GiA

Smart Indoor
Air Quality Sensing Controller

Installation and Instruction Manual

CLEANUP
Lime™
萊 寶

GET IT ON Google Play

Available on the App Store

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Smart Indoor Air Quality Sensing Controller

Index

+5V COM A+ B- NO1 NO2

Power Input

Communication Interface

Power Button
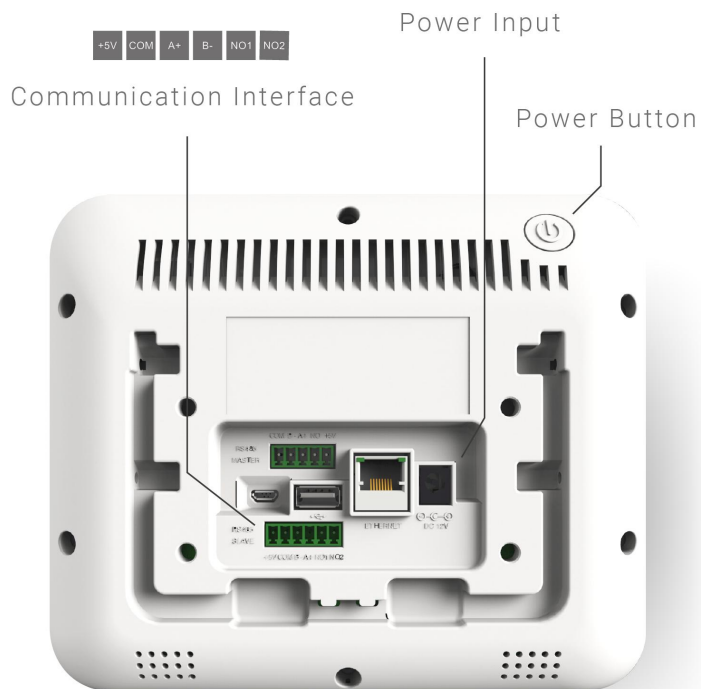
Adapter
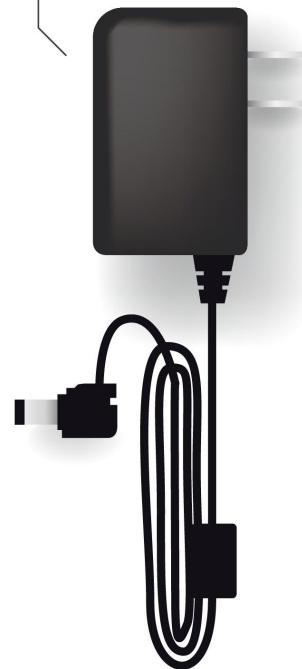
USB Cable

Host Stand

A+ B- RS485 output terminals

When the product is shipped from the factory, two sets of dry contacts can be set according to customer's parameter requirements. When this parameter is hig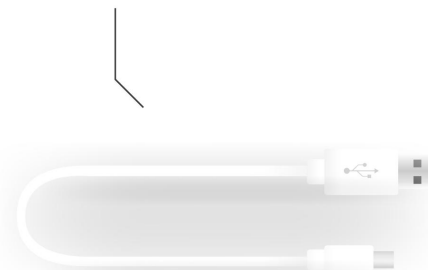her than the set alert value, the two sets of contacts can start the corresponding equipment of the external connection respectively. The NO1 and NO2 contact COM are common ground.

B

1
Firmly press the upper bracket inward before removing it.

2
Using the same method, place the bracket in the bottom two holes as well

3
Place the device on a flat surface

C

1
Press the power button to turn on the screen.

The welcome page will then display.

