



b-MOLA NCCO Air Treatment Unit Operation Manual

Model No.: NCCO1902

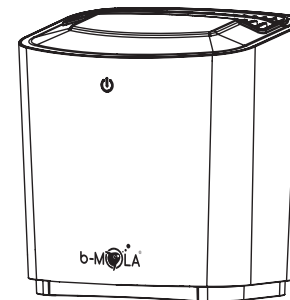
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Warranty Card Attached

Thank you for choosing b-MOLA product;
Please read this manual prior to operation and maintenance work;
Please read the "Safety Instructions" before operation. (Page 2~3);
Injury or property loss may occur if not operated according to this manual;
Please retain this manual for future reference. (Retain manual in reserve).





Safety Instructions

Please Follow Instructions Below

- Disconnect the power supply before any service or care maintenance work is carried out.
- If the power cord is damaged at any time, it must be replaced by a new power cord that is supplied by the manufacturer.
- This product should only be used or maintained by individuals that have adequate knowledge and capabilities over the age of 18 years. Please follow the safety instructions to avoid any personal injury.

- The following symbols are classified based on the hazard level or injury effects caused by improper use or operation.

WARNING
 This symbol means 'May cause fatalities or serious injury if instructions are not followed.'


ATTENTION
 This symbol means 'May cause minor injury or damage to property if instructions are not followed correctly.'



- The two symbols below refer to the relevant instructions that need to be followed.


Prohibited Item


Mandatory Item



WARNING

Prohibited Item


- Removal of the power cord is prohibited when moving or storing the unit. The power cord might otherwise be damaged leading to a potential fire risk or electric shocks.
- It is prohibited to damage the power cord or power plug. It is prohibited to cut, refit, excessively twist, "wring" or squeeze the power cord. It is prohibited to put the power cord near a heat source or place under a heavy object. (Otherwise this could lead to a fire or an electric shock.)
- It is prohibited to use no other power source other than a voltage of (DC12V 1A). (Otherwise this could cause overheating leading to a possible fire.)
- It is prohibited to place one's finger/thumb, any metal object or anything else into the air inlet, air outlet or any gap. (Otherwise the user might touch an internal component, leading to an electric shock or personal injury.)
- It is prohibited to touch the power plug or any electrical component with a wet hand. (Otherwise the user may suffer an electric shock.) 
- It is prohibited to place any liquid receptacle (e.g. water bottle) on any part of the unit. (Otherwise this might cause the unit to short circuit leading to a possible fire or electric shock.) 

Mandatory Item


- If one of the following abnormal or malfunctioning situations occurs, please immediately stop using the unit and pull the plug from its power source.
 - Unit stops running when moving the power cord.
 - Any control button fails.
 - If the circuit breaker moves or fuse burns up.
 - If the power cord or plug is abnormally warm or heated.
 - If there is a burnt smell, abnormal noise or vibration.
 - If there is anything deemed abnormal in the unit's function. → Please contact your local service centre or distributor to check the malfunction.
- Please periodically clean the power plug. If there is any dust found on the plug in a humid environment, this could damage the insulator leading to a possible fire.
 - Pull out the power plug and clean it with a dry cloth.
 - If you do not intend to use the unit for a long period of time, please pull plug out of power source.
- Please pull out the power plug before any maintenance or cleaning work is undertaken. (Otherwise the unit might start functioning unexpectedly causing an electrical shock or personal injury.)
- Please fully insert the plug into the power source. If not fully inserted, then power cord could become overheated causing a possible fire or an electric shock.
 - Do not use damaged power plug or loosen power socket.


Prohibited Item


- It is prohibited to arbitrarily disassemble or refit the unit otherwise it might function abnormally, causing a fire or electric shock. If any maintenance work is required on the unit, please contact your local customer care centre or distributor.


