



LIFAair

LIFAair International Limited

Manufactured by Dongguan LIFAair Technology Ltd.
Address: No. 2, East Industry Road, Songshan Lake Science &
Technology Industrial Park, Dongguan, 523808, CHINA
www.lifaair.com Designed in Finland

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 is not being used for a long period of time.
- Do not use this machine in rooms with large temperature differences to avoid water 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 impact on warranty.
- For user safety and product protection, do not sit or lean on the machine.
- Do not put 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.
- With the exception of professional maintenance personnel, please do not attempt to repair the product.
- To prevent electric shocks, be sure to follow the requirements of the method and manner of this manual for cleaning and maintaining the product. Please do not try to maintain the product in any other way.
- Please ensure that the machine is used only with the power supply unit provided with the appliance.

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.
- 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.

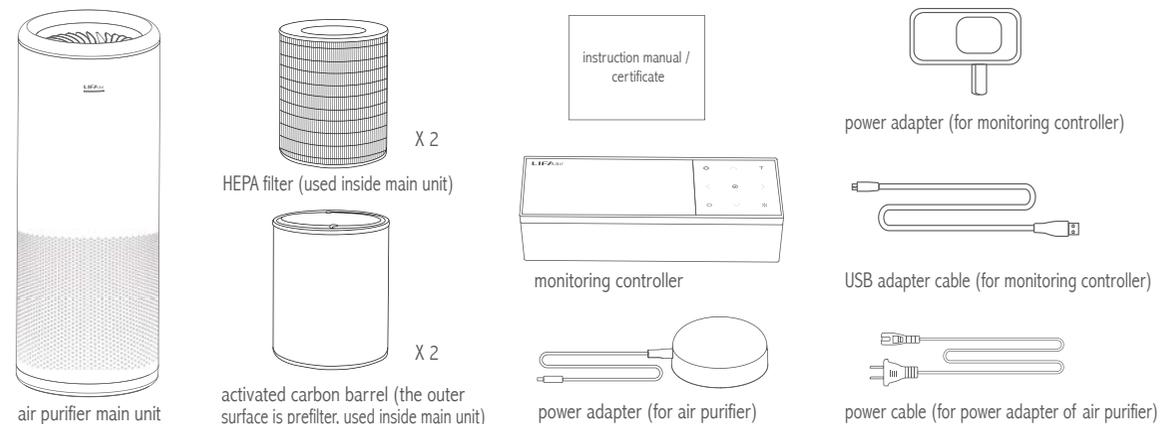


WARNING!

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.

