



NCCO Air  
Treatment Unit



# Operation Manual

Model: WH50P

## WARRANTY CARD ATTACHED

Thank you for choosing Westinghouse NCCO Air Treatment Unit.  
Before using and maintaining this appliance, please read this manual carefully and thoroughly.  
Please read the "Safety Instructions" carefully before using this appliance.  
Failure to follow the instructions to use this appliance may result in injury or property damage.  
Please keep this manual in a safe place for future reference.  
Please keep the warranty card for future repairs.



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Please Follow Instructions Below

## Safety Instructions

## Basic Information

- Before using the appliance, please read the safety and operation instructions carefully and thoroughly.
- This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.
- If the power cord is damaged, it must be replaced by either the manufacturer, a service agent, or a qualified service professional.
- Prior to cleaning or maintaining, the appliance must be unplugged and disconnected from its power source.
- To reduce the risk of electric shock, this equipment has a polarized plug (one blade is wider than the other). This plug will fit in a polarized outlet only one way. If the plug does not fit fully in the outlet, reverse the plug. If it still does not fit, contact qualified personnel to install the proper outlet. Do not alter the plug in any way.

■ **In order to avoid injury, safety instructions must be followed.**  
The below symbols classify the risk or degree of injury that may occur as the result of incorrect operation.



**WARNING**

This symbol indicates 'if not follow the warning, it would cause injury or death.'



**PRECAUTION**

This symbol indicates 'if not follow the precaution, it would cause injury or property loss.'

■ **NOTE:** Take note of the symbols below and follow accompanying instructions carefully.



**PROHIBITION**



**MANDATORY**








- **Do not move the unit by pulling on the power cord.**
  - (Otherwise the power cord could be damaged, resulting in fire or electric shock.)
- **Do not damage the power line or the plug.**
  - Do not cut, refitting, over twisting, extruding power line. Do not put the power line near to any heatsources, do not put any heavy objects over the power line. (Otherwise the power line could be damaged, resulting in fire or electric shock.)
- **Do not use power source other than 120Vac, 60Hz.**
  - (Otherwise the power line would overheat, resulting in fire.)
- **Do not put fingers, metal, or any other objects into air inlet / outlet or gap.**
  - (Otherwise it could result in electric shock or injury.)
- **Do not touch power plug with wet hand.**
  - (Otherwise it could result in electric shock.)
- **Do not place the unit in a location near a water / liquid source or where it can easily get wet.**
  - (Otherwise, the unit may be short-circuited, and resulting in fire or electric shock.)




- **Do not disassemble, repair, or modify the unit on your own.**
  - (Otherwise it could result in fire or electric shock. If maintenance work is needed, please contact Customer Service Centre or the distributor.)



- 
**When any of the following situations occur, please stop operating the unit and disconnect the power supply immediately.** (Otherwise, it may lead to electric shock, fire or smoke.)
  - When the power line is moved, the unit stops operating.
  - If any control button fails.
  - If the circuit breaker works or the fuse burns out.
  - If the power line or plug is unusually hot.
  - If you notice burning odour or abnormal sound or vibration.
  - If there are any other abnormal phenomena or faults.
 → Stop operating unit, pull out power plug, and contact Customer Service Centre or distributor for inspection and maintenance.
- Please regularly clean the plug.**  
 (If there is dust and moisture on the plug, it may damage the insulation part of the plug and cause fire.)
  - Pull out the power plug and wipe it with a dry cloth.
  - Pull out the power plug when the unit is not used for a long time.
- Make sure disconnect the power supply before maintaining the unit.**  
 (Otherwise the unit may suddenly operate, resulting in electric shock or injury.)
- Ensure that the power cord is securely and completely inserted into the power outlet before use.**  
 (Otherwise it may cause fire or electric shock if the power line is overheated.)
 
- Do not use damaged power plugs or power sockets.
 