Safety Instructions

Please Follow Instructions Below

ATTENTION

Prohibited Item


- It is prohibited to place the unit in the following places.
 - An uneven place. (Unit might fall causing injury or product damage.)
 - A bathroom, shower room or other places where there is high temperature, high humidity or where the unit could get wet. (Otherwise the unit could suffer electrical leakage leading to a possible fire or impart an electric shock.)
 - A kitchen or similar places with cooking oil fumes. (Otherwise unit may break up and cause personal injury.)
 - Locations where oil or other combustible gases might be leaking. (Otherwise such an environment might cause the unit to catch fire, leading to a disaster.)
 - Places where the unit inlet/outlet is situated close to animal or plant resting areas. (Otherwise the animal could feel discomfort and the plant might not develop properly.)
- It is prohibited to wipe the unit using gasoline or other volatile solvents, or to spray the unit with insecticide. (Otherwise the unit casing might fracture, resulting in a short circuit.)
- It is prohibited to operate the unit when using insecticide smoke. (Otherwise insecticide particles might accumulate inside the unit resulting in the exhaust draft from the air outlet possibly causing damage to health.)
 - Ventilate the room after using insecticide smoke, and then operate the unit.
- It is prohibited to place objects such as books or clothes near to or against the air outlet. (Otherwise with a blocked outlet could cause smoke or even fire.)
- It is prohibited to sit or lean on the unit. (Otherwise the unit might turnover or crack, causing personal injury or unit damage.)
 - * Families with children, please pay attention to the operation process.
- It is prohibited to light up a cigarette, cigar or burn incense near the unit. (Since the HEPA Filter is made of fibre, if the inflammable (e.g. spark) is adsorbed into unit, it may cause fire.)

Mandatory Item


- Please pull the power plug by holding the correct part of the plug. (Otherwise the power cord might cause fire or electric shock.)
- Maintain good indoor ventilation when operating unit together with combustor.

NCCO Technology

Patented NCCO Air Purification Technology Brings You Fresh and Clean Air

Our patented NCCO (Nano Confined Catalytic Oxidation) technology used inside our b-MOLA NCCO Air Treatment Unit is able to effectively remove fine particulates, passive smoke, pollen, PM_{10,31}, bacteria, viruses and more.

It brings you clean fresh air indoors when the outside air environment is polluted. The unit has safe operation of up to 8 hours under the control of its intelligent control of an automatic power-off and re-start function after 30 minutes of rest (See 'About Intelligent Power-Off Protection' for further info).



About NCCO (Nano Confined Catalytic Oxidation) Air Purification Technology

- NCCO Air Purification Technology has world-wide patents.
- The principle of NCCO technology is based on the efficient adsorption of pollutants through the use of active oxygen to break the chemical bonds of the pollutant molecule and then decomposing them to Carbon Dioxide and water molecules.
- Characteristics of the technology are - extremely long filter/Reactor life, no secondary pollution, sterilises and removes carcinogenic pollutants such as formaldehyde and effectively deodorises.
 - **Long Life** – Take example of adsorption capacity of activated carbon, which has a lifetime of only about three months, on the contrary, NCCO product is available to sustainable use.
 - **No Secondary Pollution** – For other types of filters, they will be saturated relatively quickly and thus release unabsorbed pollutants back into the air and is called secondary pollution. NCCO technology continuously decomposes pollutants into harmless Carbon Dioxide and water.
 - **Sterilisation and Formaldehyde Removal** – NCCO technology can effectively decompose chemical pollutants including formaldehyde which is deemed to be carcinogenic. It also filters suspended particles, heavy metal particles, pollen, viruses and bacteria.
 - **Efficient Deodorisation** – NCCO technology can completely remove offensive odours found in public washrooms and indoor environment near landfills.
- NCCO IS AN INNOVATIVE TECHNOLOGY INVENTED BY MEMBER OF HKUST ENTREPRENEURSHIP PROGRAM.

About Intelligent Power-Off Protection

b-MOLA NCCO Air Treatment Unit is designed using an Intelligent Power-Off Protection System.

The unit will intelligently power off with all extinguished indicators after continuous use over a period of 8 hours and then will restart automatically after 30 minutes downtime. During downtime, user might restart unit by pressing ON / OFF Button.

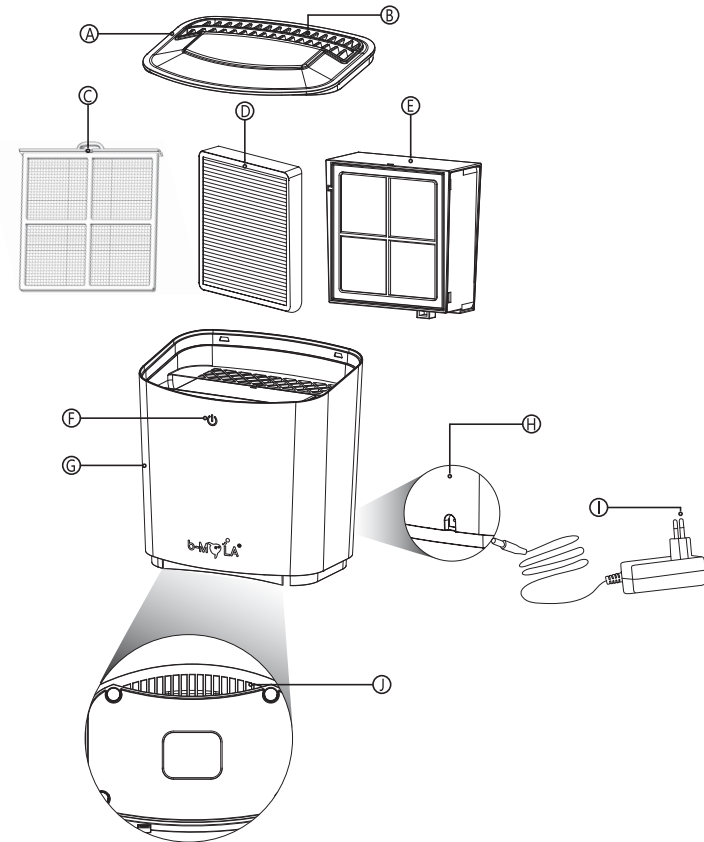
Our Intelligent power-off system is able to effectively avoid excessive load and eliminate any risk during the supply of power.