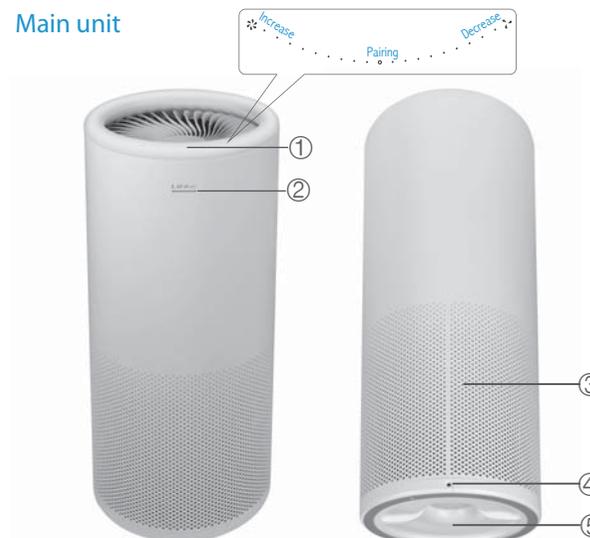
Packing List

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



Function Description

Main unit



- 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

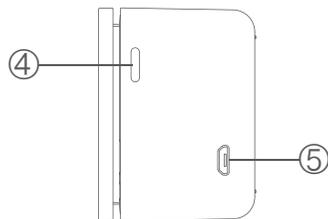
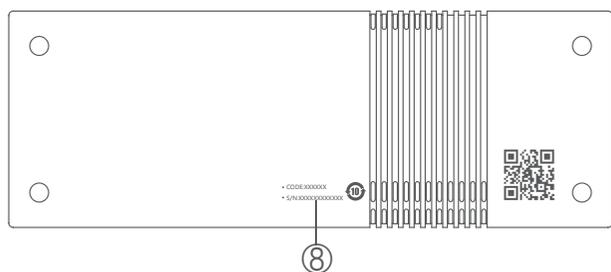
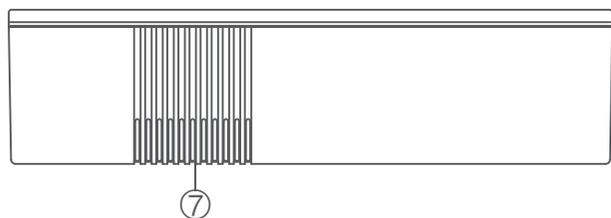
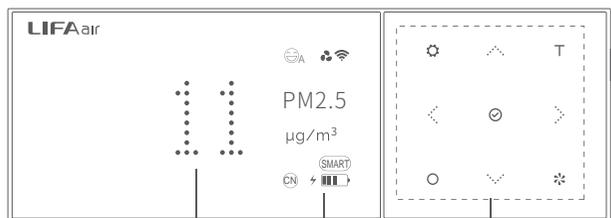
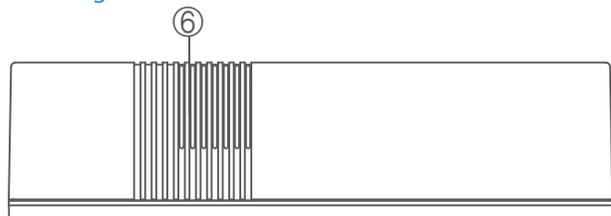
- ③ Air intake
- ④ DC power connector (connect to the power adapter)
- ⑤ Bottom cover

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

Function Description

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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 into 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 into 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 monitoring controller (required for warranty)
 - CODE code: password of APP remote control. Not case-sensitive.

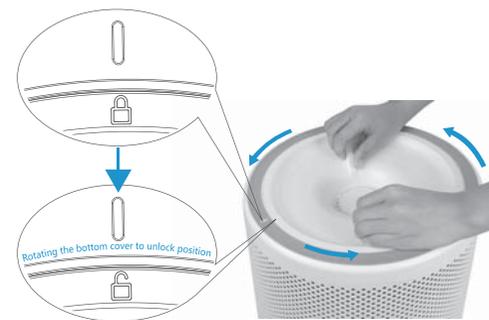
Note 1: It is only enabled when connected with LIFAair smart air purifier.

Note 2: To avoid effecting sensor accuracy, avoid blocking the intake and exhaust area. Using plush fabric cushioning may clog exhaust.

English

Initial Installation

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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.



Remove the bottom cover.



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



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



Remove the protective bag of the carbon barrel.



Put HEPA filter into the carbon barrel.

English



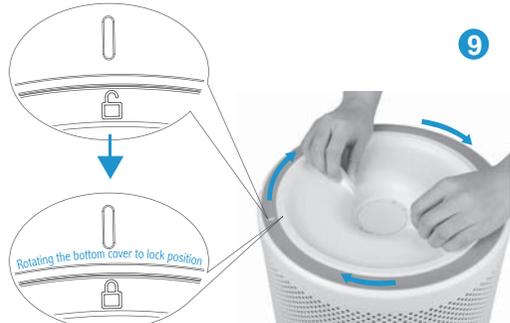
7

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).



8

Close the bottom cover.



9

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

10



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.



Note: Above diagrams are for reference only, please prevail in kind.

Manual 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 wind speed).



Touch the top circle of the main unit and rotate counter-clockwise to reduce wind speed (Continuously rotate counter-clockwise until the power light blinks slowly in a breathing pattern for zero wind speed and enter standby mode).

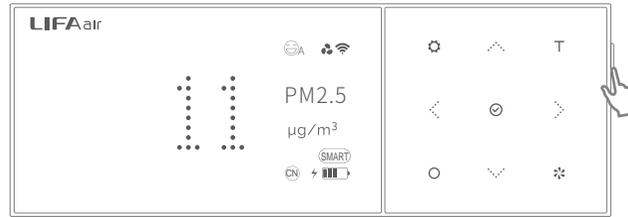
Monitoring Controller Pairing with the Main Unit



Pairing

Monitoring controller works collaboratively with the main unit through a special 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.

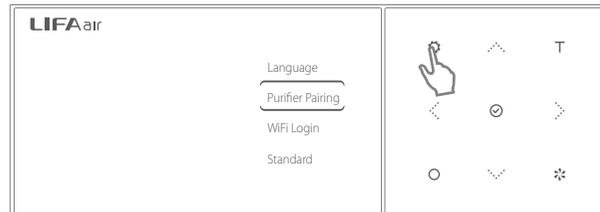


2. Slide anticlockwise on the touch circle of purifier main unit to let the main unit blink green slowly, with one finger press and hold "●" icon on the touch circle for over 5 seconds until the green light flashes rapidly. The main unit will then enter pairing mode for 30 seconds.



