ION-EDGE MODEL 400T SERIES

INSTALLATION & OPERATING INSTRUCTIONS

The Ion-Edge is a highly effective AC static neutralization system.
Please read the following instructions carefully to ensure correct installation, safe operation and peak performance.

MODEL 2000S/2002S POWER SUPPLY

The Model 2000S/2002S Power Supply is a highly reliable unit that supplies 6000 volts of AC current to the Ion-Edge bar.

ELECTRICAL REQUIREMENTS

A 6.5 foot grounded power cord is supplied with the power supply. The unit must be plugged into a grounded outlet or wired to a grounded control box.

Ratings:

Input Volts:	115VAC Standard (#2000S) or 220VAC optional (#2002S)	Cycles:	50/60
Output Volts:	6000VAC	Starting Load:	<0.5 amps
		Running Load:	<0.5 amps

MOUNTING THE POWER SUPPLY

The Power Supply can be mounted to any solid surface via the mounting tabs extending out from the bottom side of the unit or placing the unit in an enclosure. Keep in mind the positioning of the Ionizing bar when locating the Power Supply. A standard 6.5' power cable is supplied with the bar.

Once the unit has been mounted, switch the unit to the OFF position (the lighted rocker switch is located on the side of the unit near the cord end—rock the switch downward) and then route the power cord to the designated outlet. (The Power Supply can be wired directly to a machine switch so the unit is only running when the machine is running and off when it is not.) The Power Supply is now ready to receive the Ionizing bar.

Note: Always keep the Power Supply powered OFF when the system is not in use. Unplug or disconnect the power to the controller when the system is being serviced.

THE IONIZING BAR

The Ion-Edge bar is a one piece, lightweight unit. The in-line high voltage cable has a screw-in type connector enabling quick and easy hook-up to the power supply.

At each end of the bar are positioned an ⅜ stud and nuts that can be fastened to a mounting bracket or chain, not supplied. Longer bars will have mount studs and nuts positioned symmetrically in the middle of the bar.

POSITIONING THE BAR

The tip of the emitters should be directed straight at the static laden surface. Position tips ½" (minimum) to 7" (maximum) from surface. Optimum operating distance is 1". The bar should be positioned so that it spans the full width of the area or substrate that is to be neutralized. This will ensure maximum ionization coverage and static neutralization.

For best performance, it is important that there are no non-targeted electrically conductive surfaces in close proximity of the tips of the emitters. It is best if a minimal free air space of 6" (inch) is maintained in front of and alongside the emitters and the surface that is to be neutralized. Please note that this is for **best** performance. The unit will perform and no harm will occur to the system if the 6" buffer can not be maintained due to tight space limitations.

Once the best location for the bar has been determined and all the proper mounting hardware has been installed, the bar is ready for installation. Make sure the bar is mounted securely via the studs.

FOR AIR BAR INSTALLATION

The Air Bar may be placed up to three feet or more from the static laden material. Note that the Air Bar extends the neutralizing field and diffuses it over a wider area, however, the length of time for discharging material is directly proportionate to the distance from the static control bar to the material.

The only additional installation needed for the TAKK Air Bar is to connect the air tubes of the bar to an air supply using standard air fittings. The bar is fitted with a ¼" quick-disconnect coupler. Use of an air filter is recommended. Using an air flow regulator, increase air pressure to a point at which static caused problems are eliminated. Normally a gentle air flow is sufficient.

POWER CABLE CONNECTION

Before connecting the bar to the Power Supply switch the rocker switch to the OFF position or disconnect the electrical power to the unit. Screw the high voltage connector into either jack of the Power Supply. Each jack has the same output voltage. Where multiple bars are installed, two bars can be plugged directly into the Power Supply. Note: If any excess cable has to be coiled do not coil any tighter than a 6" diameter coil.

Doing so may cause internal damage to the cable and cable failure. Connect the ground wire to the ground stud located on the power supply.

CAUTION: If the cable is connected or disconnected to the Power Supply when the power is ON there is the risk of personal shock and/or damage to the Power Supply.

POWER-UP

Once all connections and final installations have been made the system is ready for use. Turn the switch ON (rock upward toward the enclosure lid). In the ON position the switch will glow red.

MAINTENANCE

With some simple preventive maintenance procedures the Ion Edge Ionization System will give years of service.

Special care should be taken with the Power Supply and bar as with any sensitive electronic device. Do not drop or shake the Power Supply or Bar. Avoid mounting the Power Supply or Bar to surfaces that would have excessive vibration or rapid motion. Always handle the bar by the body of the bar and do not tug or jerk on the power cable.

Keep the Power Supply and Bar dry and clean. Each power supply is supplied with two jack covers and these should remain in place when the jack is not being used. Avoid exposing the system to moisture or solvents of any kind. Dust and other contaminants can be removed by using a soft cloth by itself or along with a gentle, general purpose cleaner.

Remove dust and other contaminants from the Bar taking special care around the emitter points. If need be, a cleaner for use with ABS/PVC and aluminum can be used sparingly. If cleaners are used make sure the Power Supply and Ionizing Bar are dry before operating them.

SERVICE

In the event of equipment damage or failure, call the factory for service or repair, 800-792-8255.

CAUTION: There are no field serviceable parts on the system. Outside of cleaning, do not attempt to service or repair the system. Personal shock and/or damage to the system could occur. Any attempted field service or repair will void the warranty.

WARRANTY

All TAKK products are engineered and designed with optimum serviceability in mind. Quality of materials and labor are foremost in the manufacture of our products. In the event that there is any premature failure of our system, the Ion-Edge is guaranteed against any factory defects in materials and/or workmanship for a full **24 months** from the date of purchase. Any equipment found to be defective by a qualified TAKK service technician will be repaired or replaced at TAKK's cost. Any special handling or shipping the customer may request is not covered under this warranty. All warranties are void if the equipment has been damaged due to negligence, misuse, or any other event outside of the control of the manufacturer. Call the factory before returning any equipment under warranty, 800-792-8255.

HEALTH AND SAFETY

The Ion-Edge has been engineered for safe and user friendly operation. Please operate this system safely by observing the following:

The Model 2000S/2002S Power Supply is a High Voltage source. **Do not** attempt to dismantle or tamper with the unit. Personal electrical shock and/or damage to the unit may occur.

The Power Supply **must not** be operated under any circumstance with the housing lid removed or when the housing is damaged in anyway.

Do not operate the Power Supply without the unit being electrically grounded. A grounded power cord has been provided with the unit and should be used at all times with a grounded outlet or control box.

ALWAYS turn the Power Supply **OFF** or disconnect power to the unit before unplugging the bar or cleaning the system. Not doing so could result in personal electrical shock and/or damage to the unit.

The emitters on the Ion-Edge bar are resistively coupled with 100Mohm resistance in series with the high voltage source that makes the emitters shockless when touched individually. **Do not** allow personal contact with more than one point at a time. In general, contact with emitters should be avoided.

By design, the Ion-Edge emitters are very sharp. Take care when handling the bar.

It is recommended that all electrically conductive surfaces in the Ion-Edge's ion field be earth grounded to prevent those surfaces from becoming electrically charged by the AC source.

A byproduct of the Ion-Edge bar is ozone. The ozone emission from the bar is less than 0.1ppm and well below OSHA standards providing safe working conditions around the system.