2
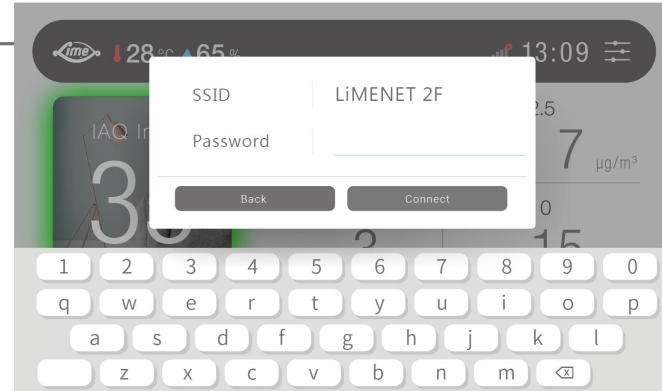The main screen will then display.
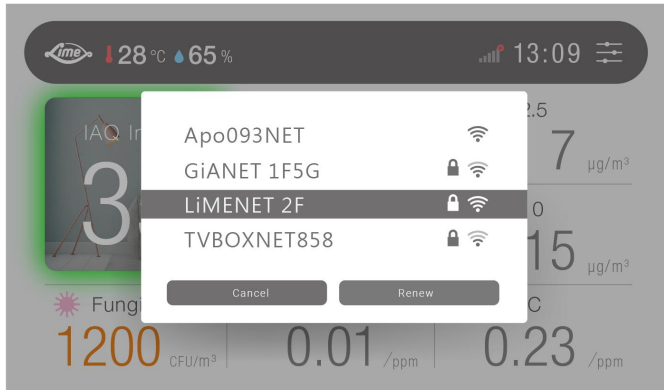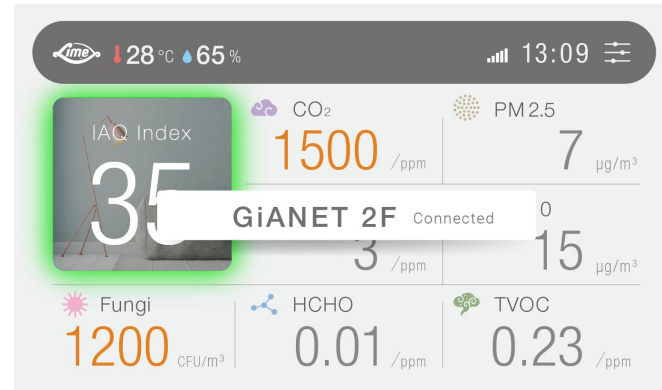
D

1

Click on the network connection icon

2

Connect to the wireless network of choice

3

Enter the network password if required and click "Connect"

4

The network connection is completed

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GiA Smart Indoor Air Quality Sensing Controller
Version: GiA-K007
Newer version is available for download, please update your device!
Host Serial Number: GiA12345

update

Time Settings

am:15:08

Display Settings

Standby Time | 3 | mins
Screen Brightness | 89 | %

OK

Alert Settings

	HCHO	ON		CO$_2$	ON		PM2.5	ON
0.08	0.02	ppm	1000	856	ppm	35	30	µg/m³
	TVOC	ON		CO	ON		PM10	OFF
0.56	0.2	ppm	9	0.0	ppm	75	65	µg/m³
	TEMP	OFF		HUMI	OFF		FUNGI	ON
28	26	°C	70	65	%	1000	989	CFU/m³

Return to Factory Set

− +

OK

Alert Settings
Air Conditioner Settings
Remote Monitor
Outdoor Air Quality Settings
System Settings

ime | 28 °C | 65 %

IAQ Index
35

CO$_2$ 1500 /ppm
CO 3 /ppm
PM

Fungi 1200 CFU/m³
HCHO 0.01 /ppm
TVOC 0.23 /ppm

GiA

28 °C | 65 % 13:09

GiA Select outdoor air quality monitoring station

Changhua ○
New Taipei City ○
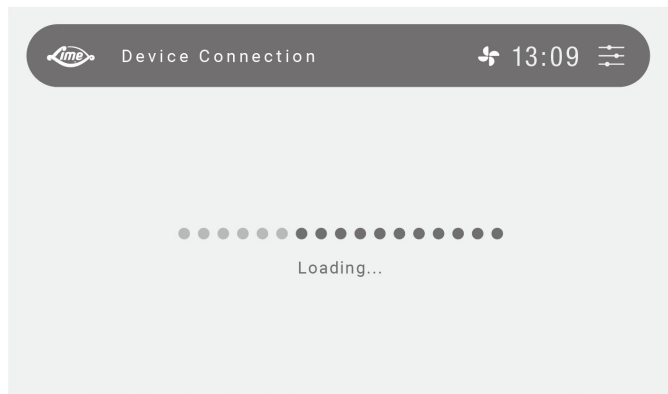Hsinchu City ○
Hsinchu ○
Taoyuan ○
Penghu ○

