

Instruction Manual **SUNJE**

SNC-21 & SBP-21C

Eng

It is recommended that only persons who have sufficient knowledge and experience such as system designers and responsible persons deal with this product after carefully reading the product manual.

1 The matters of safety

⚠ 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.
- * This device uses compressed air(CDA). Do not use the device if the CDA cannot be allowed to use. In some cases, the product malfunction or danger of accident might happen.

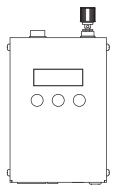
⚠ CAUTION

- * Do not disconnect the SPN-21C cable and controller with power applied. There is a possibility of electric shock or malfunction.
- * Connect wires referring to the product manual. Wrong connection can cause failures.
- * To connect a cable properly, take a look at the manual 「Installation & Connection」 for references. Any disordered connection is detected, the malfunction might arise.
- * 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 malfunction 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.

2 Check the package contents

▶ Product compositions

The package includes the following products composition.



* Controller
SNC-21
1ea

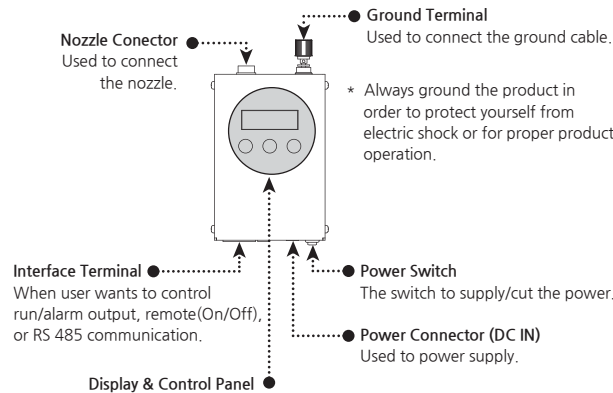


* H/V Pack
SBP-21C
1ea

※ Components for
SIB(N) high-frequency models only

<p>* Adapter SAD-MT-3-001 Input: AC100~240V, 50/60Hz Output: DC24V, 2.5A 1.6m, 1ea</p>	<p>* Terminal Block STB-VC-1-001 2Pin / 1ea</p>
<p>* Output Cable SOC-XN-2-002 1m / 4Pin-4Pin / 1ea</p>	<p>* Terminal Block STB-NC-1-001 6Pin / 1ea</p>
<p>* Ground Cable SGC-MT-6-001 1m / Ø4-Ø6[mm] / 1ea</p>	<p>* Power Cable SPC-MT-1-001 AC 100V, 50/60Hz, 1.8m / 1ea</p>
or	
<p>* Power Cable SPC-MT-2-001 AC 220V, 50/60Hz, 1.8m / 1ea</p>	<p>* Power Cable SPC-MT-2-001 AC 220V, 50/60Hz, 1.8m / 1ea</p>

3 Nomenclatures of parts



No	Name	function
1	RX / TX (LED)	Light on when using RS-485.
2	Alarm (LED)	Light on when Alarm occurs.
3	FND Display	<A-01 ~ 16> : Address <AL-1> : When high voltage error, display and operation stop. <AL-2> : When over-discharge of electrode or leakage occurs, display and operation stop. <AL-3> : When tip cleaning setting time is over.

4	Tip Cleaning (LED)	Light on when tip cleaning setting time is over.
5	RUN (LED)	Ion Bar Lights up during normal operation.
6	SET Button	It is for changing the address, frequency Setting.
7	Up / Down Button	

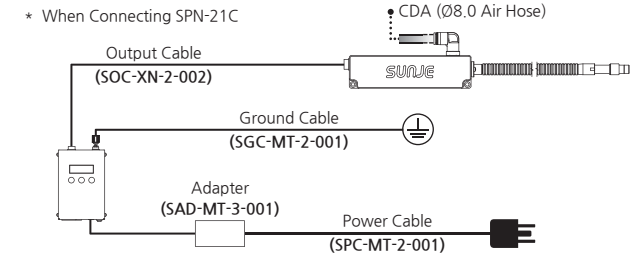
※ If operation stops when AL-1 or AL-2 or AL-3 occurs, turn the product off and then on again.

4 Installation and Connection

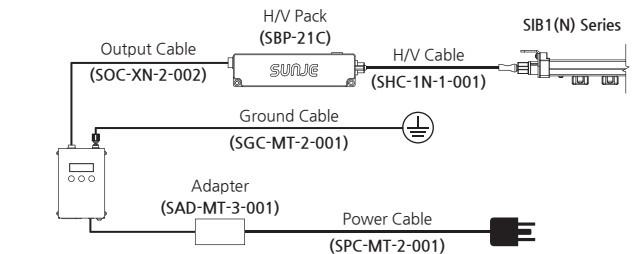
▶ How to connect

Refer to the figure below to connect the product.

Connectable Products	SPN-21C	SIB1(N)
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* When Connecting SIB1(N) High Frequency Models



▶ How to connect the Interface

For the specification of the Interface to be used, refer to the table below.

		INTERFACE						RMS			
		6	5	4	3	2	1	2	1		
Interface	Output	1	High Voltage Abnormal Alarm	Alarm	Normal						
		2	Tip Cleaning Alarm	Alarm	Normal						
		3	Signal Ground								
		4	Run / Stop State	Run	Stop						
	Input	5	Remote Input					Stop	Run		
		6	Remote Com					Stop	Run		
RMS	1	RS485+									
	2	RS485-									

5 How to set

⚠ WARNING

* Do not tamper with the set value. The malfunction might arise.

