F I N L A N D

Designed in Finland

LIFAair

LIFAair International Limited

LA503 Smart Air Purifier

Please read this user manual carefully before using, and keep for future reference.

Warning: Before using the machine for the first time, you must remove the filters' moisture proof protective bags.

Thank you for choosing LIFAair! You are about to enjoy superior Finnish technology and innovation.

Important safety information

- Only use attachments/accessories provided by the manufacturer.
- Keep the machine away from children to avoid accidents.
- Do not block any ventilation openings. Install the machine in accordance with the manufacturer's instructions.
- Make sure the machine stands in the upright position, never operate the machine when in other orientations.
- Unplug the machine when it will not be used for a long period of time.
- Do not use this machine in rooms with large temperature differences to avoid vapor condensation inside.
- Protect the power cord from being walked on or pinched.
- Please switch off and unplug the machine before moving it or cleaning and/or replacing the filters.
- Do not use this machine in high temperature and/or humidity environments, such as bathrooms.
- Never open the power adapter to avoid electric shock and affecting the warranty.
- For user safety and product protection, do not sit or lean on the machine.
- Do not put any objects into the movable portion, the air inlet and/or outlet.
- Do not place the product directly under air conditioning units to prevent condensed water droplets.
- Please do not attempt to disassemble and repair the product without the presence of professionals to avoid fire, electric shock, and being injured.
- To prevent electric shocks, be sure to follow this manual carefully for cleaning and maintaining. Please do not try to maintain the product otherwise.
- Please ensure to use the power supply unit provided with the appliance only.

Safety marking label of main unit is on the bottom plate of the product.

Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.

Correct disposal of this product. This marking indicates that this product should not be disposed with other household wastes throughout the EU. To prevent possible harm to the environment or human health from uncontrolled waste disposal, recycle it responsibly to promote the sustainable reuse of material resources. To return your used device, please use the return and collection systems or contact the retailer where the product was purchased. They can take this product for environmental safe recycling.

Power warning:
- Place the product near the power outlet for easy use.
- Before use, make sure that the operating voltage is the same as your local power supply. Correct operating voltage can be found on the product plate.

- For safety purpose, unplug the product during lightning storms or when unused for extended periods of time.
- Under normal conditions, the power supply may get hot. Please keep good ventilation in the area and exercise caution.
- Safety warning labels on the housing or bottom of the product or power adaptor.

This symbol is to alert the user to the presence of un-insulated dangerous voltage within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

This symbol is to warn the user not to disassemble the enclosure of the product and there is no user-replaceable part inside. Take the product to an authorized service center for repair.

This symbol indicates that the product is for indoor use only.

For wireless product:
1. Wireless product may generate shortwave radio frequencies and interfere with the normal use of other electronic devices or medical equipment.
2. Turn off the product when it's disallowed. Do not use the product in medical facilities, on airplane, at gas stations, near automatic gates, automatic fire alarm system or other automated devices.
3. Do not use the product in the vicinity of a pacemaker within a 20cm range. The radio waves may affect the normal operation of the pacemaker or other medical devices.
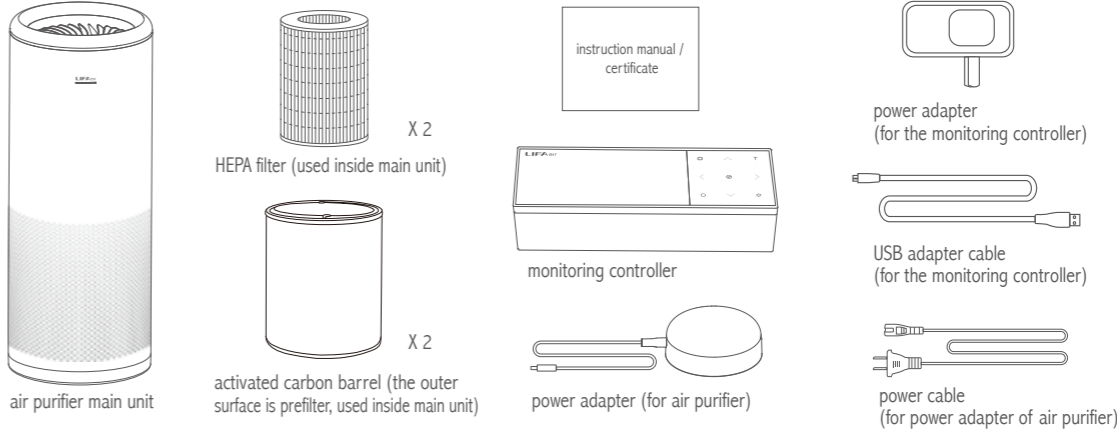
⚠ WARNING!
Danger of explosion if the battery is incorrectly replaced. Replace only with the same or equivalent type.
For products with removable battery, the battery must be properly recycled or disposed. For products with built-in battery, disassembling is prohibited. Never disassemble, hit with force, squeeze batteries or dispose of batteries in fire. Do not expose batteries in conductive materials, liquid, fire or heat. Do not let metal object contact two battery poles. If the battery looks swollen, leaking, discolored, having odor or any abnormal appearance, stop using it. Do not use the battery after immersed in water.
Improper use of battery may lead to explosion or leakage, causing skin burn or other injuries; in the event of battery leakage, handle it with care and immediately dispose of the battery in the manner in compliance with applicable laws and regulations in your locality.