1 Press ⚏ to select the setting   2 Select the parameter area to be adjusted

3 Press ⊕ ⊖ to adjust the setting   4 If you do not save changes, press ↩ to return to the main screen

5 After the change is completed, press OK to return to the main screen   6 To return to the original settings, press Return to Factory Set

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Device Connection   ✈ 13:09

RS-485
Energy Recovery
Ventilator (ERV)

Wi-Fi
Ventilation System

Others
Air Purifier
Air Intake
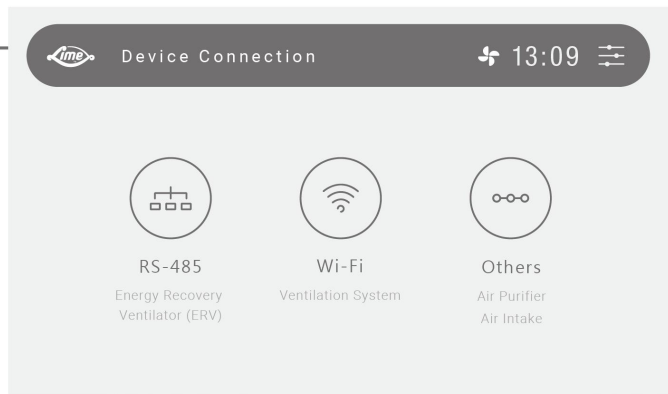
1

click the corresponding communications method

Device Connection   ✈ 13:09

Loading...

2

Wait for the device to connect

Device Connection   ✈ 13:09

Ventilation System

GiA-K350

3

Select the device

Device Connection   ✈ 13:09

Heat Exchanger / GiA-K350
Auto Mode

Fan   Medium
Time   Start 00:00 / End 00:00
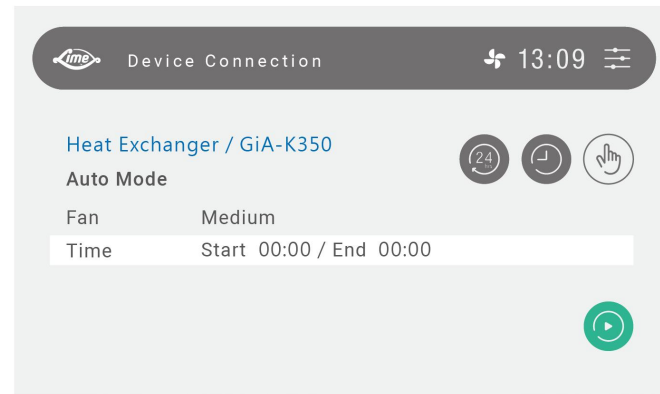
4

Complete the connection by pressing the green play button

G

Situation Settings

❄ AC
✺ Fan
🚬 Smoke
💨 Oder

👥 Party
👨‍🍳 Cook
🧴 Clean
💧 Wet

13:09

AC: choose this when the AC is turned on to reduce the electrical output of the AC unit