- 
**Do not place the unit in the following places:**
  - Unstable place.  
(Otherwise the unit may fall off, resulting in injury or damage to the unit.)
  - Bathroom, kitchen or other places with high humidity / temperature.  
(Otherwise the unit may be damaged or suffer from electric leakage, resulting in fire, electric shock or personnel injury.)
  - Places where oil or flammable gas may leak.  
(Otherwise fire may occur in the inhaled monitor, leading to fire.)
  - Near heater or other heat sources.  
(Otherwise the unit may be overheated, leading to fire disaster.)
- Do not use gasoline or other volatile mixed solvents to wipe the unit.**  
 (Otherwise, the unit may rupture or short circuited, resulting in injury, fire or electric shock.)
- Do not operating the unit while smoking pesticide is used.**
  - (Otherwise, the pesticide may accumulate in the unit and then released from the outlet, endangering health.)
  - After using pesticide, the room should be ventilated thoroughly, before the unit can be operated.
- Do not block the air inlet or outlet by placing clothes, books or other obstacles.**  
 (Otherwise, blocking the air outlet may lead to smoke and fire.)
- Do not sit, stand or lean on this product.**  
 (Otherwise, the unit may be overturned, resulting in injury or unit damage.)
  - If children is around, please supervised carefully.
- Do not approach the unit with ignited cigarettes, incense and others.**  
 (Otherwise, flammables may be sucked into the unit and cause fire.)
- Do not spray flammable materials such as insecticides or air fresheners around this product.**


- 
**Please pull out the power plug at the hand plug position.** (Otherwise, the power line may be damaged, resulting in fire or electric shock.)
 

**Patented NCCO Air Purification Technology Brings Fresh and Clean Air**

Patented NCCO (Nano Confined Catalytic Oxidation) Air Purification Technology is invented by Member of HKUST Entrepreneurship Program, and has obtained global patents. Our technology can solve indoor air quality problems in an all-round way, create a home / office environment with fresh air, and protect you and your family's health.



**NCCO Technology's Characteristics**

- ◆ Patented NCCO Technology continuously removes bacteria and viruses efficiently.
- ◆ Patented NCCO Technology effectively decomposes carcinogens in the air, such as formaldehyde.
- ◆ Hazardous pollutants will be decomposed into harmless water molecule and carbon dioxide, and will not accumulate in the filter, effectively avoiding re-release into the air due to saturation, and will not cause secondary pollution.
- ◆ Under normal maintenance conditions, NCCO Reactor can be used for a long time. Since there is no need to replace NCCO Reactor frequently, the operating cost is much lower than similar products on the market.
- ◆ Effectively remove offensive odour.
- ◆ Patented NCCO Technology has been widely used in different industries, such as schools, hospitals, nursing centers and public toilets.

**About Intelligent Power-Off Protection System**

The unit will intelligently power off, as well as all extinguished indicators, after continuous use over a period of 8 hours and then will restart automatically after 30 minutes downtime. During downtime, user can still restart unit by pressing ON / OFF Button. Our intelligent power-off system is able to effectively avoid excessive load and eliminate any risk during the supply of power.

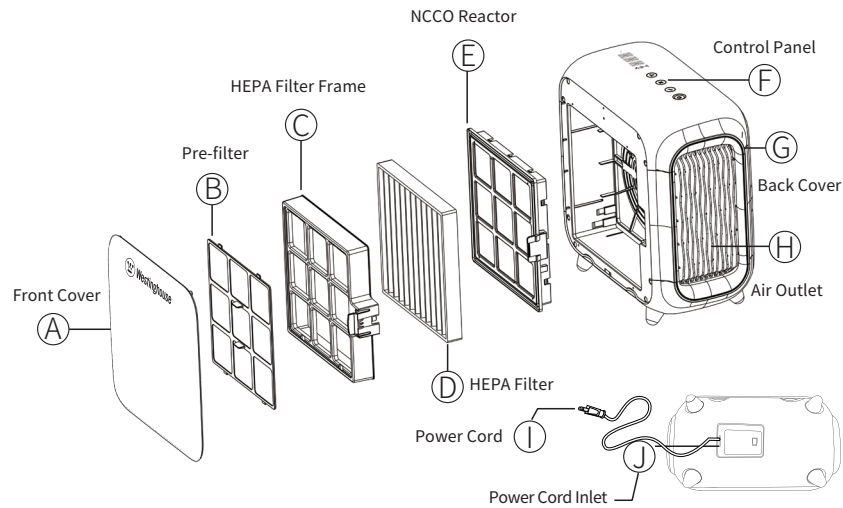
**Placing Area Guideline**

- Indoors**  
 As dust falls on the floor, it is recommended to place the unit on a flat surface in the room.
- Excellent Air Circulation**  
 Placing the unit on a dry, solid, level surface, and ensure the unit is provided with reasonable space of at least 15 cm from any objects, in order to operate effectively.
- Do not put the unit in the following places:**
  - In the direct sunlight; blown by air conditioner; high temperature area. (Otherwise, it may cause deformation, aging, discoloration or reduction of service life.)
  - Distance over 1 meter to objects such as televisions and radios. (Otherwise, it may lead to image disorders and lost of sound.)
- Do not use the same power outlet with TV, radio and other equipment.**  
 (Otherwise, it may lead to image disorders and lost of sound.)  
 →Please plug into other power outlets.
- Do not place any items on top of the unit.**  
 (Otherwise, the unit may be malfunctioned.)
- Do not place objects at air inlet and outlet.**  
 (Otherwise, it may affect the operating performance.)

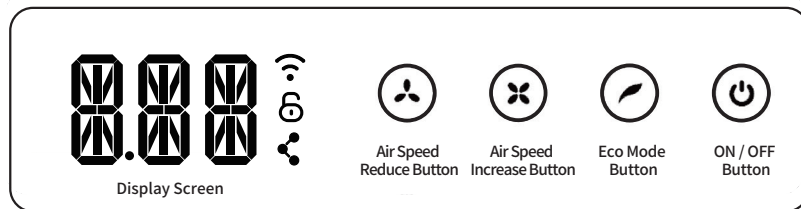
## Main Parts & Components

## Basic Information

### Illustration Diagram:



### Control Panel:



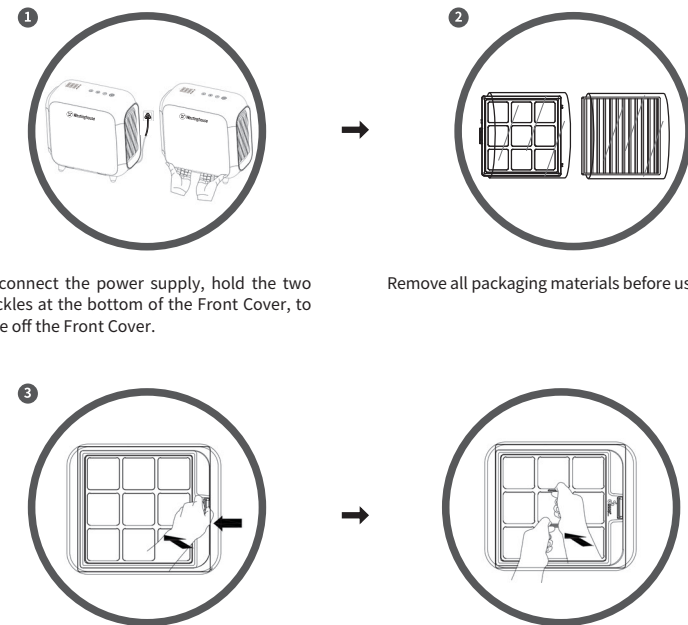
\*Unit supports 2.4Ghz / 5Ghz Wifi. If there is any connection problem, please contact your router supplier for problem solution.

## First-time Operation

## Getting Started

1. Remove all packaging materials, use a soft dry cloth to clean all the parts then re-assemble parts back together.
2. Place the unit on a dry, solid, level surface, and ensure the unit is provided with reasonable space of at least 15 cm from any objects, in order to operate effectively.
3. Check power sockets and any extension cords to confirm compliance with unit requirements. Ensure that the unit is plugged in before usage.
4. The unit is equipped with a sensor. If filters are not installed properly, the unit will not operate.
5. When the unit is turned on for the first time, warm air and mineral smell may be released from the air outlet. This is normal as catalytic oxidation is taking place inside the NCCO Reactor, and completely harmless to human body.

