

EP0402013 Overhead – Ionizer with 5 fans

Use of the device

The ESD-Protect Overhead Ionizers Q133 is used to neutralize electrostatic fields and the charge in the room and over production lines, belt conveyors or work tables.



WARNING

- If the equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired,
- * Do not let the water touch the product, it may cause electric shock or fire due to malfunction,
- When you check or maintain the product, make it sure you turn off the power, it may cause electric shock or fire due to malfunction.
- Secure the product firmly when you want to secure it. There is a possibility of accident due to fall-over or malfunction, etc.
- Do not use the product at the place where dangerous material such as inflammable or ignitable material
 exists, This product is not the product of anti-explosive type,
- This device is made only for industrial uses, You need to ground the device beforehand,
 Otherwise, there are in case of malfunction, electric shock, or fire damage,

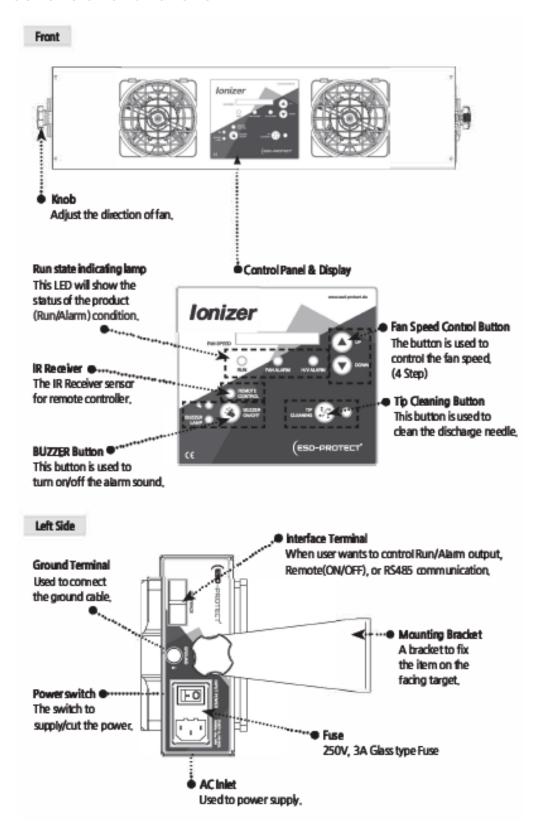
CAUTION

- Do not contact the discharge needle or terminal with power applied,
 There is a possibility of electric shock or malfunction,
- * Handle the discharge needle with care as its tip is very sharp,
- Connect wires referring to the product manual, Wrong connection can cause failures,
- Take precautions as cables of the adaptor, the power line and communication line of each product may disconnect, if the cable is damaged, replace it immediately,
- Do not install the device where the vibration can be detected. Any minor impact or vibration on the device,
 the malfuction or danger of accident might happen.
- Do not use the product for the purpose outside of the range of the product use, if the product is used
 for the purpose outside of the range of the use, it can result in the trouble or the shortened service life,
 or an unexpected problem may occur,

The following sketches and drawings apply mutatis mutandis to all Q133 ionizers. The 2-fan variant is mainly shown here.

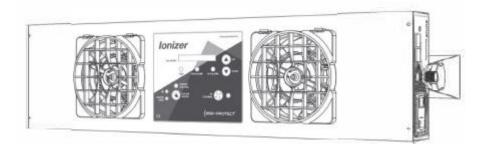
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Connections and functions





Scope of delivery





Options

If you need additional features, you'll need to add additional items for more Purchase assistants (see below).