For highest efficiency of air filtration!

- Removing indoor dust.
 - Place unit on a flat surface in an open area where dust falls easy.
- Best air circulation location area.
 - Place unit at least 15cm (6") from a wall, furniture, curtains etc, otherwise its filtration efficiency will possibly be diminished.
- Do not place the unit in the following places or areas.
 - Direct sunlight, near air-conditioning unit airflow or heat. (This may cause distortion, colour change or reduced life.)
 - Near television, radio etc. (This may cause television image disorder and radio noise.) →Keep the unit 1m or above away from such devices.
- Do not use the same power socket as one already used for television or radio.
 - (Television image disorder and radio noise may appear when power plug is inserted into socket.)
 - Please use alternative power sockets.
- Do not place objects on the unit.
 - (This might affect the operation of the unit.)
- Do not obstruct air inlet or outlet.
 - (This could reduce efficiency of air filtration by unit.)
- Do not operate in same location for a long period of time.
 - Surrounding walls or floor could be dirty. User is recommended to maintain or repair the unit at other places.

Parts & Components

Parts & Components



A. Top Cover	E. NCCO Reactor	I. Power Adapter
B. Air Outlet	F. ON /OFF Button	J. Air Inlet / Display Screen
C. Pre-filter	G. Unit Body	
D. HEPA Filter	H. Power Socket	

Setup

Before Startup

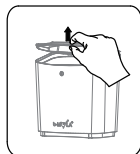
For the first-time operation of the unit:

1. Please carefully read and retain the operation manual for future reference.
2. Remove all packaging materials, wipe all removable parts and grooves by a soft and dry cloth, then reassemble all these parts.
3. Place the unit at a dry and even place. Keep the unit at least 15cm away from wall or surrounding objects for normal operation.
4. Check power socket and all external power cords to meet operation requirements. Make sure the unit has been connected with power supply before operation.
5. The unit is installed with inductor to induce filters' location. If the filters have not been properly installed, the unit won't operate.
6. When first switched on there will be warm air. This is perfectly normal and is due to special manufacturing technique of the NCCO Reactor.

Installation Steps:

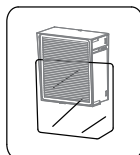
1. Open Top Cover

The Top Cover is magnetically mounted, where user can open the Top Cover with slight upward force.



3. Remove Packaging Material of Filter Set

Before using unit, please remove all packaging materials.

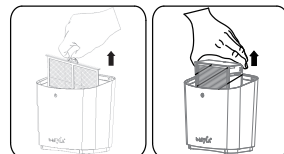


5. Close Top Cover

Align Top Cover with proper location to close Top Cover.

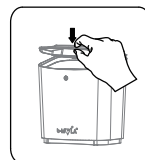
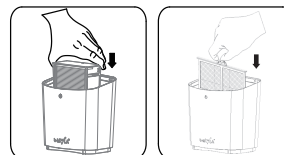
2. Take out Filter Set

Take out filter set from unit.



4. Re-install Filter Set

Re-install filter set and close Top Cover. Slightly push the filter set to keep the top of the filter set maintain the same level with Air Outlet. Make sure to install the filter set with proper direction.



Notice

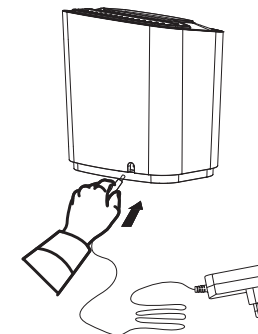
- Please press filters with force for proper installation.

Operation Method

Operation Instructions

1. Connect the unit with power adapter.

Connect the unit with proper power supply.

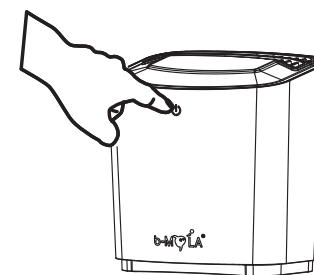


2. Turn On / Off Unit & Adjust Air Speed

ON: Touch the ON/OFF Button at the front side to turn on unit, where white indicator will illuminate on the bottom of the front side. Unit will operate with Silent Mode after turning on.

Efficient Mode: After turning on the unit, touch the ON / OFF Button again, where blue indicator will illuminate on the bottom of the front side.

OFF: Touch the ON / OFF Button for the third time to turn off unit.



3. Intelligent Power-Off Protection

The unit will intelligently power off with all extinguished indicators after continuous use over a period of 8 hours and then will restart automatically after 30 minutes downtime.

Maintenance & Care

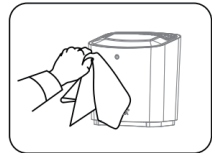
! WARNING

Please pull out power plug before any maintenance or care process is carried out.
(Otherwise the unit might still be running and could cause an electrical shock causing injury.)

- Notice**
- It is prohibited to clean the unit with any detergent.
 - If cleaning the unit by using a cloth that is chemically treated, please read the instructions supplied.
 - During maintenance work, do not touch the disassembled parts randomly and ensure you do not stumble over them, thus injuring yourself or damaging the parts.
 - If the HEPA Filter has not been installed, please do not operate the unit since this could cause irreversible damage to the NCCO Reactor.
 - If the HEPA Filter is not replaced periodically as indicated in instructions, it may seriously affect the efficiency of the NCCO Reactor.

Cleaning Method

1 Cleaning External Surfaces of Unit Body

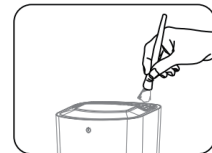


Wipe Unit body by soft and dry cloth.

Notice

A damp (non-abrasive) cloth can be used to clean the unit surface.

2 Cleaning Air Inlet and Air Outlet

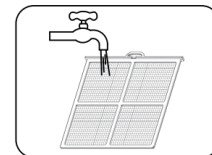


Use a soft brush or light vacuum to clean the air inlet and air outlet.

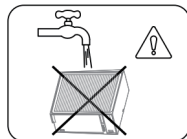
Notice

Never rinse or soak HEPA Filter or NCCO Reactor with water.

3 Cleaning Pre-filter



Available to use water to clean Pre-Filter. Wipe up Filter before reassembling Filter into unit.



Maintenance & Care

Filter Maintenance and Replacement

- Filter lifetime will vary depending on the environment, amount of usage and location of the unit.
- To maintain optimal operating condition of the unit, only use the recommended filter.
- It is recommended to regularly clean Pre-filter.
- Before disassembling the unit, disconnect the power supply.
- When the NCCO Reactor needs to be replaced, it is also recommended to replace the HEPA Filter.

RECOMMENDED FILTER CLEANING AND REPLACEMENT CYCLES AND ETHODS		
Filter	Cycle	Method
Pre-filter	/	Clean <small>(Please refer to the Section of Filter Maintenance and Replacement.)</small>
HEPA Filter	Every 6-18 months *	Replace
NCCO Reactor	Available to sustainable use **	Available to sustainable use **

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

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

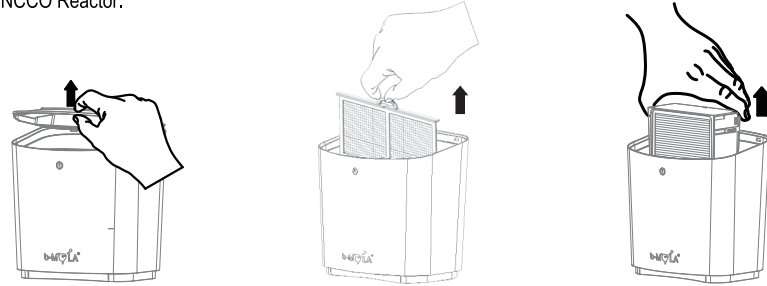
HEPA FILTER SURFACE COLOR CHANGING INDICATOR		
No need to Replace	Replacement is Recommended	Replacement is Needed

Maintenance & Care

Replacement Steps

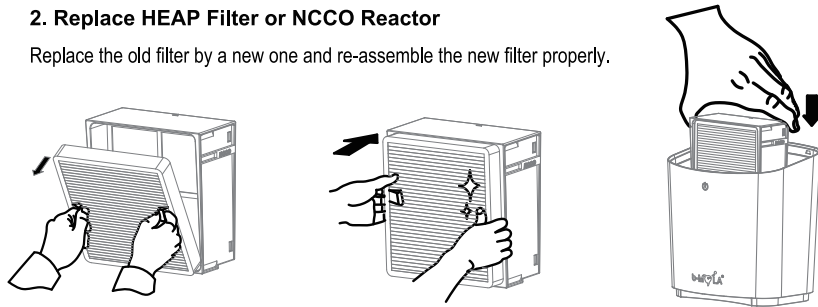
1. Open Top Cover and Take out Filter Set

Open the Top Cover with slight upward force. Then, hold the strings at filters to take out HEPA Filter and NCCO Reactor.