- This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved.
- Children being supervised not to play with the appliance.
- The appliance is only to be used with the unit provided.
- Cleaning and user maintenance shall not be made by children without supervision.
- The appliance must only be supplied at safety extra low voltage corresponding to the marking on the appliance.
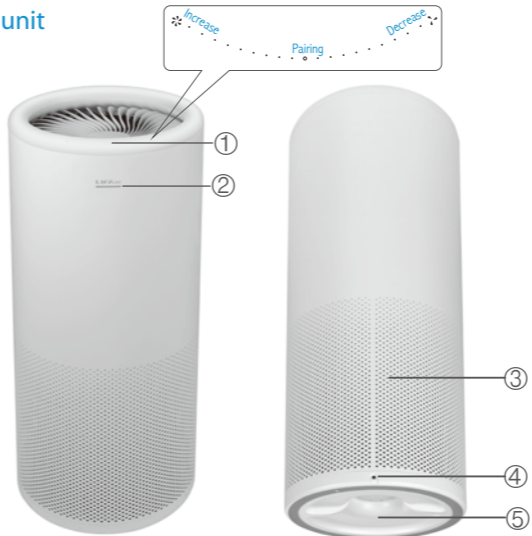
---

air purifier main unit ×1 monitoring controller ×1 power adapter (for air purifier) ×1 power adapter (for the monitoring controller) ×1
USB adapter cable (for the monitoring controller) ×1 power cable (for power adapter of air purifier) ×1
activated carbon barrel ×2 HEPA filter ×2 instruction manual / certificate ×1

instruction manual / certificate

power adapter (for the monitoring controller)

HEPA filter (used inside main unit) X 2

monitoring controller

USB adapter cable (for the monitoring controller)

air purifier main unit

activated carbon barrel (the outer surface is prefilter, used inside main unit) X 2

power adapter (for air purifier)

power cable (for power adapter of air purifier)

Function Description

Main unit

Increase   Pairing   Decrease

① Touch control surface: change fan speed and enter the pairing mode.
② Working status / power indicator light

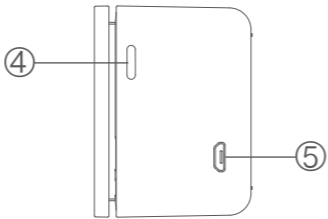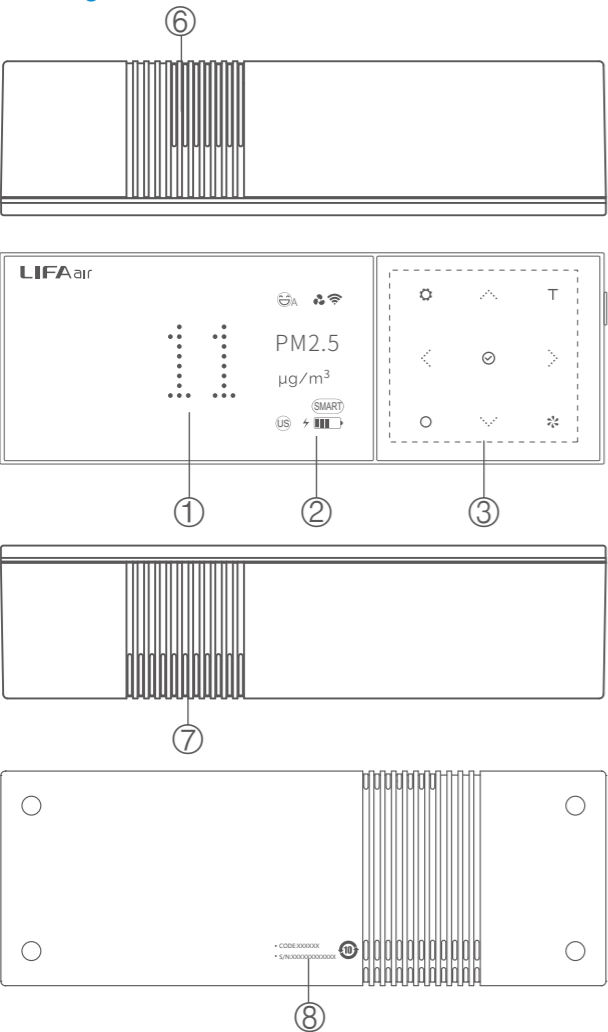| In case the Monitoring controller is not connected |
| --- |
| Green light flashing slowly: standby mode |
| Green light flashing: response to touch control |
| Green light flashing rapidly: pairing with controller |
| Green light remains steady: operating mode |
| In case the Monitoring controller is connected |
| White light flashing slowly: standby mode |
| White light flashing: response to touch control |
| White light remains steady: operating mode |

③ Air intake
④ DC power connector (connect to the power adapter)
⑤ Bottom cover

Note: To avoid blocking the intake and exhaust area. Using plush fabric cushioning may clog exhaust.