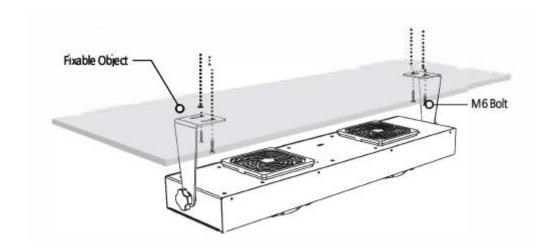
Installation

MARNING

- Please adjust the device in the proper position upon the area you install, The item should be laid on the flat surface,
- * When installing the device, please be aware of high temperature/humidity.
- If there are any random objects that are dosely surrounded or touched the target object, the ionizing
 performance might decrease, Please consider the area where you install,
- The performance of device will decrease if the ground is insecurely connected. The proper ground connection is always a first thing to consider,

Installation instructions

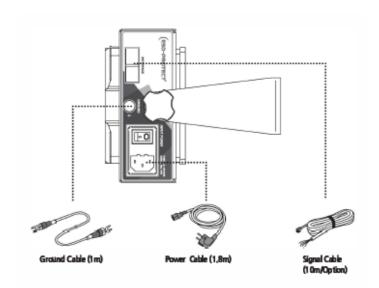
- a. Determine the point where the device will be installed.
- b. Attach the lonizer to the ceiling with the bracket with M6 screws or on the wall.
- c. Connect the ground wire to a ground terminal.
- d. Connect the UTP cable (option)
- e. Connect the power supply to the ionizer.
- f. Activate the ionizer via the power connector.
- g. Check the function of the lamp.
- h. Set a position in which the ionized air will reach its destination.





Connection

Refer to the image below to connect the product:

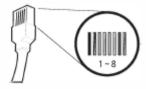


Be sure to ground the 50B-S series enclosure to ensure the stable performance of the product and avoid electric shock.

Connect the signal cable if you want to send a signal to the outside.

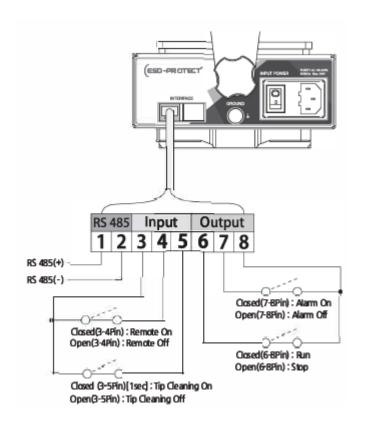
The input power of the power supply is AC 100-240V, 50-60Hz.

Connection of the interface (signal cable)

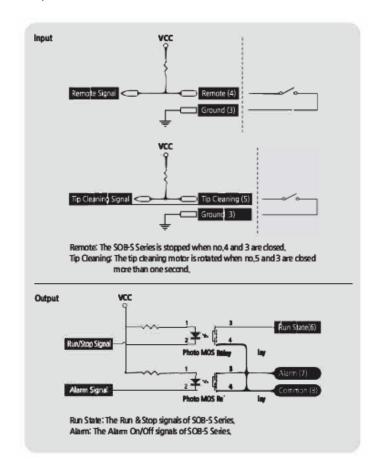


Nr	Farbe	Beschreibung	Bemerkungen	
1	Braun	RS 485 +	RS 485 Kommunikation	
2	Weiß & Braun	RS 485 -	(Run, Stop, Tip Cleaning Signal)	
3	Orange	Ground	15	
4	Weiß & Orange	Remote	If the #4 and #3 pins are short-circuited, the product stops operating	
5	Grün	Tip Cleaning	The tip clearing motor is rotated when #5 & #3 pins are closed more than one second	
6	Weiß & Grün	Run State	When #6 & #8 pins are closed, SOB-S is working	
7	Blau	Alarm (Ion Unbalance / Fan)	When #7 & #8 pins are dosed, SO8-S is signaled alarm	
8	Weiß & Blau	Common	- W	





Outputs:

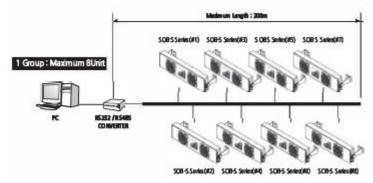




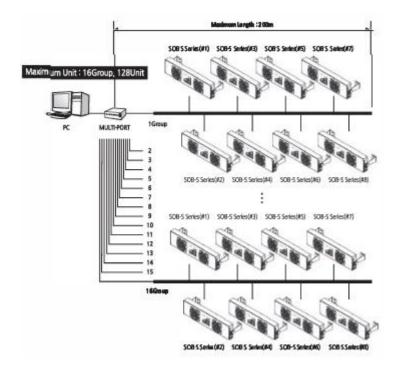
Connecting to a PC

It is possible to control the run/stop alarm and peak cleaning operation via a computer.