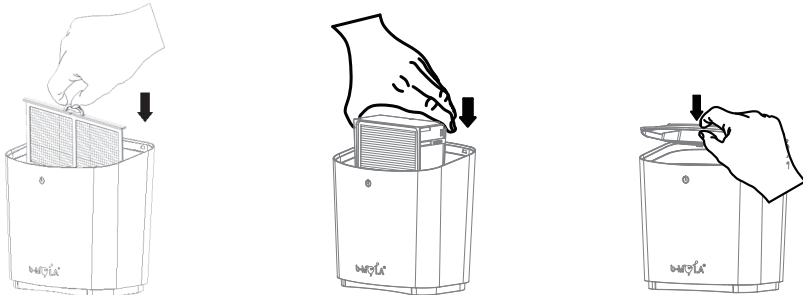
2. Replace HEPA Filter or NCCO Reactor

Replace the old filter by a new one and re-assemble the new filter properly.



3. Re-install Filter Set and Close Top Cover

Re-install filter set and close Top Cover. Slightly push the filter set to keep the top of the filter set maintain the same level with Air Outlet. Make sure to install the filter set with proper direction. Align Top Cover with proper location to close Top Cover.



FAQ

Q1

Indicator flashes white and then blue alternately.

A

Please re-check whether the HEPA Filter and NCCO Reactor have been properly installed. If not, please re-install HEPA Filter and NCCO Reactor.

Q2

Can the HEPA Filter be washed?

A

NO, the HEPA Filter is made of composite material and washing will seriously affect its purification capacity.

Q3

Air quality still has not improved even after operating for a long period of time.

A

When the unit being used in a seriously polluted area, the treatment process will take a long time. Continue operating the unit in high airflow mode until pollution is reduced.

Q4

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

A

Immediately turn off unit and disconnect power supply. Then contact your local service centre or authorised distributor service centre for resolution.

Trouble Shooting

Problem	Solution
Unit does not operate.	Check whether the unit is correctly connected to its power supply. Turn on unit.
Indicator flashes white and then blue alternately.	Check whether the filters have been correctly installed. Re-install filters.
No air is being blown out of the Air Outlet.	Check whether the unit is correctly connected to its power supply. Check whether the power cord interface is in good service condition.
Air quality still has not improved despite operating for a long time.	If the unit is used in a seriously polluted area, the treatment process will take longer than normal. It is recommended to operate the unit using it high airflow mode until the pollution diminishes.
	Filters might require cleaning or replaced. Clean or replace filters.
Air speed at Air Outlet becomes slow.	HEPA Filter may be clogged or blocked. Replace HEPA Filter. (Please refer to "Filter Maintenance and Replacement").
	Make sure all packaging materials are removed.
Unit produces abnormal noise.	Make sure all packaging materials are removed.
	Make sure Air Inlet and Air Outlet are not be blocked by foreign matter. Remove all surrounding matter which may block the airflow.
	The unit may be malfunctioning. Seek advice from service centre or an authorised service provider.
Unit emits unusual smell, odour or smoke (also flames or burning).	Immediately switch off unit and disconnect its power source. Contact local service centre or authorised service provider.

Product Specification

Power Supply		DC12V 1A		
Power Consumption (W)	Mode	Lowest	3	
		Highest	5.5	
Airflow Volume (m ³ /hr)	Mode	Lowest	5.1	
		Highest	10.2	
Noise Level (dB)	Mode	Lowest	33	
		Highest	42	
Product Dimension (L x W x H) (mm)	175 (L) x 136 (W) x 184 (H)			
Net Weight (kg)	1			
Treatment System	Stage 1	Stage 2	Stage 3	Stage 4
Function	Active Oxygen Generator	Pre-filter	HEPA Filter	NCCO Reactor
	Sterilization & Disinfection	Removes dust and hair.	Removes dust, hair, and airborne particles such as allergens, pollen, bacteria, viruses and fungus.	Removes odour, decomposes and oxidises formaldehyde, VOCs and other harmful pollutants.