Fan: choose this when AC is turned off to encourage indoor ventilation

Smoke: choose this to reduce and remove smoke

Odor: choose this to reduce and remove odors from the air
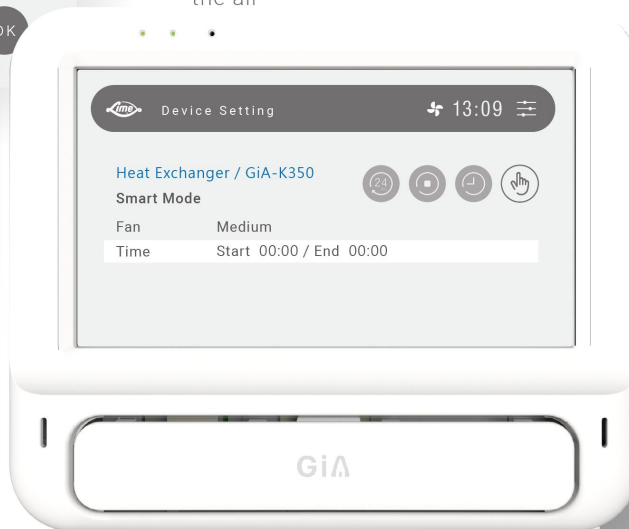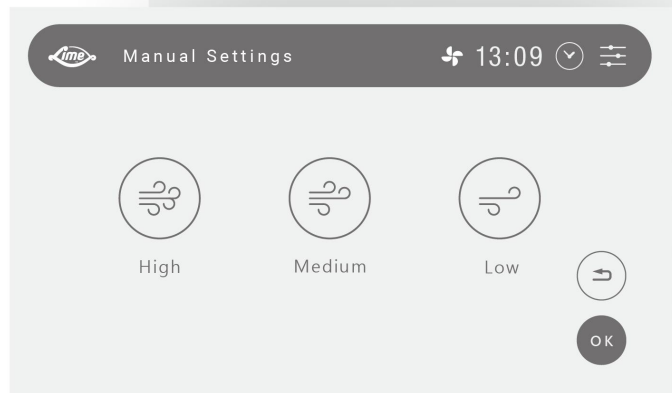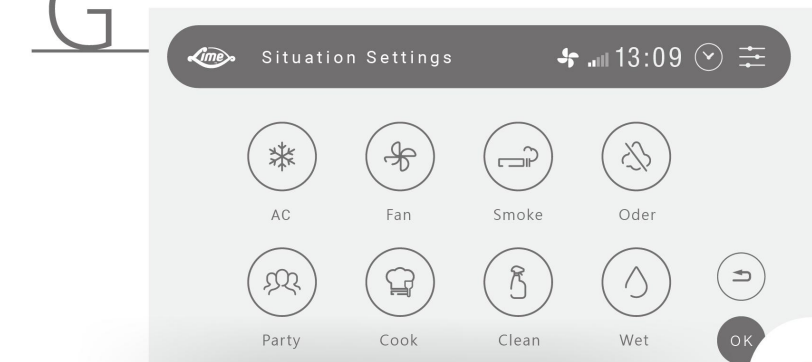
Party: choose this when there is a large gathering of people to encourage the flow of fresh air from outside