The connection to the computer is made via an RS-232/RS-485 converter.



The method of connecting to the computer with multi-port





Setting the address

- 1. Wait 10 seconds after power on
- 2. You can access the address setting by pressing the Up/Down button at the same time.
- 3. 87654321 Depending on the number of LEDs that are lit, you can check the selected address.
- 4. You can set the address using the UP and DOWN buttons.
- 5. If there is no movement within 3 seconds, the selected address will be used and the setting mode will be exited.

Maintenance

Maintenance is an essential part of maintaining performance. Please perform routine maintenance according to the description below. The lifespan of a discharge needle can vary depending on the conditions of use. The SOB-S series requires regular maintenance and cleaning when used in adverse conditions (high humidity or dust). It is therefore recommended to clean the discharge needle regularly (at least once a month).



- This device uses the high level of voltage. When operating maintenance, please power off and unplug the device. Otherwise, there might be in case of electric shock or fire damage.
- * The discharge needle is very sharp at the edge. Do not phsically(directly) touch the discharge needle.
- Do not remove the front cover(Grill) when the product is operating.
 There is a risk of electric shock and accident,

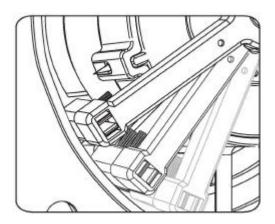
Cleaning of the emitter tip

The SOB-5 series has a brush for cleaning the needle. When the "Tip Cleaning" button on the front is pressed, the SOB-5 series will automatically clean the needle for 5 seconds when the fan stops operating.



Automatic cleaning

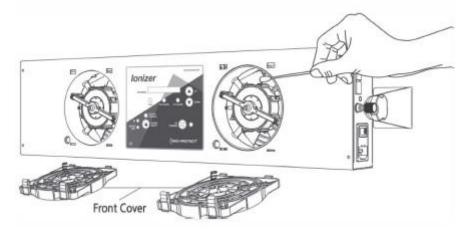
If the power-on status of the SOB-5 series lasts longer than 24 hours, the needle will be automatically cleaned every 24 hours. The cleaning of the emitter needle is carried out for 3 seconds before stopping the operation of the blower.



Manual cleaning

Manually clean the emitter needle if it is very dirty.

- a. Turn off the ionizer before cleaning it.
- b. Please open the front cover of the SOB-5 series.
- c. Dab the cotton swab with alcohol. (Do not use acetone)
- d. Place the cotton swab on the needle and wipe it by dragging the swab after Rotate right and left. (Be careful not to apply a strong force to the needle)
- e. Replace the damaged needle.
- f. After cleaning, leave the alcohol applied to the surface of the needle completely and then put the 5OB-S series into operation.
- g. Please record the cleaning process for reference.





Discharge needle replacement cycle for current pickup

During cleaning, check the emitter needle and take action.

- a. Replace the broken or badly damaged discharge needle.
- b. You can replace the discharge needle directly with a long wrench. When replacing
- it, be careful not to damage the corner of the needle, otherwise it can easily break.
- c. The outlet needle is very sharp at the edge. Do not touch the outlet needle (directly).
- d. The general cycle for replacing the needle is one year, but it may vary depending on the environment of use.

Cleaning the fan filter

- a. Be sure to turn off the ionizer before cleaning.
- b. Wash the filter under running water.
- c. Dry the filter completely and insert it into the fan cover.
- d. If the filter is badly damaged, replace it.



