, C-UL, CE

*\*Testing was performed with a charged plate monitor in accordance with ionization standard ANSI/ESD 53.1 - 1991.*

### 3M™ Transformer 960/980X

Item	Typical Property
Input	120VAC, 50/60 Hz, 270 mA
Output	24VAC, 1.0 A through RJ-11 socket connector
Dimensions	3.5" (H) x 2.6" (W) x 2.3" (D) (8.9 (H) x 6.6 (W) x 5.8 (D) cm)
Weight	2.2 lbs.
Certifications	UL

*Note: One transformer will supply power for up to four (4) Mini Air Ionizers.  
Transformer is not included with purchase of Mini Air Ionizer 960.*

## 8.0 Package Contents

1 ea. - 3M™ Mini Air Ionizer 960

1 ea. - 3ft. RJ-11 Cable

3M™ Wall Transformer 960/980X is not included (Sold separately)

## Customer and Technical Service

### Within the U.S.:

Customer service and technical support can be obtained by calling the 3M Electronics Materials Solutions Division Customer Service: 866-722-3736

### Outside of the U.S.:

For customer service and technical support, please contact your local representative of the 3M Electronics Materials Solutions Division.

3M is a trademark of 3M Company.

UL Listed to U.S. and Canadian Safety Standards.

Mark of Conformity to European Directives (Conformité Européene).

## Important Notice

All statements, technical information, and recommendations related to 3M's products are based on information believed to be reliable, but the accuracy or completeness is not guaranteed. Before using this product, you must evaluate it and determine if it is suitable for your intended application. You assume all risks and liability associated with such use. Any statements related to the product which are not contained in 3M's current publications, or any contrary statements contained on your purchase order shall have no force or effect unless expressly agreed upon, in writing, by an authorized officer of 3M.

## Warranty; Limited Remedy; Limited Liability.

This product will be free from defects in material and manufacture for one year from the time of purchase. **3M MAKES NO OTHER WARRANTIES INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.** If this product is defective within the warranty period stated above, your exclusive remedy shall be, at 3M's option, to replace or repair the 3M product or refund the purchase price of the 3M product. **Except where prohibited by law, 3M will not be liable for any indirect, special, incidental or consequential loss or damage arising from this 3M product, regardless of the legal theory asserted.**



## Electronics Materials Solutions Division Static Control Products

926 JR Industrial Drive  
Sanford, NC 27332-9733  
Toll-Free: 866-722-3736  
International: 919-718-0000  
Email: 3mstaticinfo@mmm.com  
www.3mstatic.com



Please recycle. Printed in USA.  
© 3M 2014. All rights reserved.  
78-9102-1496-0 JHA

# AMEYA360

## Components Supply Platform

Authorized Distribution Brand :



Website :

Welcome to visit [www.ameya360.com](http://www.ameya360.com)

Contact Us :

➤ Address :

401 Building No.5, JiuGe Business Center, Lane 2301, Yishan Rd  
Minhang District, Shanghai , China

➤ Sales :

Direct +86 (21) 6401-6692

Email [amall@ameya360.com](mailto:amall@ameya360.com)

QQ 800077892

Skype [ameyasales1](#) [ameyasales2](#)

➤ Customer Service :

Email [service@ameya360.com](mailto:service@ameya360.com)

➤ Partnership :

Tel +86 (21) 64016692-8333

Email [mkt@ameya360.com](mailto:mkt@ameya360.com)