



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. We cannot be responsible for improper installation or service, or if the product is not used properly. We only provide replacement or refund for defective products.

### 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.
- \* It may fail to function properly if someone drops or any misuse of the product.
- \* 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.
- \* 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.

**⚠ CAUTION**

- \* 9V Battery only. (rectangular shaped battery)
- \* 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

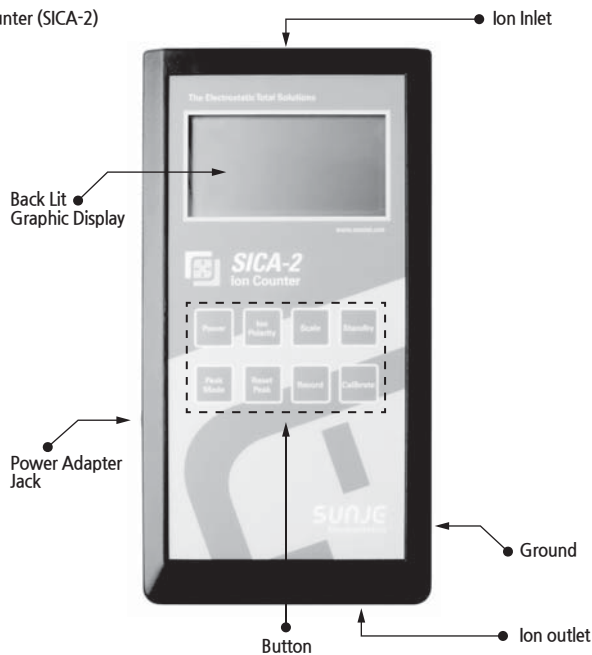
The package includes the following products composition.



	Ground Cable SGC-PE-1-001 1ea		Alligator Clip SAC-PE-1-001 1ea
	Adaptor SAD-IC-1-001 1ea		Banana Jack SBJ-PE-1-001 1ea

### 3 Nomenclatures of parts

► Ion Counter (SICA-2)



Button	Function	Button	Function
Power	Power On / Off	Peak Mode	Peak Mode Setting
Ion Polarity	Select the ion polarity of the measurement object / (+)Ion, (-)Ion	Reset Peak	Reset the Peak Value
Scale	Measurement range setting	Record	Storing the measured value in the PC (Option)
Standby	Standby ready	Calibrate	Measuring initialization

### 4 How to use

► Summary

The SICA-2 measures positive and negative air ions up to a 200 million ions/cm<sup>3</sup>.

► Operation

**⚠ CAUTION**

- \* Inhale/measuring the ion at the ion inlet when the product is during operation. And then ejected ion from the outlet at the bottom of the product. Do not block the ion inlet and ion outlet. There may be an error in the measurement value.
- \* The 20-foot long ground wire should be used to connect the meter to earth ground for most types of measurements -- especially if you are measuring near an ionizer.
- \* For accurate readings of the average number of ions in a room, avoid measuring near charged plastic like synthetic fabric(clothing).
- \* Overcharge is may affect the ion measurement value. Do not overcharge for accurate measurements.
- \* When not measuring, place the meter in STANDBY mode to conserve battery power.

- When operating the display shows the ion count within 1 seconds and it continues to display the ion density in the air, showing any changes within 1 seconds after they occur.

- After turning the meter on Select the POLARITY you want to measure.

- When changing polarity he display count will immediately jump, but it will stabilize within 6 seconds.

- This meter reads the negative ions in the air when POLARITY is on "-", and positive on "+".

- Overcharge can cause reduced positive ions and negative ions value.

- If the ions are almost no there, measurement values may contain errors even if measure at close range.

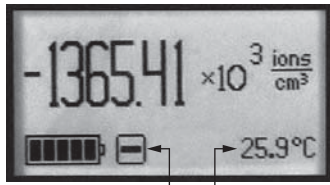
- Without some mechanism for circulating the air, you may see the ion count go low, then high, then low, irregularly as a "cloud" of ions slashes back and forth.

## ► Operation Details

### Power Up / Operation Mode

- On power up the fan will come on and ion measurement will begin.
- Select the desired polarity by depressing the "Polarity" pad.
- Note that when polarity is changed there will be a temporary jump in the display count.
- A display of 1---,-- indicates over range.
- If this is ncountered go to higher scale by depressing the "Scale" pad.

Default Scale, 2M ions cm<sup>3</sup>



Selected Polarity ● ● Temperature

Alternative Scale, 200M ions cm<sup>3</sup>



### Meter Calibration / Re-zeroing

- Calibration took place at the factory and is not necessary upon power up.
- Depressing the "Calibration" pad will zero the meter. During the calibration the fan will be off.
- Calibration may take up to 50 seconds.
- A counter on the display indicates the remaining time.
- Calibration is only necessary if a consistent ion count is displayed when no ions are present.
- Note that it is common for display count fluctuation of +/- 0.50 in typical ambient environment.

## ※ Calibration Errors

<b>! CAUTION</b>	<ul style="list-style-type: none"> <li>* If during the calibration an excessive offset or if a lack of sensitivity is detected, an error message indicating such will be displayed. These errors will only occur if the internal ion detection chamber has been contaminated by accumulations of dust, or of high humidity which has resulted in internal condensation.</li> <li>* If an error occurs, please re-measured after ventilating the measurement environment. If continued an error occurs, please contact us.</li> </ul>
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### Power Options and Battery Level

- The meter may be powered from four internal AA Alkaline batteries or with an external wall adapter.
- The meter may be operated with a 6 to 9V DC, 200mA regulated or unregulated power adapter with a barrel plug(ID: 2.1mm / OD: 5.5mm), (positive center).
- Note that if the battery level drops below the level required for the internal processor, the display will be blank, however the back light of display may still be illuminated, if this occurs replace the batteries.



Battery Level : Each missing bar represents a drop of approximately 20% of battery's capacity.

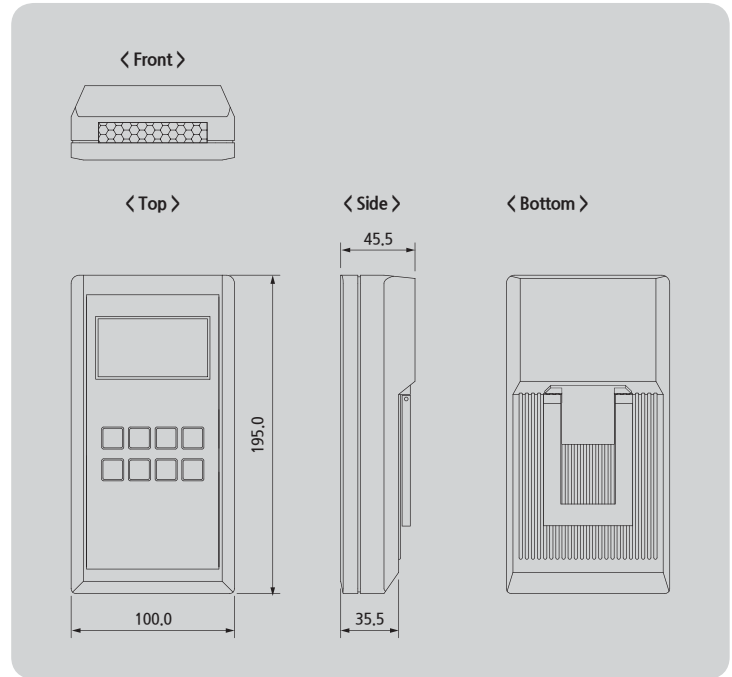
### Peak Hold

- Depressing the "Peak Hold" pad places the meter in the peak hold mode.
- In this mode the display shows the highest positive or negative value measured by the meter since the last time the peak hold was reset.
- While in this mode, momentarily depressing the "Peak Reset" pad resets the peak value.
- When peak hold mode is off the meter continues to capture the highest positive or negative value measured, which will be shown when peak hold mode is activated.



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## 5 Dimensions



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## 6 Specification

### ► Ion Counter (SICA-2)

Category	Description / Value
Range / Resolution	2million or 200million Selectable scales / 10(ions per cc)
Accuracy	+/- 20% with a repeatability 5%
Noise	20 ions / cc(1 second averaging)
Meter Size	7.25 X 4.0 X 1.75 inches (197 X 102 X 45mm)
Weight	20 oz(567g)
Power	AA Alkaline Battery 4ea(~10 hour life) or AD Adapter
Warranty	1 year

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

**SUNJE Electrostatics**

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