Cook: choose this when cooking to reduce and remove cooking odors

Clean: choose this when cleaning to remove harmful chemicals

Wet: choose this mode to reduce humidity overall

Manual Settings

13:09

High
Medium
Low

OK

Device Setting
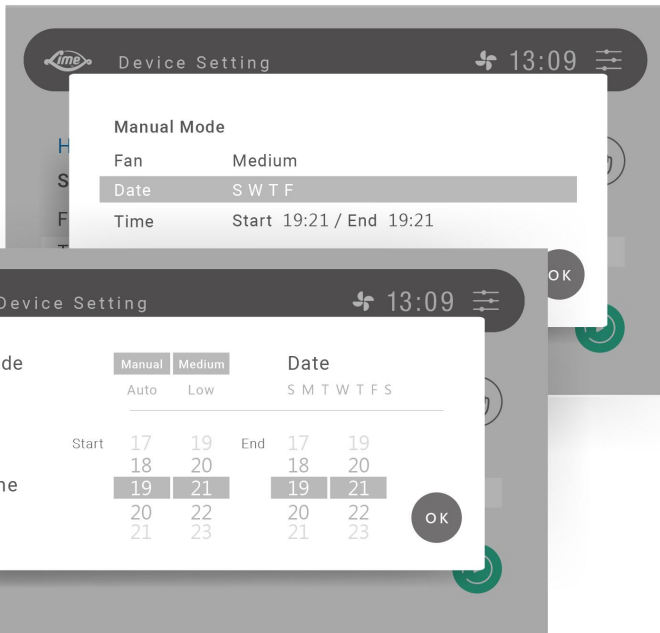
13:09

Heat Exchanger / GiA-K350
Smart Mode

Fan   Medium
Time   Start 00:00 / End 00:00

GiA

Device Setting

13:09

Manual Mode

Fan   Medium
Date   S W T F
Time   Start 19:21 / End 19:21

OK

Device Setting

13:09

Mode | Manual | Medium | | Date
        | Auto | Low | | S M T W T F S

Time
Start   17   19   End   17   19
        18   20   18   20
        19   21   19   21
        20   22   20   22
        21   23   21   23

OK

1 To select the situation according to the current state, press ♡

2 To Adjust the wind speed by pressing ✋   3 To set a schedule, press 🕐

4 Pressing ㉔ will allow the device to run for 24 hours in automatic mode or until the stop button is manually pressed

1 Press each category to find its description and improvement method.

2 press ⮌ to return to the main screen

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🧠 TVOC 0.56 ppm

Total Volatile Organic Compounds is grouping of a wide range of organic chemical compounds that are present in polluted air.
They are generally refer to vapors of gases given off by compounds.

☁ O₃ 0.06 ppm

Ozone may stimulate the respiratory tract, causes coughs, asthma, headaches, and chest pain, reduces pulmonary functions and leads to bronchitis. It may cause serious problems such as pulmonary edema, pulmonary emphysema and other cardiorespiratory issues and eye irritation as well.

Methods to improve: Ventilation

☁ CO₂ 1000 ppm

It is a colorless, odorless, non-flammable, and non-combustible gas.
A crowded room with poor ventilation would increase the concentration of carbon dioxide.
Common of CO2 sources at home are human breathing, smoking, heating appliances and candles.

<500
<800

Methods to i

IAQ Index 室內空氣指數 35

28 ℃ 65 % 13:09

CO₂ 二氧化碳 1500 /ppm
PM 2.5 懸浮微粒 7 µg/m³
CO 一氧化碳 3 /ppm
PM 10 懸浮微粒 15 µg/m³
Fungi 黴菌 1200 CFU/m³
HCHO 甲醛 0.01 /ppm
TVOC 揮發物質 0.23 /ppm

⬚ PM2.5 35

PM2.5 easily penetrates human lungs and it has a great impact on h
The smaller the particles are, the further it floats. It is not easy to in
particles in respiratory tract, and PM 2.5 is very harmful to the respiratory
Secondhand smoke and kitchen fumes are the main sources of PM2.5.