English

Monitoring controller

① Main display screen
② Secondary display screen
③ Touch button

     To move selection box or alter the value

    ⚙ Setting: press and hold: enter setting interface
       press: return to previous menu
    T Test: press and hold to check air quality for 5 minutes
    ⊘ Confirm: click to confirm
    ◯ Filter: click to enter filter use and filter reset interface
    ✳ Main unit speed control: click to select purifier's fan
       speed mode (Note 1)
④ Turn ON/OFF / Black screen/light up screen
    Turn ON/OFF: press and hold
    Black screen/light up screen: press
⑤ 5V DC microUSB power connector
⑥ PM2.5 sensor air inlet (Note 2)
⑦ PM2.5 sensor air outlet (Note 2)
⑧ Model identifications
    S/N code: serial number of the monitoring controller
             (required for warranty)
    CODE code: password for APP remote control.
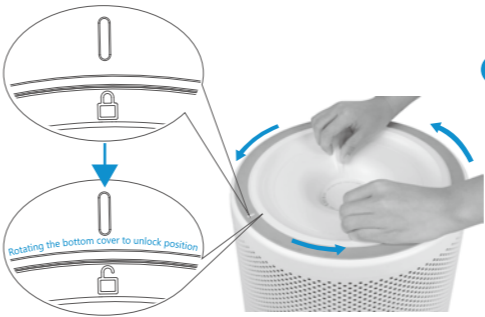   Not case-sensitive.

Note 1: It is only enabled when connected with main unit.
Note 2: To avoid effecting sensor accuracy, avoid blocking the intake and opening. Using plush fabric cushioning may clog exhaust.

English

1 Cover the ground with a soft towel or a protective pad, flip the main unit upside down and rotate the bottom cover to unlock position. Make sure the DC power is cut off.
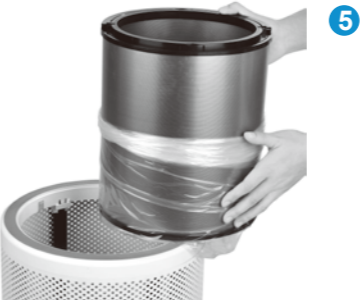
2 Remove the bottom cover.

3 Hold the top of HEPA filter by hand and take out the filter.

4 Open the protective bag to take out the carbon barrel (repeat the same actions to take out filter and carbon barrel at the bottom).

5 Remove the protective bag of the carbon barrel.

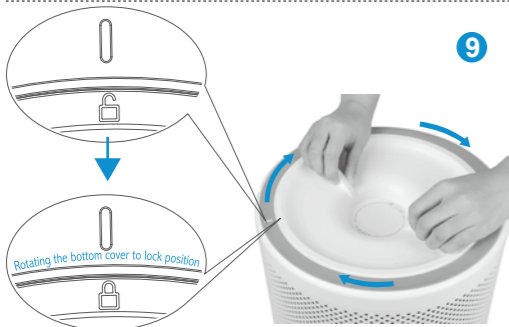**6** Put HEPA filter into the carbon barrel.

English

❼

Put the carbon barrel and filter combination into the main unit and gently shake to the right place (Repeat step 6 and 7 to put the second carbon barrel and filter combination into the main unit).

❽

Close the bottom cover.

❾

Rotating the bottom cover to lock position

Lock the bottom cover (be sure to rotate the bottom cover to the lock position).

❿

The installation is completed. Flip the main unit carefully back to the upright position.

Connect the power supply

Remove the protective strip on the DC power connector, take out the power cord and connect to the power adapter. Connect the adapter to the main unit and then connect to the power source. The main unit will be in standby mode, LED lights will be flashing slowly.
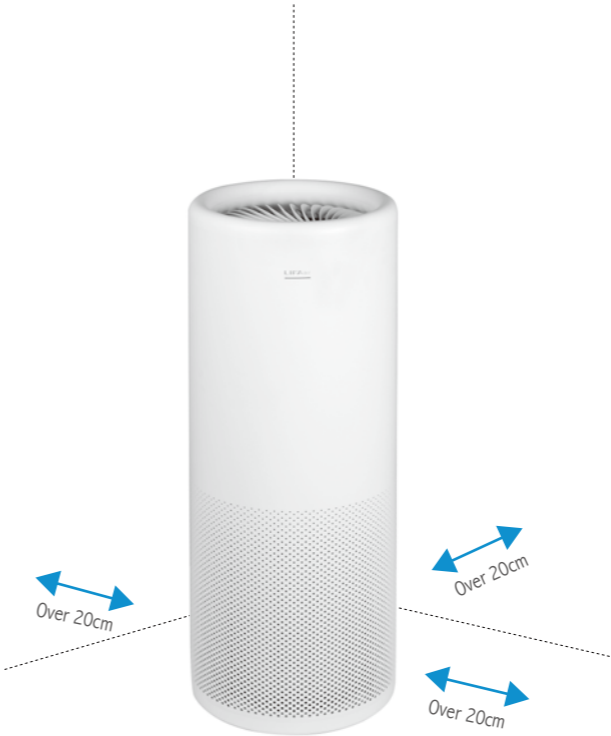
Correct positioning

To achieve the best possible performance of the air purifier, the air inlets should maintain a certain distance from the walls and other obstructions when using the purifier.

