



**EcoQuest**  
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# **OWNERS MANUAL**

**EcoQuest**  
Electronic Air Purification Systems

## **MODEL MI-1500B**

- \* Pre-Installation
- \* Operation
- \* Maintenance
- \* Replacement Parts
- \* Warranty

Caution: Read manual carefully for proper procedures and operation.

# CONTENTS

OUTSTANDING FEATURES.....	2
MODEL SPECIFICATION.....	2
INSTALLATION.....	2
PRINCIPLES OF OPERATION.....	3
PLACING THE UNIT.....	3
ADJUST/SETTING THE UNIT CONTROLS.....	4
APPLICATIONS.....	5
MAINTENANCE AND TROUBLESHOOTING.....	5
REPLACEMENT PARTS.....	5
WARRANTY INFORMATION.....	5

# OUTSTANDING FEATURES

- Plug into 110 or 120 volt outlet
- Low electrical consumption
- No residual contamination
- No chemicals
- Very low maintenance
- Complete user control

## MODEL MI-1500B - SPECIFICATIONS

(Mass Ion Generation and Dispersion)

Features -- positive and negative ion level control steel chassis for industrial application.

Electrical --

- 120 volt 60 hz AC line operation **or**
- 220 volt 50/60 hz AC line operation
- Less than 150 watts power consumption
- 26 kv DC ion generator

Mechanical --

- 3000 CFM adjustable free air delivery fan.

Dimensions & Weight --

- 28" (height) x 26" (width) x 18" (depth)
- 55 lbs.

## INSTALLATION AND INSPECTION

- Remove unit from shipping carton
- Remove all protective materials
- Check for shipping damage or loose/broken parts
- Plug the unit into a 110 or 120 volt outlet and adjust control according to the application. (See: "Placement Of Unit" and "Adjust/Setting Unit Controls")

# PRINCIPLES OF OPERATION

Nature cleanses the air with lightning and rain. Lightning bolts produce positive and negative ions which cleanse the air naturally. Rain helps bring ions close to the earth's surface. They are then attracted to atmospheric contaminants and either removed from the air or attached to grounded objects.

The EcoQuest purification unit MI-1500B produces billions of negative ions which function in the following manner: Airborne particulate, contaminants, and pollution are electrically charged, precipitated together, and then adhere to a grounded surface or are made heavy enough to be influenced by gravity.

## PLACING THE UNIT

Elevate the unit as high as possible to insure complete purification. Some pollutants such as smoke rise and the unit, when elevated, can more effectively eliminate the pollutant.

The EcoQuest MI-1500B is most effective when placed in a position that allows the ions to be spread evenly and thoroughly mixed with the polluted air. Suggested location, listed in the order of preference:

1. In or near the air stream or current within the room that will best disperse the ions
2. Nearest the source of worst pollution
3. In the area most heavily used to achieve maximum benefit

# ADJUST/SETTING CONTROLS

## Ionizer Control --

The adjustment and setting of the ionizer control for the MI-1500B ranges from full positive to full negative and is determined by application. The more particulate or pollutant in the air, the higher the settings need to be. The MI-1500B is capable of creating a static charge on objects. Locate a setting where the pollutants or particulates are eliminated and still have a non-static situation.

## Fan Control --

The fan speed is adjustable for the MI-1500B

## Static Control --

Static is created by an electrical imbalance between positive and negative ions and can be biased positively or negatively. Establishment of the stronger polarity can be determined by a trails an error method; however, the majority of all static problems are positive in nature. This means that the best starting point for the ionizer setting is at the one o'clock position, which is a slightly negative position. If the static problem becomes worse, turn the control to the left in small increments until the problem has been resolved. If the static problems has been reduced, but not eliminated, turn the control to the right in small increments until the problem is resolved.

## Warning --

The MI-1500B can create a high level of static electricity in an unpolluted environment which may cause problems with static sensitive equipment, such as computers.

## Smoke, Dust, and Particulate Remove --

Airborne contaminates are best removed with the ionizer control set to the extreme right (full negative). Depending upon the nature and degree of the pollution, it may not be necessary to have the control at full power.

# MAINTENANCE

Ion Generator --

The ion generator is maintenance free. Periodically check the ion discharge needles for corrosion. Replace them if necessary.

Fan --

The fan requires no maintenance except on the rare occasion where it may be necessary to give it a gentle push the first time it is used. If the fan squeaks, a few drops of light weight oil may be needed on the fan shaft.

# TROUBLESHOOTING

1. Is the unit plugged in?
2. Are you sure the outlet is active?
3. Is the unit off/on switch activated?
4. Check the fuse.

See Warranty Card

Please record the serial number of your EcoQuest MI-1500B:

Serial # \_\_\_\_\_

# APPLICATIONS

- Smoke
- Agricultural Dust
- Airborne Bacteria
- Plastic Operations
  - Saw Dust
    - Dust
    - Bars
    - Bingo
- Animal Dander
- Feather Dust
- Printing Areas
- Paper Handling
- Many Others...