Setting order

A-01 Ionizer Running

↓ SET

d50.0 Duty Set Up
- Duty are from 30 to 70. (Daily change possible)
- The Duty can be changed by pushing up/down button.

↓ SET

P007 Positive Pulse Width Set
- Positive Pulse Width are from 1 to 7.
- The Positive Pulse Width can be changed by pushing up/down button.

↓ SET

nE07 Negative Pulse Width Set
- Negative Pulse Width are from 1 to 7.
- The Negative Pulse Width can be changed by pushing up/down button.

↓ SET

tCoF Tip Clean Mode on / off
On : Tip cleaning alarm function is activated.
Off : Do not used tip cleaning mode.
- The Tip Cleaning Alarm can be changed by pushing up/down button.

↓ SET

tCon It shows when

C-01 Tip Cleaning Time Set Up
- It is available to set time from 1 day to 60days.
- The time can be changed by pushing up/down button.

↓ SET

1-no Interface Set
- no : Nomal
- rE : Reverse

↓ SET

A-01 Address Set Up
- Communication addresses are from 1 to 16.
- The address can be changed by pushing up/down button.

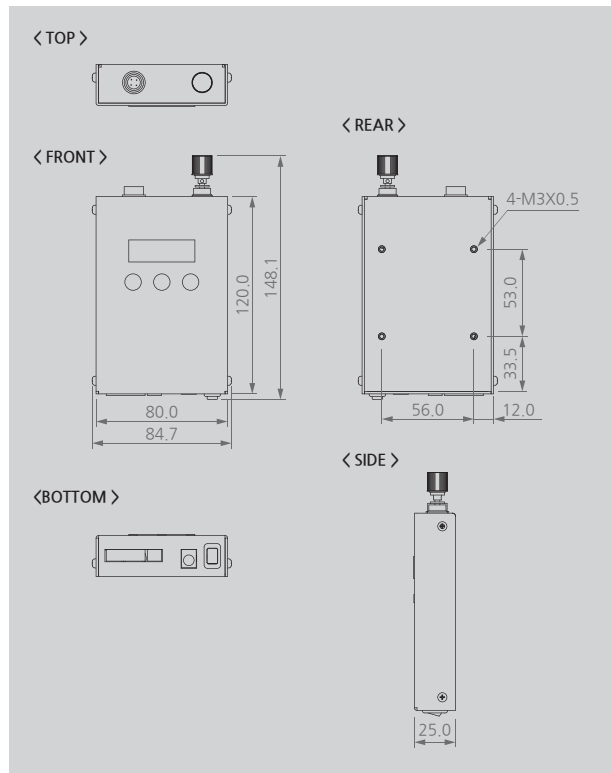
6 Problem solving

▶ Checklist before called

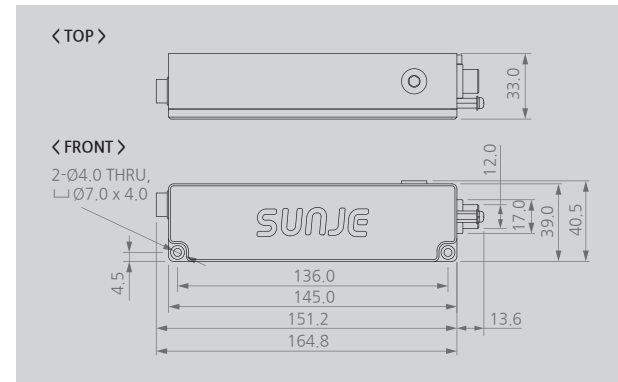
Problem	Identifying Problem	Solution
The product does not work.	Is your power cable still plugged in?	Please re-plug the power cable and then turn the device on again.
	Was the proper voltage level applied for this set-up?	Please use the proper level of power input for the device. (AC 100~240V, 50/60Hz)
There is no ionization.	Is there any conductive material around the device?	Please refer to 'Installation & 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 performance has been decreased.	Can't possibly ground the device?	Please refer to 'Installation & Connection,' for grounding the device.
	Any damages or cut on the cables?	You need to replace the cables if it gets cut or damaged.
	Any contamination on the discharge needle?	Please refer to 'Maintenance,' for cleaning the discharge needle.

7 Dimensions

▶ SNC-21 (Controller)



▶ SBP-21C (H/V Pack)



8 Specification

Parameter	Description / Value	
Input Power	DC 24V (±5%)	
Power Consumption	Max. 4.8W	
High Voltage	Pulse AC 6.4 ~ 15kVpp	
Ion-Generation Method	Corona discharge	
Connector	Power (DC24V) : DC JACK RS-485 & Interface : Terminal Block 3.81mm Pitch	
Operating Distance	50 ~ 1,000mm	
Operation Circumstance	0°C ~ +50°C(32 F ~ 122 F), 35% ~ 85% RH	
Function	Alarm	High Voltage Alarm, Tip Cleaning Timer Warning
	Interface	- Run/Stop State : Run-Closed / Stop-Open - High Voltage Alarm : Normal-Open / Alarm-Closed - Tip Cleaning Timer Warning : Normal-Open / Alarm-Closed - Remote Input
		RMS
Warranty	1 year	

※ The appearance and specification of the product may be changed without prior notice for the improvement of the product.

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