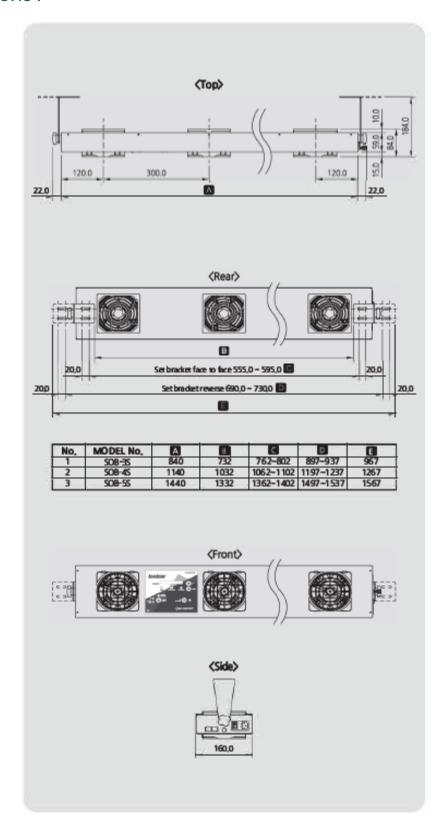
Problem solving

Pre-call checklist:

Problem	Identifying Problem	Solution	
	Is your power cable still plugged in?	Please re-plug the power cable and then turn the device on again.	
The product does not work.	Was the proper voltage level applied for this set-up?	Please use the proper level of power input for the device, (AC 100–240V, 50/60Hz)	
	Is the switch OFF at left side of the device?	Turn ON the power switch.	
There is no ionization.	Is there any conductive material around the device?	Please refer to finstallation & Connection, for setting the proper target distance from the device.	
	Does the installed environment have too high/low level of humidity or temperature?	Please install the device upon the proper working specification.	
The ionizing	Can't possibly ground the device?	Please refer to finstallation & Connection, for (proper) grounding the device.	
performance has been	Any damages or cut on the cables?	You need to replace the cables if it gets cut or damaged,	
decreased.	Any contamination on the discharge needle?	Please refer to "Maintenance, for cleaning the discharge needle.	

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Dimensions:





Technische Daten

POWER INPUTAC 100~240V, 50/60HzION GENERATION METHODStationary direct currentPOWER CONSUMPTION75WELECTRICITY CONSUMPTION341 mAAIRFLOW21.25 m³/minNOISE LEVEL(DB)67 dBION BALANCEWithin ±2V in 600mm, maximum airflowOZONKONZENTRATION0.05ppmCIRCUMSTANCES OF THE OPERATIONO'C ~ +50'C, 35% ~ 85% RHWEIGHT6.2KgMATERIALAluminiumMATERIAL ELECTRODETungstenASSEMBLYCeiling and wall mountingFUNCTION4-stage fan speed, peak cleaning, automatic tip cleaningALARM FUNCTIONIon alarm, alarm of blowerINTERFACERemote Control On/Off, Operating Status, Alarm, Peak Cleaning, RS 485MAINTENANCE1 yearDIMENSIONS1477 x 84 x 160 mm (B x H x T)		
POWER CONSUMPTION ELECTRICITY CONSUMPTION AIRFLOW AIRFLOW NOISE LEVEL(DB) ION BALANCE Within ±2V in 600mm, maximum airflow OZONKONZENTRATION CIRCUMSTANCES OF THE OPERATION O'C ~ +50'C, 35% ~ 85% RH WEIGHT 6.2Kg MATERIAL Aluminium MATERIAL ELECTRODE Tungsten ASSEMBLY FUNCTION 4-stage fan speed, peak cleaning, automatic tip cleaning ALARM FUNCTION ION alarm, alarm of blower INTERFACE REMOTE COntrol On/Off, Operating Status, Alarm, Peak Cleaning, RS 485 MAINTENANCE 1 year	POWER INPUT	AC 100~240V, 50/60Hz
ELECTRICITY CONSUMPTION AIRFLOW 21.25 m³/min NOISE LEVEL(DB) ION BALANCE Within ±2V in 600mm, maximum airflow 0.05ppm CIRCUMSTANCES OF THE OPERATION O'C ~ +50'C, 35% ~ 85% RH WEIGHT 6.2Kg MATERIAL Aluminium MATERIAL ELECTRODE Tungsten Ceiling and wall mounting FUNCTION 4-stage fan speed, peak cleaning, automatic tip cleaning ALARM FUNCTION ION alarm, alarm of blower INTERFACE Remote Control On/Off, Operating Status, Alarm, Peak Cleaning, RS 485 MAINTENANCE 1 year	ION GENERATION METHOD	Stationary direct current
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NOISE LEVEL(DB)67 dBION BALANCEWithin ±2V in 600mm, maximum airflowOZONKONZENTRATION0.05ppmCIRCUMSTANCES OF THE OPERATIONO'C ~ +50'C, 35% ~ 85% RHWEIGHT6.2KgMATERIALAluminiumMATERIAL ELECTRODETungstenASSEMBLYCeiling and wall mountingFUNCTION4-stage fan speed, peak cleaning, automatic tip cleaningALARM FUNCTIONIon alarm, alarm of blowerINTERFACERemote Control On/Off, Operating Status, Alarm, Peak Cleaning, RS 485MAINTENANCE1 year	ELECTRICITY CONSUMPTION	341 mA
ION BALANCE OZONKONZENTRATION O.05ppm CIRCUMSTANCES OF THE OPERATION O'C ~ +50'C, 35% ~ 85% RH WEIGHT 6.2Kg MATERIAL Aluminium Tungsten Ceiling and wall mounting FUNCTION 4-stage fan speed, peak cleaning, automatic tip cleaning Ion alarm, alarm of blower INTERFACE Remote Control On/Off, Operating Status, Alarm, Peak Cleaning, RS 485 MAINTENANCE 1 year	AIRFLOW	21.25 m³/min
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CIRCUMSTANCES OF THE OPERATION WEIGHT 6.2Kg MATERIAL Aluminium Tungsten ASSEMBLY Ceiling and wall mounting FUNCTION 4-stage fan speed, peak cleaning, automatic tip cleaning ALARM FUNCTION Ion alarm, alarm of blower INTERFACE Remote Control On/Off, Operating Status, Alarm, Peak Cleaning, RS 485 MAINTENANCE 1 year	ION BALANCE	Within ±2V in 600mm, maximum airflow
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MATERIAL ELECTRODE ASSEMBLY Ceiling and wall mounting 4-stage fan speed, peak cleaning, automatic tip cleaning ALARM FUNCTION Ion alarm, alarm of blower INTERFACE Remote Control On/Off, Operating Status, Alarm, Peak Cleaning, RS 485 MAINTENANCE 1 year	WEIGHT	6.2Kg
ASSEMBLY FUNCTION 4-stage fan speed, peak cleaning, automatic tip cleaning Ion alarm, alarm of blower INTERFACE Remote Control On/Off, Operating Status, Alarm, Peak Cleaning, RS 485 MAINTENANCE 1 year	MATERIAL	Aluminium
FUNCTION 4-stage fan speed, peak cleaning, automatic tip cleaning Ion alarm, alarm of blower Remote Control On/Off, Operating Status, Alarm, Peak Cleaning, RS 485 MAINTENANCE 1 year	MATERIAL ELECTRODE	Tungsten
automatic tip cleaning ALARM FUNCTION ION alarm, alarm of blower Remote Control On/Off, Operating Status, Alarm, Peak Cleaning, RS 485 MAINTENANCE 1 year	ASSEMBLY	Ceiling and wall mounting
ALARM FUNCTION INTERFACE Remote Control On/Off, Operating Status, Alarm, Peak Cleaning, RS 485 MAINTENANCE 1 year	FUNCTION	4-stage fan speed, peak cleaning,
INTERFACE Remote Control On/Off, Operating Status, Alarm, Peak Cleaning, RS 485 MAINTENANCE 1 year		automatic tip cleaning
Alarm, Peak Cleaning, RS 485 MAINTENANCE 1 year	ALARM FUNCTION	Ion alarm, alarm of blower
MAINTENANCE 1 year	INTERFACE	Remote Control On/Off, Operating Status,
, , , , , , , , , , , , , , , , , , , ,		Alarm, Peak Cleaning, RS 485
DIMENSIONS 1477 x 84 x 160 mm (B x H x T)	MAINTENANCE	1 year
	DIMENSIONS	1477 x 84 x 160 mm (B x H x T)

^{*} The appearance and specifications of the product may be changed by the manufacturer without prior notice in order to improve the product.