Over 20cm

Over 20cm

Over 20cm

Manually control fan speed

The machine is designed with 121 wind speed and it can precisely control the PM2.5 level.

Touch the top circle of the main unit and rotate clockwise to increase the fan speed (Continuously rotate clockwise until the power light remains constant indicating maximum fan speed).

Touch the top circle of the main unit and rotate counter-clockwise to reduce fan speed (Continuously rotate counter-clockwise until the power light blinks slowly in a breathing pattern for zero fan speed and enter standby mode).
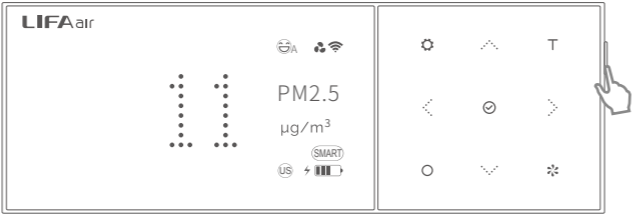
Note: Above diagrams are for reference only, please prevail in kind.

Pairing

The monitoring controller works collaboratively with the main unit through a Bluetooth wireless connection, can be paired with LIFAair smart air purifiers within certain distance.

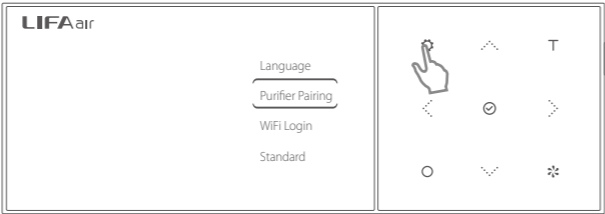1. Press and hold the monitoring controller ON/OFF button to turn it on.

LIFAair

PM2.5
μg/m³

2. Slide anticlockwise on the touch circle of purifier main unit to let the main unit blink green slowly, with one finger press and hold " ○ " icon on the touch circle for over 5 seconds until the green light flashes rapidly. The main unit will then enter pairing mode for 30 seconds.

Note: When pairing, the main unit must be in standby mode (green light slowly flashing; when the main unit flashes white, it has been successfully paired with the controller).
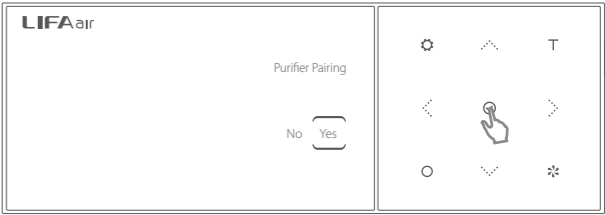
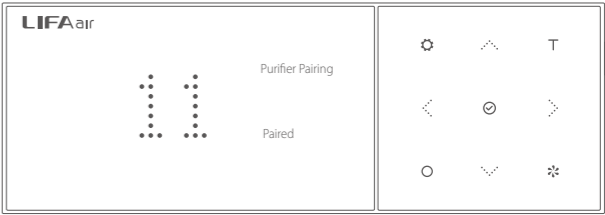3. Press and hold " ⚙ " on the controller, press " ⌄ " to select "Purifier Pairing", then press " ⊘ " to confirm.

LIFAair

Language
Purifier Pairing
WiFi Login
Standard

T

4. Press " ⋮ " to move selection box to "Yes" and press " ⊘ " to confirm, the monitoring controller and main unit will enter auto pairing mode.

LIFAair

Purifier Pairing

No   Yes

T

5. After the pairing is successful, the main unit indicator light will turn white, and the monitoring controller will display "Paired". The " ❀ " icon will appear at the top of the secondary display. If pairing is unsuccessful, please repeat the above steps.
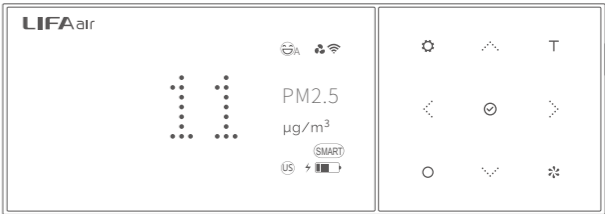
LIFAair

Purifier Pairing

Paired

T

The Monitoring Controller Testing Items

Your smart air purifier monitoring controller can monitor PM2.5, CO_2 and TVOC concentration.
When paired with LIFAair smart air purifiers, it can automatically control purifier main unit and maintain PM2.5 concentration in a healthy range. It can also monitor temperature and humidity.
The monitoring controller will monitor air quality. There are six levels: good, moderate, unhealthy for sensitive groups, unhealthy, very unhealthy, and hazardous. American standards will be more stringent.
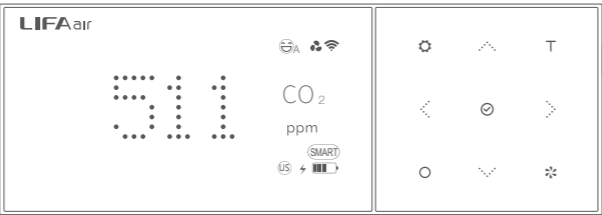
PM2.5 measurement

In the main interface press " ⋅⋅ " and " ⋅⋅ " to switch to "PM2.5" interface.
The Chinese standard requires PM2.5 level to be below $35μg/m^3$. American standard requires PM2.5 level to be under $12μg/m^3$. It takes about 40 seconds for the value to stabilize.
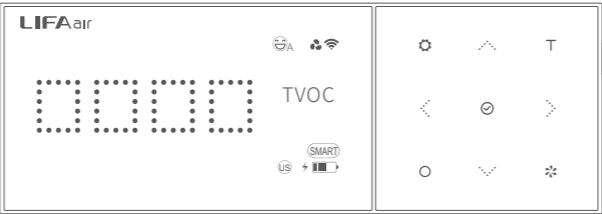
LIFAair

PM2.5
μg/m³

T

CO2 measurement

In the main interface press " ⌄ " and " ⌄ " to switch to "CO2" interface.
CO_2 concentration will display on the monitoring controller, ≤1000ppm is good.
When the concentration is over the standard level, it is recommended to open window for ventilation.
It takes about 40 seconds for the value to stabilize.
The average CO_2 concentration in outdoor air is about 400ppm.

LIFAair
511 CO₂
ppm
SMART

TVOC measurement

In the main interface press " ⌄ " and " ⌄ " to switch to "TVOC" interface.
According to current standards, AQI (air quality index) measurement doesn't account for TVOC. Thus, when the monitoring controller displays "good", it doesn't indicate TVOC is under standard level. It takes about 40 seconds for the value to stabilize.
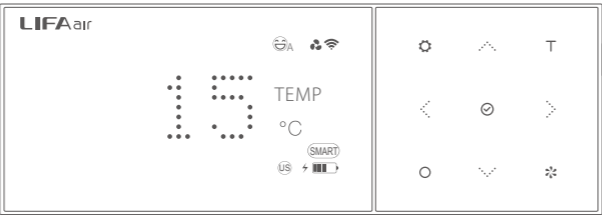
Note: The monitoring controller uses a semiconductor sensor to measure TVOC, it cannot replace professional instruments.
TVOC is divided into five levels:
Good: □ □ □ □   Moderate: □ □ □ ■   Unhealthy: □ □ ■ ■   Very unhealthy: □ ■ ■ ■   Hazardous: ■ ■ ■ ■

LIFAair
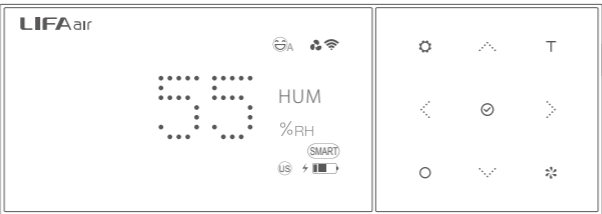□□□□ TVOC
SMART

Temperature measurement

In the main interface press " ⌄ " and " ⌄ " to switch to "TEMP" interface.
It displays the temperature at which the purifier main unit is located.

Note: To enable this function, please ensure the monitoring controller is connected with LIFAair purifier main unit.

LIFAair
15 TEMP
°C
SMART

Humidity measurement

In the main interface press " ⌄ " and " ⌄ " to switch to "HUM" interface.
It displays the relative humidity at which the purifier main unit is located.

Note: To enable this function, please ensure the monitoring controller is connected with LIFAair purifier main unit.
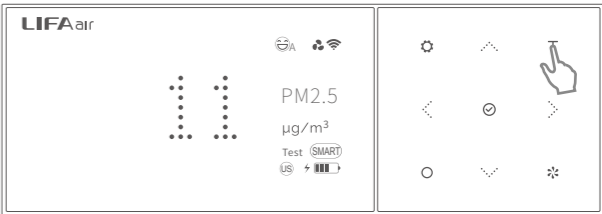
LIFAair
55 HUM
%RH
SMART

English

Press and hold "T", the controller will continuously monitor air quality and will display for 5 minutes. The "Test" icon will blink on the secondary display screen. Press "T" to exit this mode at any time during this process.
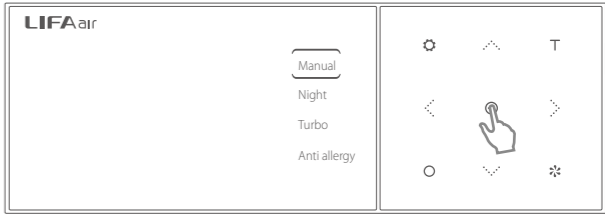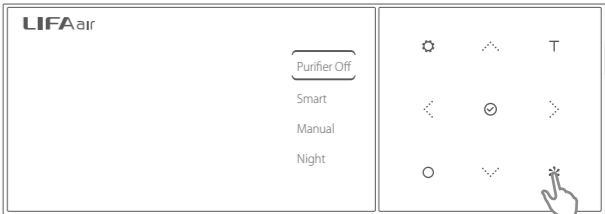
LIFAair
11 PM2.5
μg/m³
Test SMART

Note: After pairing with the unit (main unit indicator light is white), the controller will regularly monitor air quality and auto-control the operation of the main unit, despite of what aforementioned mode is selected.
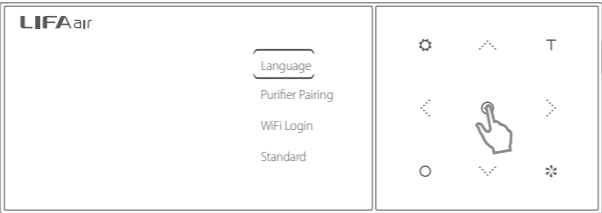
How to Operate the Monitoring Controller
To enable full autonomous operation, please ensure the monitoring controller is connected to the main unit.

1. Control the main unit: Press " ✳ " to enter speed mode selection interface (paired with the main unit), press " ⌄ " " ⌄ " to move selection box and press " ⊘ " to select different purification mode.

Purifier Off: Power on/off purifier.
Smart Mode: According to real-time indoor air quality, the monitoring controller will auto-adjust the main unit's fan speed (recommended mode).
Manual Mode: Manually adjust the fan speed of the main unit; the fan speed will be held at set value.
Night Mode: Fan will run at ultra-low noise level, to ensure a comfortable sleeping environment. Fan speed will remain at constant speed.
Turbo Mode: Maximum fan speed, rapid purification.
Anti Allergy: The main unit will continue to run at a specified fan speed and will not be affected by PM2.5 concentration during this period. It is recommended to enable this function during flu or pollen season.
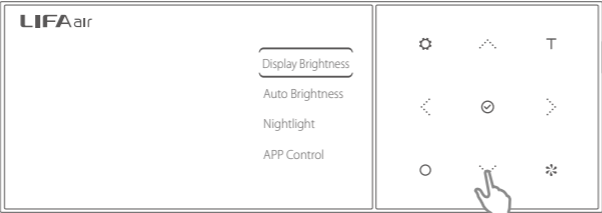
LIFAair
Purifier Off
Smart
Manual
Night

LIFAair
Manual
Night
Turbo
Anti allergy

English

2. Press and hold "⚙" to enter settings interface, press " ⌣ " " ⌣ " to select and press " ✓ " to confirm modification, then press "⚙" again to return to main interface.

Language: 中 → Chinese mandarin;
            EN → English.

Purifier Pairing: Can be paired with LIFAair smart air purifier. "No" is default.

WiFi Login: Download LIFAair mobile APP to facilitate process. Refer to P14-P16 for details.

Standard: Select the air quality standard (Chinese or American) as the purification standard; If American standard is selected, the fan will operate at higher levels, especially at night.

Display Brightness: Adjust the screen brightness. Default is "Low".

Auto Brightness: The brightness of the monitoring controller and the main unit can vary according to the ambient light. If "Off" is selected, the monitoring controller display will be set at the lowest brightness when the surrounding is dark; if "On" is selected, the display screen of the controller will be off at this moment. "On" is default.

Nightlight: If this function is enabled, at night when the monitoring controller enters time display, touch any button the main display screen will all be lit and remain at the highest brightness for 3 minutes. Press any button to show corresponding content. "Off" is default.

APP Control: Permit or forbid mobile phone APP to control the main unit. If "Off" is selected, APP can only view the monitoring controller display, it will not be able to control the monitoring controller. "On" is default.

Purifier Control: Toggle touch control functionality on/off. To avoid accidental touch, turn touch control off. "On" is default.

Night Eco: When turned on, the main unit will automatically decrease fan speed between 22:00-6:00 to reduce noise level and conserve energy. "On" is default.

Time Setting: Select "Yes" and manually press " ⌣ " " ⌣ " " ⌣ " " ⌣ " buttons to adjust time. "No" is default. (Note)

Factory Settings: Select confirm, the monitoring controller will be restored to factory settings. "No" is default.

LIFAair
Language
Purifier Pairing
WiFi Login
Standard

LIFAair
Display Brightness
Auto Brightness
Nightlight
APP Control

LIFAair
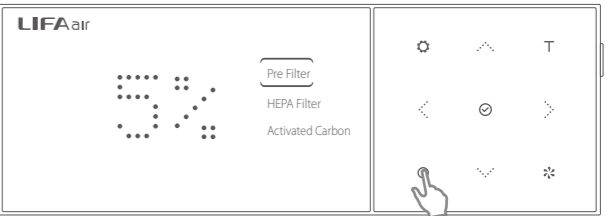Purifier Control
Night Eco
Time Setting
Factory Settings

CO_2 Calibration: Please follow the screen prompt to calibrate CO_2 value to zero, so as to ensure its accuracy. Generally, it is unnecessary to calibrate. "No" is default and see P13 for details.

LIFAair
Night Eco
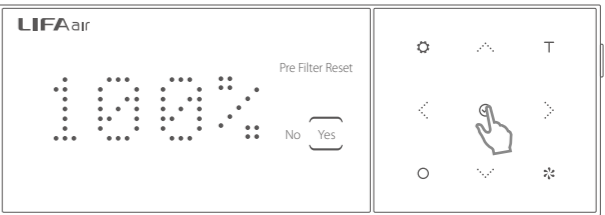Time Setting
Factory Settings
CO_2 Calibration

Note: The monitoring controller will automatically sync to local time zone once connected to Wi-Fi via cloud server. Please note this function may be not applicable in certain areas, please set time manually if so.

3. Filter checking

LIFAair series smart purifiers all implemented advanced filter life-span calculation algorithm, it accurately calculates filter usage. Press " ◯ " to enter filter monitoring interface, press " ⌣ " " ⌣ " to separately view each filter's life status. The filter should be replaced when the monitoring controller indicates the filter's capacity is less than 5%.
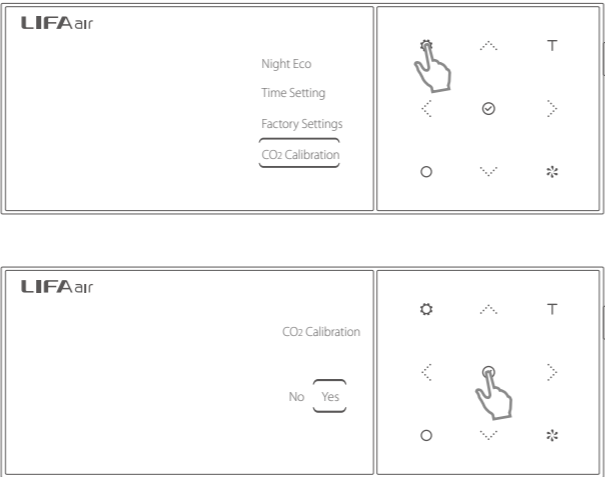
LIFAair
5%
Pre Filter
HEPA Filter
Activated Carbon

After cleaning or replacing the filter, please press " ✓ " to enter filter reset interface. Select "Yes" to reset, the monitoring controller will then restart the monitoring process.

LIFAair
100%
Pre Filter Reset
No   Yes

How to calibrate CO2:

CO2 sensors have been pre-calibrated. If there appears to be a systematic error, proceed to recalibrate.
Calibration method:
Place the monitoring controller outdoors, ensure sufficient ventilation. After 10 minutes, turn on the monitoring controller and perform two "Continuous measurement" procedures. After the second "Continuous measurement", wait for 3 minutes. Press and hold " ⚙ " to enter main interface, press " ⌒ "" ⌄ " to move selection box to "CO2 calibration" and press " ⊘ " to enter selection interface, then press " ⟨ "" ⟩ " to select "Yes" and press " ⊘ " again to calibrate CO2 value to 400ppm.
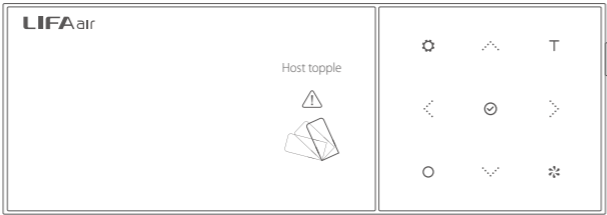

Note: If maloperation occurs, please select "Factory Settings" in the main menu to restore to default factory settings.
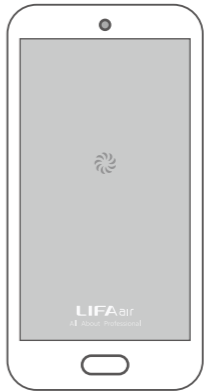
Warning

Main unit tilting:

Do not tilt main unit during operation. If it is tilted over 45 degrees, the monitoring controller screen will display such warning, and the main unit will stop operating until it is restored back to upright position. The warning icon will then also disappear.

Note:
* When the monitoring controller is disconnected from its power supply, after each monitoring cycle the monitor will automatically enter standby mode. The main and secondary display will be off, until the main power supply is connected.
* In standby mode, if the monitoring controller is paired with the main unit, the monitoring controller will still control and operate the main unit, despite the display being off.
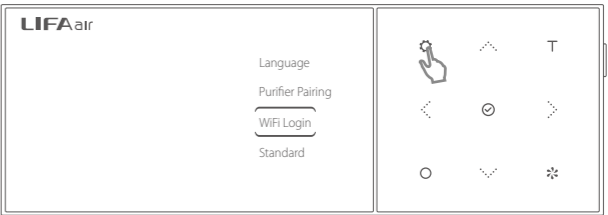
English

Scan the above QR code using smart phone. The same QR code can also be found at the bottom of the monitoring controller.