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).

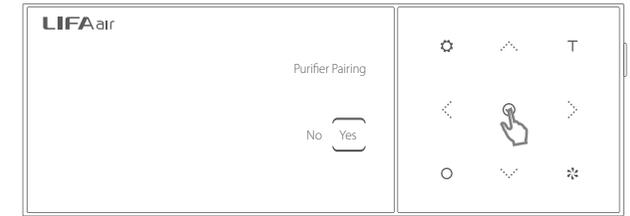
3. Press and hold "⚙️" on the controller, touch "☰" to select purifier pairing, then click "✔️" to confirm.



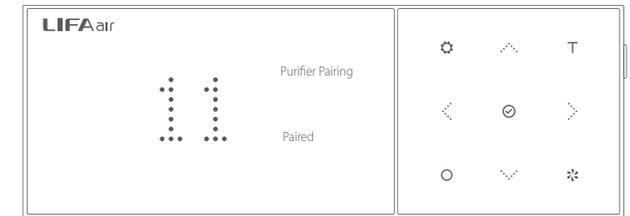
Monitoring Controller Pairing with the Main Unit



4. Touch "☰" to move selection box to "Yes" and press "✔️" to confirm, the monitoring controller and main unit will enter auto pairing mode.



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



Monitoring Controller Testing Items

Your smart air purifier monitoring controller can monitor PM2.5, CO₂ 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.

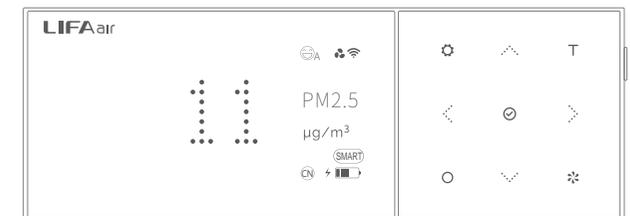
It can also monitor temperature and humidity.

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/m³. American standard requires PM2.5 to be under 12μg/m³. It takes about 40 seconds for the value to stabilize.



Monitoring Controller Testing Items

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CO₂ measurement

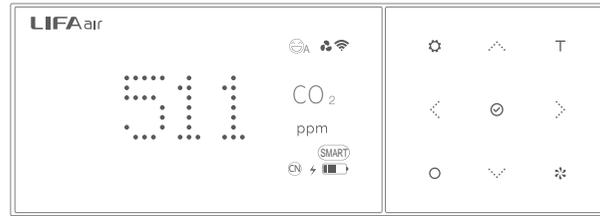
In the main interface press “.” and “.” to switch to “CO₂” interface.

CO₂ 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 CO₂ concentration in outdoor air is about 400ppm.



TVOC measurement

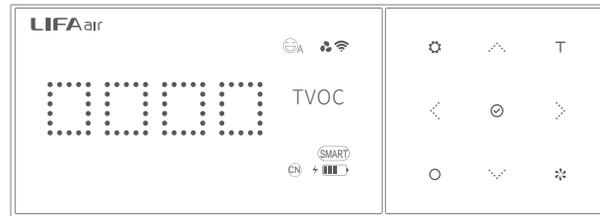
In the main interface touch “.” and “.” to switch to “TVOC” interface.

According to national 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 national 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:

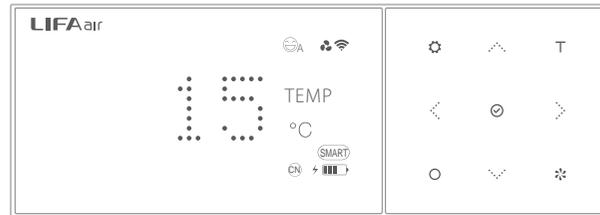


Temperature measurement

In the main interface touch “.” and “.” to switch to “Temperature” 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.

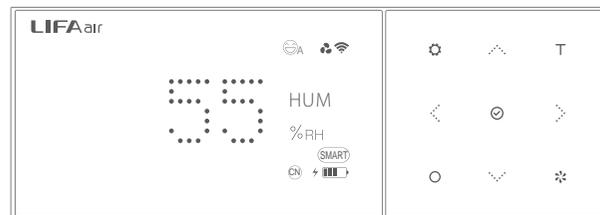


Humidity measurement

In the main interface touch “.” and “.” to switch to “Humidity” 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.