< 3 µg/m³
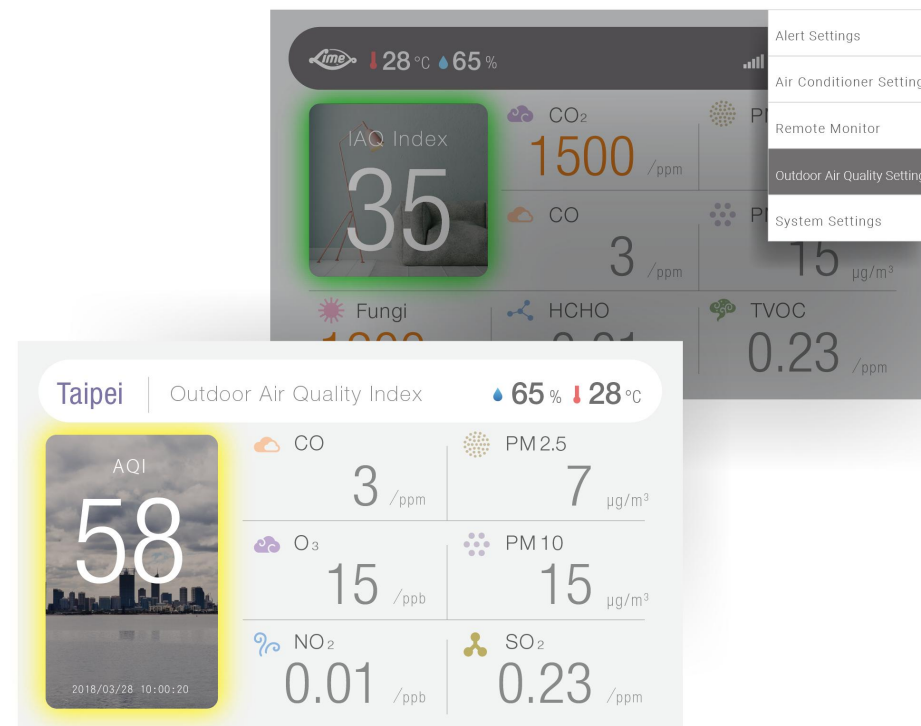< 20 µg/m³
< 35 µg/m³

Methods to improve: using air filters

Humidity 70%

ty between 60 to 70% is regarded as the best condition for people.
and damp areas without proper ventilation are a hotbed for mold.
e humidity is 70 to 90% in a non-ventilated environment for a long time,
d will rapidly grow. Mold attract dust mites. Thus, allergies such as rhinitis,
asthma, arthritis, gastroenteritis among others can easily develop in a high
humidity space.

HUMI 60~70 %RH
HUMI 80~90 %RH

Methods to improve: drying, dehumidifying

IAQ Index

35

CO₂ **1500** /ppm

CO **3**

15 μg/m³

Fu... **12**...

Alert Settings

Air Conditioner Settings

Remote Monitor

Outdoor Air Quality Settings

System Settings

ime ↓28 ℃ ♦65 %

Download APP

Scan QR Code

GiΛ

45

Indoor
K007_11 / Gia

105

Outdoor
新北市汐止區

1 Press remote monitor in the setting menu

2 Use mobile phone to scan QR Code on the left to download the application

3 Use mobile phone to select settings and scan the QR code on the right of the device

4 After the setting is completed, mobile phone can remotely monitor the air quality.

1 To set the outdoor location, press the Outdoor Air Quality Settings in the setting menu

2 Slide the main page to the left twice to view the outdoor air quality

ime ↓28 ℃ ♦65 %

Alert Settings

Air Conditioner Settings

Remote Monitor

Outdoor Air Quality Settings

System Settings

IAQ Index

35

CO₂ **1500** /ppm

CO **3**

P... **15** μg/m³

Fungi 1...

HCHO 0.01

TVOC **0.23** /ppm

Taipei | Outdoor Air Quality Index ♦65 % ↓28 ℃

AQI

58

2018/03/28 10:00:20

CO **3** /ppm

PM 2.5 **7** μg/m³

O₃ **15** /ppb

PM 10 **15** μg/m³

NO₂ **0.01** /ppb

SO₂ **0.23** /ppm

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Dimension	200(L) x 167(W) x 40.5(H)
Power	DC-12V/1A
Display Interface	7"TFT LCD 1024x600 Resolution + Capacitive Touch Interface
Wireless Communications	2.4 GHz Wireless Network 802.11 b, g, n, BLE V 4.1
Wired Communications	Ethernet RJ45 10/100Mbps RS-485 Master Control output RS-485 Slave Sensing data reading
Sound	Built-in stereo output
Others	USB 2.0 Host

Model	GiA-K007-5	GiA-K007-6	GiA-K007-8	GiA-K007-10	GiA-K007-11	GiA-K007-12
TEMP	●	●	●	●	●	●
HUMI	●	●	●	●	●	●
CO2	●	●	●	●	●	●
CO					●	●
PM2.5	●	●	●	●	●	●
PM10			●	●	●	●
TVOC	●	●	●	●	●	●
HCHO					●	●
Ozone						●
FUNGI				●	●	●
IAQ			●	●	●	●
AQI	●	●	●	●	●	●