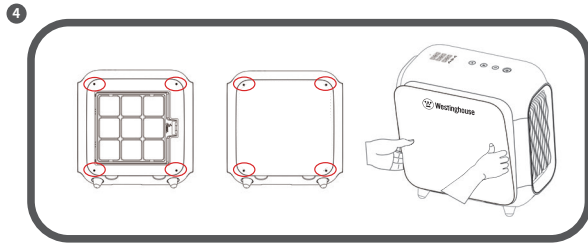
### Installation Procedures:



Disconnect the power supply, hold the two buckles at the bottom of the Front Cover, to take off the Front Cover.

Remove all packaging materials before usage.

Install NCCO Reactor, HEPA Filter and Pre-filter in sequence into HEPA Filter Frame. A clicking sound should be heard to indicate that successful of filters installation.

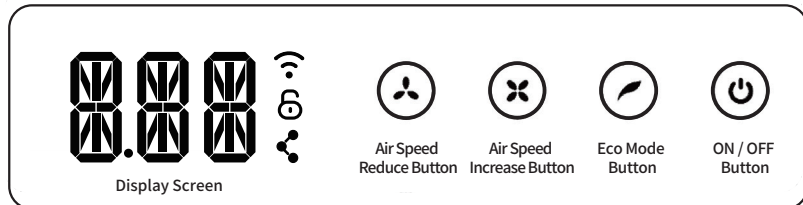


First, align the four pins on the Front Cover with the four holes on the unit. Then, slightly push the Front Cover, the magnetic parts will attract the Front Cover towards to unit body. The installation of Front Cover is completed.

**ATTENTION**

Please make sure all the Filters are fully installed.

**Control Panel Buttons:**



\*Unit supports 2.4Ghz / 5Ghz Wifi. If there is any connection problem, please contact your router supplier for problem solution.

**1. Power Button**

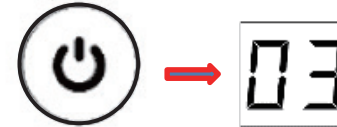


**ON:** Sound should be heard indicating Power On after the unit has been connected with power supply. Press ON / OFF Button to turn on unit.

**OFF:** Press ON / OFF Button again to turn off unit.

**Note:** When the unit is running, long press the button to reset WIFI Mode.

**2. Default Air Speed & Memory Function**



**Default Setting:** The default air speed is at '03'. Every time the unit got disconnected from power supply, when it's turned back on, the air speed will be reset to default value.

**Memory Function:** If user presses the ON / OFF Button to turn off the unit and then turns it back on, the unit would remain the same operation status as last usage.

**3. Fan Speed Mode**



**Increase Speed:** Press the Increase Speed button, and each click will increase the fan speed.

**Reduce Speed:** Press the Reduce Speed button, and each click will reduce the fan speed.

**4. Turbo Mode**



When the air speed is at '10', simultaneously press the Air Speed Increase Button and Air Speed Reduce Button to enter into 'SS' Mode.

It is recommended to select 'SS' mode to treat seriously contaminated area in a short period of time.

Exit the 'SS' Mode: Press the Air Speed Reduce Button to switch into Air Speed Mode with air speed at '10'.

### 5. ECO Mode



Press the Eco Button to enter into Eco Mode and press one more time to exit Eco Mode. It is recommended to select Eco Mode during sleep time.

### 6. Lock Mode



When the unit is running, simultaneously press the ON / OFF Button and Eco Mode Button for 5 seconds, where there is crystal ring coming from the unit and the Lock Mode icon is illuminated. At that time, the unit enters into Lock Mode. If user wishes to exit Lock Mode, simultaneously press the ON / OFF Button and Eco Mode Button for 5 seconds again.

**Note: Under Lock Mode, pressing any button is failed to operate the unit.**

### 7. Filter Installation Indicator



If 'EE' is displaying on Display Screen, the unit is not operating and making 'DiDi·DiDi' sound, it means NCCO Reactor and / or HEPA Filter not being installed properly.


Method: Disconnect the unit with power supply and open cover to re-install filters.

**ATTENTION**

- The unit is equipped with a special protection feature: It will stop operating with all indicating lights off for 30mins, after every 8 hours' non-stop operation. 30mins later the unit resume operating automatically. Press Power Button can awake the unit at any time.
- Once after the unit runs for 1 minute without receiving any further operation instructions, all indicating lights and the Fan Speed Display will be shown 50% of brightness, while other functions remained. To wake up, press any button on the control panel.

**!** **1. Always disconnect the power supply of the unit before any maintenance or care process is carried out (except replacing filters).** (Otherwise the unit might still be running and could cause an electrical shock or injury)

**2. RISK OF ELECTRIC SHOCK-**These servicing instructions are for use by qualified personnel only. To reduce the risk of electric shock, do not perform any servicing other than that contained in the operating instructions unless you are qualified to do so.




**WARNING**

**ATTENTION**

- When cleaning the unit, please follow instructions given by the cleaning product. Use a damp clean cloth to wipe the unit.
- During maintenance, ensure the disassembled parts are kept in a safe and secure place. (Otherwise parts could be lost or damaged.)
- Do not operate the unit if Filters have not been installed, since this could cause irreversible damage to the unit.
- If HEPA Filter is not replaced periodically as indicated in the instructions, it may seriously affect the efficiency of NCCO Reactor.

### Cleaning Instructions

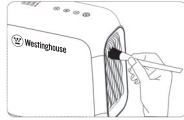
- 1



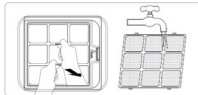
**Cleaning Unit Body**  
Use dry and soft cloth to clean the unit.

**ATTENTION**


  - Damp cloth can be used to clean the surface of the unit. Do not use abrasive materials.
- 2



**Cleaning Air Inlet And Outlet**  
Clean the air inlet and outlet with a soft brush or vacuum cleaner.
- 3



**Cleaning Pre-filter**  
Pre-filter can be cleaned with water. Make sure it is dried out before usage.
- 4



**WARNING**

  - Do not rinse or soak HEPA Filter or NCCO Reactor in water.

## Filter Replacement & Maintenance

1. The lifetime of the filter will vary depending on the environment, amount of usage and location of the unit.
2. To maintain optimal operating condition of the unit, only use the recommended filter.
3. It is recommended to clean Pre-filter regularly.
4. When replacing filters, please keep unit running.
5. Please follow HEPA Filter Surface Color Changing Indicator to dispose HEPA Filter.

### Recommended Filter Cleaning and Replacement Cycles and Methods

| Filters      | Cycle                 | Method      |
|--------------|-----------------------|-------------|
| Pre-filter   | /                     | Cleaning    |
| HEPA Filter  | Every 6 - 12 Months * | Replacement |
| NCCO Reactor | Substantial**         | Substantial |

\* The filters cleaning and replacement cycle may vary depending on the operating area.

\*\* If HEPA Filter has not been replaced periodically, or it has been damaged, the surface of NCCO Reactor is covered with dust or oily substances after disassembling, the removal capacity of NCCO Reactor may be badly reduced and should be replaced.

### HEPA FILTER SURFACE COLOR CHANGING INDICATOR

|                       |                            |                       |
|-----------------------|----------------------------|-----------------------|
| No replacement needed | Replacement is recommended | Replacement is needed |
|-----------------------|----------------------------|-----------------------|

## Care & Maintenance

## FAQs

Q1

'EE' is displaying on Display Screen, the unit is not operating and making 'DiDi·DiDi' sound.

A

Please check if filters have been properly installed. If not, please re-install them.

Q2

Can the HEPA Filter be washed with water?

A

HEPA Filter is made of composite material, water would seriously affect the purification effect.

Q3

The air quality has not improved even after the unit has been turned on for a long time.

A

If the unit is used in a severely polluted area, the treatment process will take longer. It is recommended to use the HIGH FLOW MODE or extend the operational time until the pollution diminishes.

Q4

The unit emits an unusual smell or smog. (e.g. smoke, flame, or burning)

A

Turn off the unit and disconnect it from power supply right away. Call the customer service center immediately or contact with a qualified service provider.

Q5

Why does the unit would release mineral smell during the first time operation?

A

It's normal as catalytic oxidation is taking place inside of the NCCO Reactor, the smell is harmless to human body, and it would disappear after a period of operating time, please feel free to use it.

Q6

Why is there flashing of "HP" light on the screen, with Red light indicating on the body?

A

When the HEPA timer reaches 3,000 hours, the display on the machine will show "HP", and a red light will be turned on to remind the user for checking and changing the HEPA filter.

(1) Make sure the machine is turned ON and running.

(2) Remove the HEPA filter(s) (some models may have more than one HEPA filter, remove them ALL).

(3) After the HEPA filter(s) is taken out, the machine will make a warning sound continuously, and "EE" is displayed on screen.

(4) Put in a new set of HEPA filter(s).

(5) The "EE" should disappear immediately, and the "HP" and red light should be off. The machine should be back to normal.

## Other Information

## Trouble Shooting

## Other Information

| Problems  | Solutions   |
|---|---|
| The unit does not operate.  | Check if the unit is correctly connected to its power supply. Turn on the unit.   |
| 'EE' is displaying on Display Screen, the unit is not operating and making 'DiDi·DiDi' sound. | Check if the filters have been correctly installed. Re-install all filters.   |
| No air is blowing through air outlet.   | Check if the unit is correctly connected to its power supply. Check if the power cord interface is in good service condition.   |
| The air quality has not improved after a long operation time.                                 | If the unit is used in a severely polluted area, the treatment process will take longer. It is recommended to use the HIGH FLOW MODE or extend the operational time until the pollution diminishes. |
|   | The Filter may require cleaning and replacement.  |
| The airflow from air outlet becomes slow.   | Filter may be blocked. Replace the filter. (See section "filter cleaning and maintenance" of this manual)   |
|   | Make sure all packaging materials are removed.  |
| The unit makes an abnormal noise.   | Make sure all packaging materials are removed.  |
|   | Make sure the air inlet and outlet are not blocked by external objects. Remove all adjacent objects that block the air inlet and outlet.  |
|   | The unit may malfunction. Call the customer service center for advice or consult with a qualified agent.  |
| The unit emits an unusual smell or smog. (e.g. smoke, flame, or burning)                      | Turn off the unit and disconnect it from power supply. Call the customer service center immediately or contact with a qualified service provider.   |

## Product Specification

## Other Information

|                                     |                             |  |     |
|-------------------------------------|-----------------------------|--|-----|
| Power Supply                        | Rated Voltage               | 120Vac   |     |
|                                     | Rated Frequency             | 60Hz   |     |
| Power Consumption (W)               | Mode                        | Lowest   | 3   |
|                                     |                             | Highest  | 15  |
|                                     |                             | Turbo  | 20  |
| Airflow Volume (m <sup>3</sup> /hr) | Mode                        | Lowest   | 35  |
|                                     |                             | Highest  | 143 |
|                                     |                             | Turbo  | 170 |
| Noise Level (dB)                    | Mode                        | Lowest   | 36  |
|                                     |                             | Highest  | 52  |
|                                     |                             | Turbo  | 56  |
| Product Dimension (L x W x H) (mm)  | 340 (L) x 200 (W) x 348 (H) |  |     |
| Net Weight (kg)                     | 4.9                         |  |     |
| Treatment System                    | Active Oxygen Generator     | Sterilization & Disinfection   |     |
|                                     | Pre-filter                  | Remove dust and hair   |     |
|                                     | HEPA Filter                 | Remove dust, hair and airborne particles such as allergens and pollen, bacteria, viruses and fungus. |     |
|                                     | NCCO Reactor                | Remove odour and decompose harmful pollutants such as formaldehyde and VOCs.                         |     |