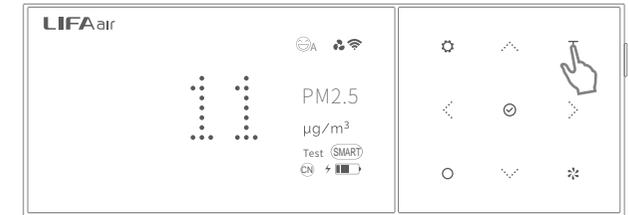


English

Short Time and Continuous Monitoring of Monitoring Controller

10

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. Press “T” to exit this mode at any time during this process.



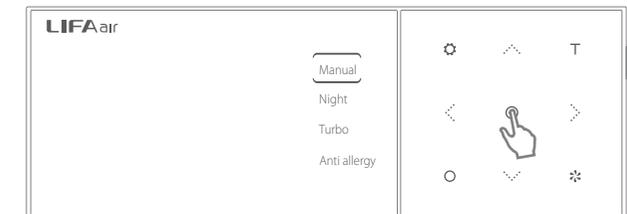
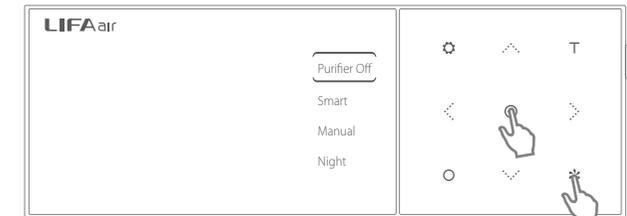
Note: After pairing with the unit (main unit indicator light is white), the controller will regularly monitor air quality and auto-control the operation of the main unit, despite of what aforementioned mode is selected.

How to Operate Monitoring Controller

The monitoring controller is the core of intelligent control; it should as far as possible online pair with the main unit.

1. Control the main unit: Touch “*” to enter into speed mode selection interface (paired with the main unit), touch “.” “.” to move selection box and click “☉” to select different purification mode.

- Purifier Off: Power on/off fresh air purifier.
- Smart Mode: According to real-time indoor air quality, the monitor 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.



English

2. Press and hold "⚙️" to enter settings interface, touch "⏪" "⏩" "⏴" "⏵" to select and click "✅" to confirm modification, then touch "⚙️" again to return to main interface.

- Language:** 中 → Chinese mandarin; EN → English; "中" is default.
- 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. Default is Chinese standard.
- Display Brightness:** Adjust the screen brightness. Default is "Low".
- Auto Brightness:** The brightness of the controller and the main unit can vary according to the ambient light. If "OFF" is selected, 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 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 monitor display, it will not be able to control the monitor.
- Purifier Lock:** 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 touch "⏪" "⏩" "⏴" "⏵" buttons to adjust time. "No" is default. (Note)
- Factory Setting:** Select confirm, the monitoring controller will be restored to factory settings. "No" is default.



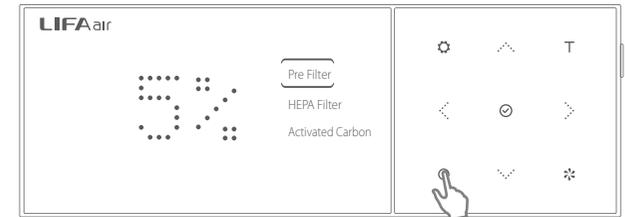
CO2 Calibration: Please follow the screen prompt to calibrate CO2 value to zero, so as to ensure its accuracy. Generally, it is unnecessary to calibrate. "No" is default and see P13 for details.



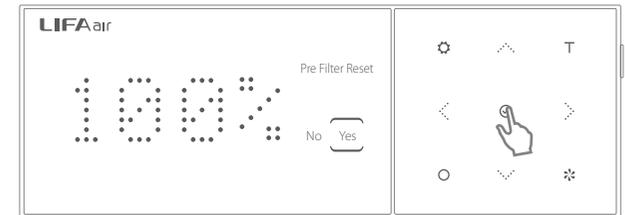
Note: The controller will automatically sync to local time zone once connected to Wi-Fi via cloud server. Please note this function may be not applicable in certain areas, please set time manually if so.

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, touch "⏪" "⏩" "⏴" "⏵" to separately view each filter's life statuses. The filter should be replaced when the monitor indicates the filter's capacity is less than 5%.



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

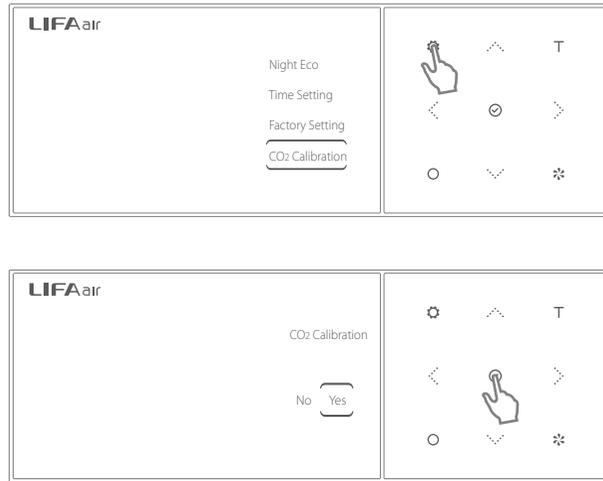


How to calibrate CO2:

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, touch "⏏️" 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.

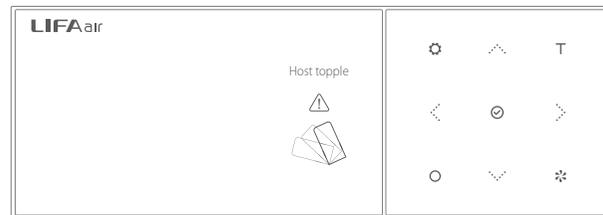


Note: If maloperation occurs, please select "Factory Setting" in the main menu to restore to default factory settings.

Warning

Main unit tilting:

Do not tilt main unit during operation. If it is tilted over 45 degrees, the monitor 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 internal battery is used to power the monitor, 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 monitor is paired with the main unit, the monitor will still control and operate the main unit, despite the display being off.



Scan QR code using a mobile phone or scan QR code at the bottom of monitoring controller



Download and install APP



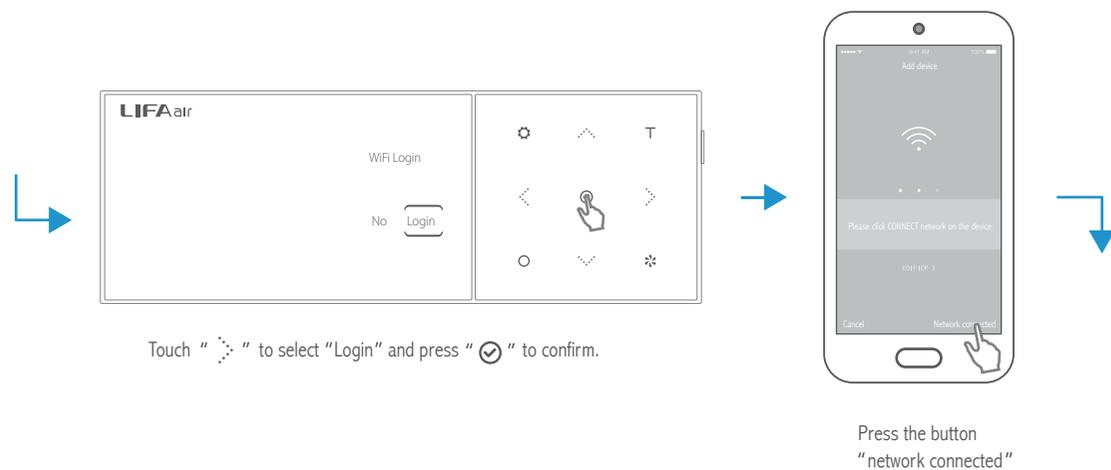
Open LIFAair, Click the "+" on the phone screen to add device



Make sure your phone is properly connected to Wi-Fi network, enter Wi-Fi password