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Sensor	Type	Detect Range
PM2.5	Laser Active Sensor	0 - 1,000 µg/m³ / Resolution 1 µg/m³
PM10	Laser Active Sensor	0 - 1,000 µg/m³ / Resolution 1 µg/m³
CO2	NDIR	0 - 10,000 PPM / Resolution 1 PPM
TVOC	Semiconductor Type	0.05- 6.00 PPM / Resolution 0.01 PPM
CO	Electrochemical Sensor	0 - 500 PPM / Resolution 1 PPM
HCHO	Electrochemical Sensor	0 - 5.00 PPM / Resolution 0.01 PPM
TEMP	Semiconductor Type	0 – 50.0 ℃ / Resolution 1 ℃
HUMI	Semiconductor Type	0 - 100% / Resolution 1%
Ozone	Electrochemical Sensor	0 - 10.00 PPM / Resolution 0.01 PPM

* Each sensor on the boot, there are individual stable time.
  According to the screen display.
* This product is suitable for installation at spaces of room temperature 40℃ and
  relative humidity below 85% RH.

Read "Safety Precautions" before the usage and use it correctly.

To prevent injury to users and others and avoid property damage, be sure to observe the following.

⊘ Do not install the product in locations where there is a suspected current leakage, water leakage or exposure to direct sunlight, overheating, fire and smoke, etc.

⊘ Do not unplug the power cord to stop the equipment that may cause electric shock, fire, and instrument malfunction.

⊘ Do not use damaged, processed, or bent power cords, which may cause electric shock and fire.

⊘ Do not modify or repair the product on your own. Improper repair may cause electric shock and fire. Please contact a professional.

⊘ If you find that the product is overheating, smoking, or giving off an odor, immediately turn off the power switch and unplug the power cord from the power outlet.

! When installing accessories, turn off the power of the product and disconnect the power cord from the outlet.

! Use AC110V 15A. Using sockets other than 110V may cause electric shock and fire.

! Please plug in the power cord before usage. If you do not use this product for a long period of time, it is recommended that you unplug the power cord from the outlet to avoid danger.

! Do not place items around the outlet so that you can unplug the power plug immediately if an abnormality occurs.

If your instrument is abnormal or does not turn on normally, check the above mentioned points. If the failure cannot be solved, please contact us.

? Shutdown under abnormal conditions

Is the power cord or plug deformed?
Replace the power cord set.

Is the power cord plugged in properly?
Plug in the power cord.

Is there a power surge?
Restart the product.

? Can't connect to LAN or Wi-Fi

Is the network device turned on?
Turn on the network device.

Is the network cable loose?
Plug in the network cable

Are other electronic products also unable to connect to Wi-Fi?
If so, contact the telecommunications carrier.

? Unable to interact with ventilation equipment

Check first if the machine is connected to the Internet.

? Does the detector need to be calibrated?

All built-in detectors have the automatic calibration function.

Federal Communications Commission (FCC) Statement

15.21

You are cautioned that changes or modifications not expressly approved by the part responsible for compliance could void the user's authority to operate the equipment.

15.105(b)

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

-Reorient or relocate the receiving antenna.

-Increase the separation between the equipment and receiver.

-Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

-Consult the dealer or an experienced radio/TV technician for help.

This device complies with Part 15 of the FCC Rules.

Operation is subject to the following two conditions:

1) this device may not cause harmful interference and

2) this device must accept any interference received, including interference that may cause undesired operation of the device.

FCC RF Radiation Exposure Statement:

The equipment complies with FCC RF exposure limits set forth for an uncontrolled environment.

The equipment must not be co-located or operating in conjunction with any other antenna or transmitter.

Your GiA carries a warranty period of one year from the time of delivery. Labels found on GiA indicates its authenticity. Altered, torn, or missing GiA labels is deemed as void of warranty. Please, keep this warranty card safely. During the warranty period, we offer one free factory calibration service and free maintenance services. We may charge for material and repair costs under the following circumstances:

- Failure to use Gia according to the guidelines set forth in the instructions manual

- Defects caused by improper use or natural disasters

- Unauthorized disassembly, modification, welding and/or adjustments

Date of Purchase: Date: Month: Year: