

BROAD
Combats
POLLUTION



BROAD CLEAN AIR

BROAD Disinfected Fresh Air

SQ300-D

OPERATION AND MAINTENANCE MANUAL



400-677-6666

1-YEAR WARRANTY

2021.03 English



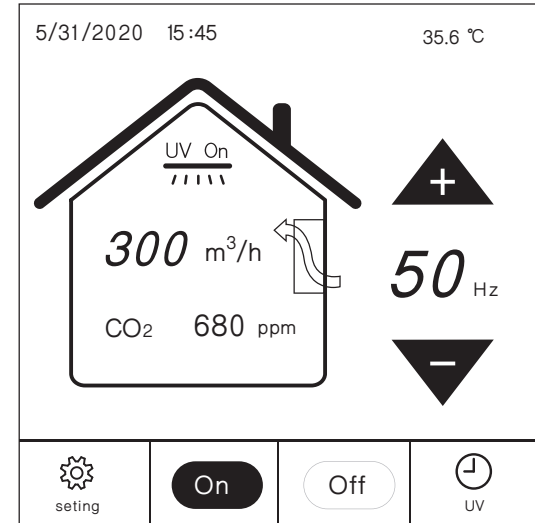
SAFETY INSTRUCTIONS

1. Please read this manual carefully and retain for future use
2. Make sure that the power voltage is consistent with the voltage indicated in the label pasted on the machine
3. The power cord shall comply with local standards. If it is damaged, it must be repaired or replaced by the manufacturer or a qualified professional to avoid electric shock
4. The grounding wire shall well insulated
5. When opening the machine door, do not press the safety switch with hands or other objects to prevent electric shock and avoid scratching
6. Turn off the master power switch and remove the cover plates before cleaning the internal parts or performing maintenance
7. Do not block the fresh air inlet and outlet
8. This product is not suitable for people with poor physical, sensational or mental condition (including children)
9. Do not dispose of this product with ordinary garbage. Take it to a qualified electrical waste station for recycling.

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CONTROLLER INTERFACE



- The main interface contains the power switch, air volume control, UV disinfection control and parameter settings
- Press “On” to Power On, Press “Off” to Power Off
- Press “▲” or “▼” to increase or decrease the fan frequency in 1 Hz increments. Frequency range is 20~50 Hz
- To preset the UV disinfection time, press “🕒”
- Press “⚙️” to set up system parameters
- The backlight will be off with no operation for 30 seconds. Press any part of the screen to light up the screen

UV Disinfection Control

- Off
- Disinfect for 1 hr
- Disinfect for 2 hr
- Disinfect for 4 hr

Cancel	 Home	Enter
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- Off: Turn off the UV light
- Set up the UV disinfection time for 1, 2, or 4 hours
- Press "Enter" to confirm or "Cancel" to cancel the setting of disinfection time
- Press "Home" to return to the main interface


Date and Time Setting

Time: **16**:40


Date: 2020/05/31

Mode: Fresh Air
 Purification


Lock screen time




off 30s 60s 120s

Cancel	 Home	Enter
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- Set up the time and date, mode and auto-lock time
- When the auto-lock time is set to "off", the auto-lock function is disabled
- Press "enter" to confirm
- Please calibrate every six months