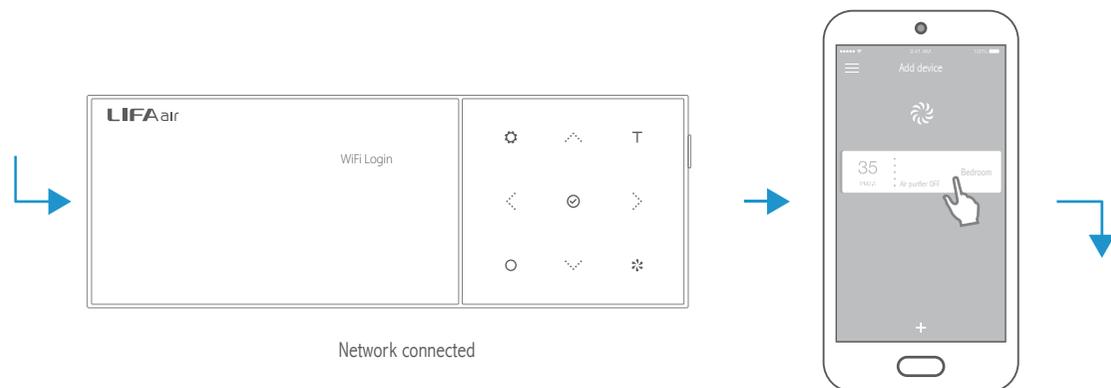
Press and hold "⚙️" on the monitoring controller to enter the main menu, touch "⏏️" to move selection box to "WiFi Login" and press "⏏️" to confirm.



Touch "  " to select "Login" and press "  " to confirm.

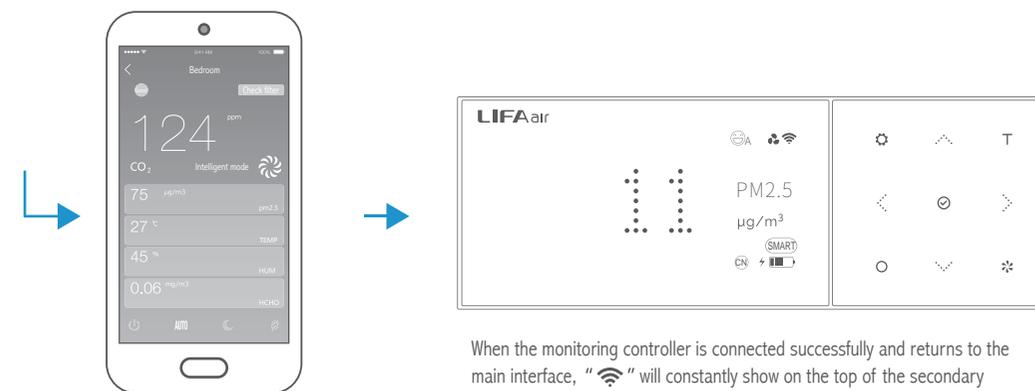


Press the button "network connected"



Network connected

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



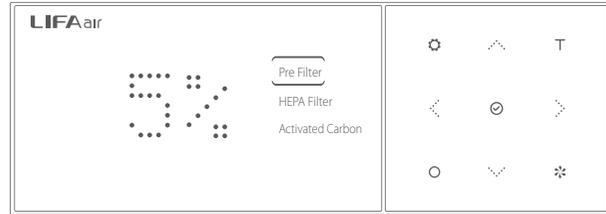
After successfully connecting, the main unit can be controlled via phone through the monitoring controller, and the on-screen display data will sync with that of the monitor's.

When the monitoring controller is connected successfully and returns to the main interface, "WiFi" 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.

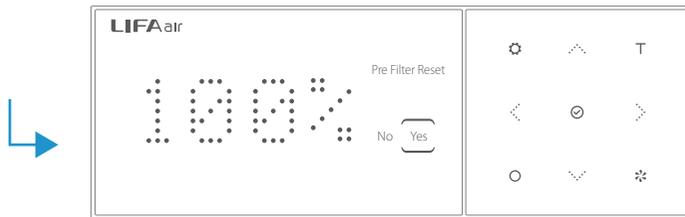
Note: Due to product and software upgrades, operation interfaces shown on this manual may be slightly different from actual product. If any difference is found, the actual product prevails.

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



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

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



Pre-filter Reset

Clean the pre-filter



To clean the pre-filter, 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 pre-filter to avoid clogging the pre-filter.

Product Name: Smart Air Purifier

Product Type: LA503

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

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

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

Formaldehyde Cumulate Clean Mass (CCM formaldehyde): F4 level

Formaldehyde Removal Efficiency: high efficient level

Particle 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

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

Frequency Band (Bluetooth): 2.402GHz-2.480GHz

RF Power output: ≤ 20 dBm (EIRP)

There are no restrictions 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.

Monitoring controller can't connect with main unit?

Please pair with main unit by referring to "Monitoring controller pairing with the main unit" steps on the Page 7-8.

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 that we reserve the right to change or modify our product without prior notice.