Download and install APP

Open the LIFAair App, press the "+" on the phone screen

Make sure your phone is connected to the Wi-Fi network you would like the monitoring controller to connect to.

Press and hold " ⚙ " on the monitoring controller to enter the main menu, press " ⌄ " to select "WiFi Login" and press " ⊘ " to confirm.
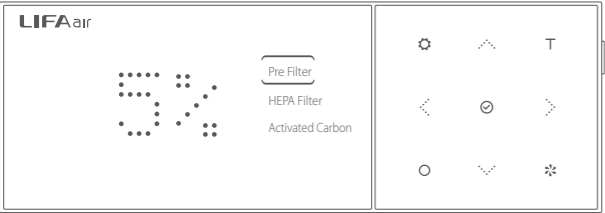
English

Press " ⋮ " to select "Login" and press " ⊘ " to confirm.

Press "Done" on your smartphone.

Network connected

After successfully connecting to the internet, select "connect to the monitoring controller", enter the monitoring controller password (last 6 digits of CODE, located at the back of the monitoring controller, not case-sensitive).

After successfully connecting, the main unit can be controlled via phone through the monitoring controller, and the on-screen display data will sync with that of the monitoring controller's.

When the monitoring controller is connected successfully and returns to the main interface, " 📶 " will constantly show on the top of the secondary display, indicating it is connected.

Note: To control main unit via phone and to read data such as temperature, humidity, filter life-span etc. the monitoring controller must be connected to the main unit.
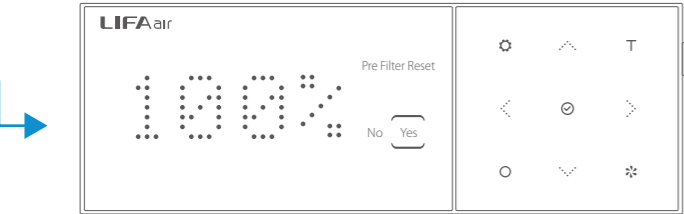
Note: Due to product and software upgrades, operation interfaces shown on this manual may be slightly different from actual product. If any difference is found, the actual product prevails.

Filter Change (be sure the main unit is not operating, unplug the power cord and then proceed to clean/replace filters)

Pre Filter
HEPA Filter
Activated Carbon

Refer to "Initial Installation", open bottom lid and replace filters.

Switch filters when the monitoring controller indicates the filter capacity is less than 5%.

Pre Filter Reset

No Yes

Prefilter Reset

Prefilter Cleaning

To clean the prefilter, remove the two carbon barrels. Clean off the dust on the outer surface of the carbon barrel. Please carry out this procedure outdoors. Reinstall the carbon barrels, and press the "Reset" button in the respective controller interface to confirm.

Note: Do not use a wet towel to clean the prefilter to avoid clogging the prefilter.

English

Product Name: Smart Air Purifier

Model number: LA503

Particle Clean Air Delivery Rate (CADR particulate matter): 450m³/h

Particle Cumulate Clean Mass (CCM particulate matter): P4 level

Particle Removal Efficiency: high efficient level

Formaldehyde Clean Air Delivery Rate (CADR formaldehyde): 240m³/h

Formaldehyde Cumulate Clean Mass (CCM formaldehyde): F4 level

Formaldehyde Removal Efficiency: high efficient level

Noise: Night mode: 34dB (A)

Turbo mode: 66dB (A)

Application area: 31m² ~54m²

PM2.5 sensor: Laser type

TVOC sensor: Semiconductor type

Declaration for EU

Frequency Band (Wi-Fi): 2.412GHz-2.484GHz

Frequency Band (Bluetooth): 2.402GHz-2.480GHz

RF Power output: ≤20 dBm (EIRP)

There is no restriction of use.

Note: for application area, it is in accordance with GB/T18801-2015 calculated based on the value of CADR for particle.Performance data above are in accordance with GB/T18801-2015 tested by the third-party laboratories by using particular soot particles or gaseous pollutants as targeted pollutants.

Troubleshooting

Purifier not working?
Please check whether the power cord is correctly connected.
Please check whether the purifier is in minimum wind speed.
Please check whether the bottom cover is in the lock position.

Running noise?
Please check whether the filter is installed.
Please check whether the protective bags of the carbon barrels have been removed.

Unable to connect the monitoring controller to the main unit?
Please follow the step-by-step instructions on Page 7- page 8 "Pairing" to connect.

Customer Service – International
If you have any questions, please contact us at care@lifa-air.com or visit us at www.lifaair.com

Please note: All right to change or modify of the product without prior notice are reserved.

English