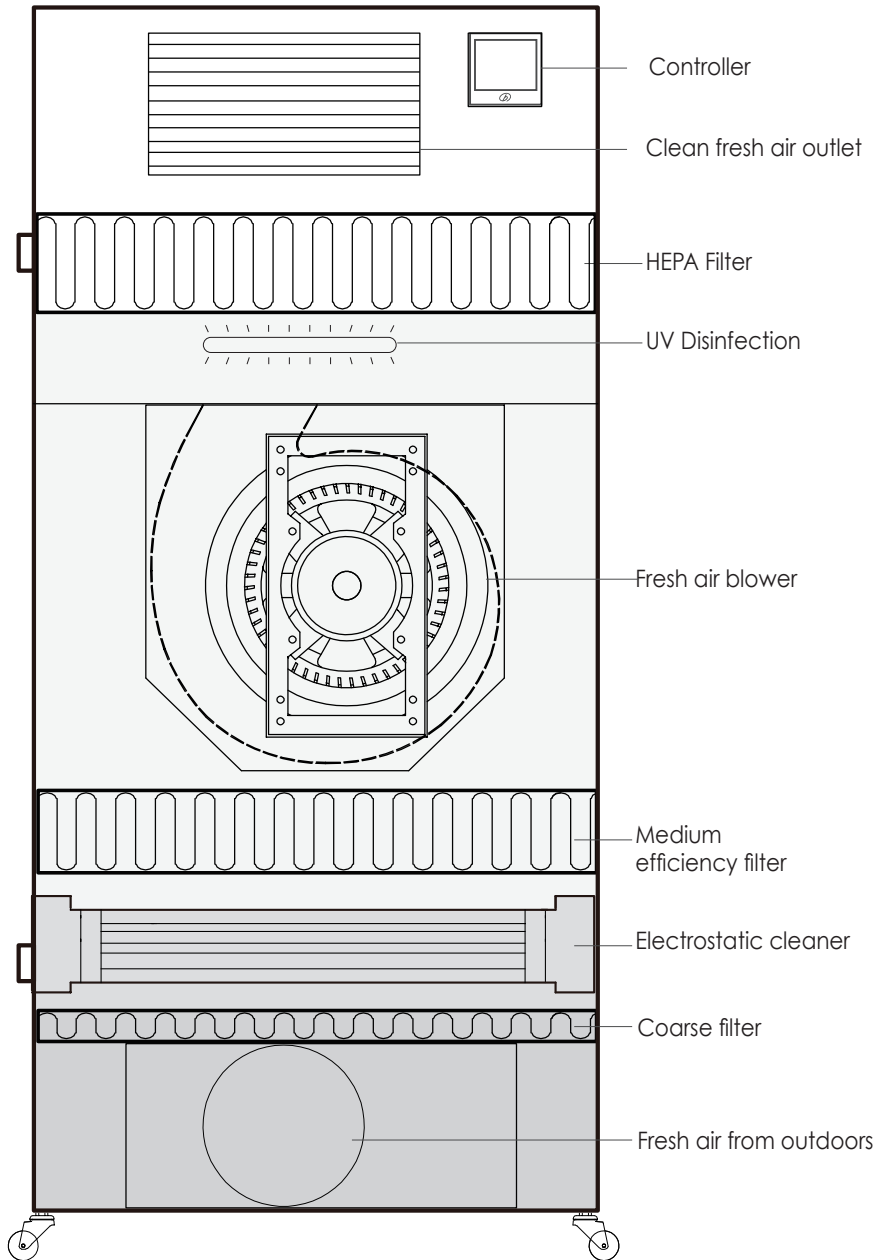


- Wash the coarse filter and electrostatic cleaner
- Replace the medium efficiency filter
- Replace the HEPA filter
- Fan fault
- Temperature sensor fault
- RS-485 communication fault

	 Home	Enter
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- The above interface will pop up automatically to remind the user to clean the coarse filter and the electrostatic cleaner after 720 hours of cumulative use. After powering on again, the system will regard it has having been cleaned
- The above interface will pop up automatically to remind the user to replace the medium efficiency filter after it has been used for 6 months, or to replace the HEPA filter after it has been used for 12 months. After powering on again, the system will regard it has having been replaced
- The above interface will pop up automatically to remind the user to replace the UV light after it has been used for 8000 hours. After powering on again, the system will regard it has having been replaced
- The above interface will pop up automatically when the fan, the temperature sensor or the communication system fails
- Press "home" to return to the main interface, and press "enter" to reset and return to the main interface

COMPONENTS



MAINTENANCE & WARRANTY

Filter Cleaning and Replacement

1. Electrostatic cleaner and coarse filter cleaning
 - Every 1~3 months, depending on dust thickness
2. Medium efficiency filter replacement
 - Every 3~6 months, depending on dust thickness
3. HEPA filter replacement
 - Frequency: Every 1~2 years, depending on dust thickness
 - Record the next replacement time on the new HEPA filter
4. UV light replacement: Once a year
 - Every 1~3 years
 - Wipe the fan and the machine's inner case with a wrung wet towel, be careful not to scratch the fan blades
5. Internal component cleaning
 - Frequency: Every 1~3 years
 - Wipe the fan and the machine's inner case with a wrung wet towel, be careful not to scratch the fan blades

Note: the ventilation function will deteriorate if the HEPA filter is plugged up

Ex-factory Accessories

- Air duct kit X 1
- Cover plate X 1
- Expansion bolt X 4 sets specification: M8x80
- Screws X4, M4x10
- Special brush for electrostatic cleaner x 6
- Air flow vent strip x 1 bag

Warranty:

BROAD clean air products take "best purification effect", "minimum energy consumption", "zero downtime" and "40-year lifespan" as its maintenance goals. For cleaning and maintenance, please refer to "Operation and Cleaning" posted on the machine and the user manual for more details. Each maintenance must strictly follow the maintenance procedures and record the steps in detail. The maintenance work for commercial users is suggested to be completed or supervised by BROAD service engineers (or BROAD authorized service providers). Domestic users can perform maintenance by themselves or entrust BROAD

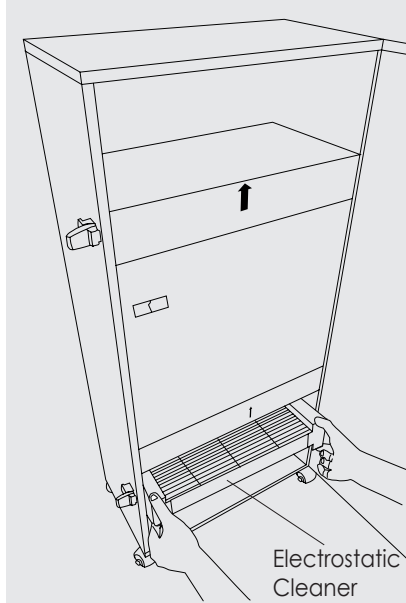
Precautions:

1. It is recommended to keep the fresh air machine running at 30 ~ 40Hz, which can be tuned higher when the number of people increases. Do not run it at full load if not necessary
2. Keep the doors and windows closed tightly to ensure a slight positive pressure indoor
3. Turn off the range hood and exhaust fan immediately after cooking
4. Note that smoking and incense burning will affect air quality

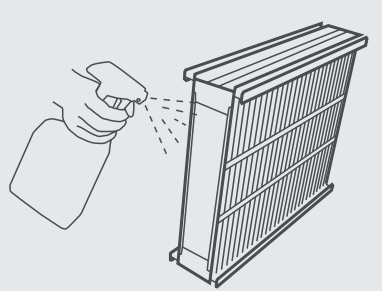
ELECTROSTATIC CLEANER CLEANING

Clean the electrostatic cleaner every 1~3 month. If the electrostatic cleaner has collected over 1.5 mm of dust, it must be cleaned immediately

■ Remove the electrostatic cleaner
Cut off the power, open the door, and remove the electrostatic cleaner



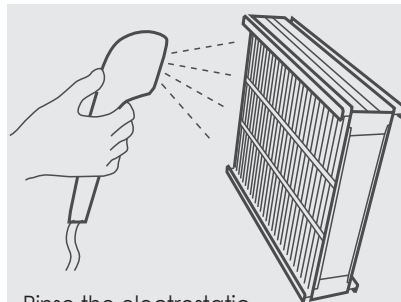
■ Cleaning Method:
Detergent Cleaning



Spray the detergent over the electrostatic cleaner
Best to spray in a tub



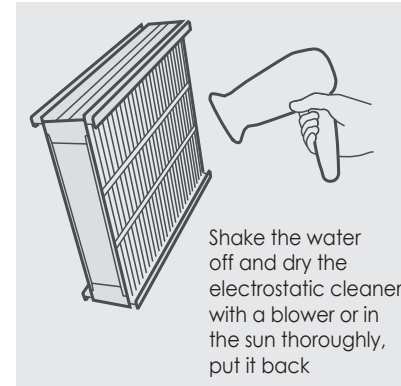
Use the special brush to brush clean the grille
Pay attention not to scrape off the tungsten filament



Rinse the electrostatic cleaner with clean water (cool or warm)

ELECTROSTATIC CLEANER & COARSE FILTER CLEANING

■ Blow dry after cleaning



Shake the water off and dry the electrostatic cleaner with a blower or in the sun thoroughly, put it back

■ Fan Cleaning



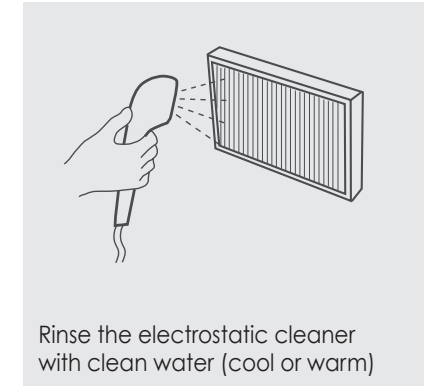
Clean the fan and the inner case every 1~3 years

Clean the coarse filter every 1~3 month

■ Cleaning Method:
Detergent Cleaning

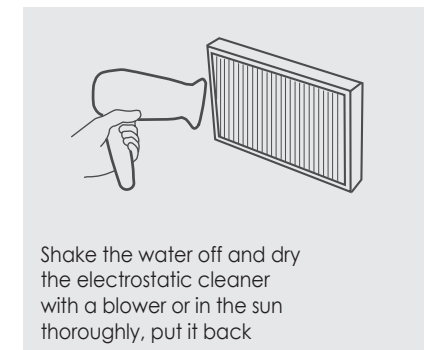


Spray the detergent over the electrostatic cleaner
Best to spray in a tub



Rinse the electrostatic cleaner with clean water (cool or warm)

■ Blow dry after cleaning

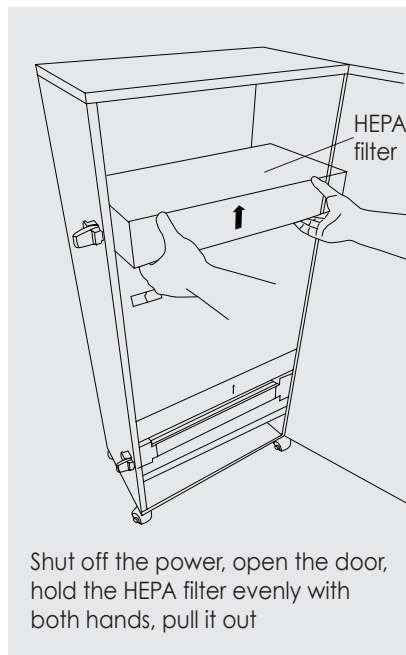


Shake the water off and dry the electrostatic cleaner with a blower or in the sun thoroughly, put it back

HEPA FILTER AND UV LIGHT REPLACEMENT

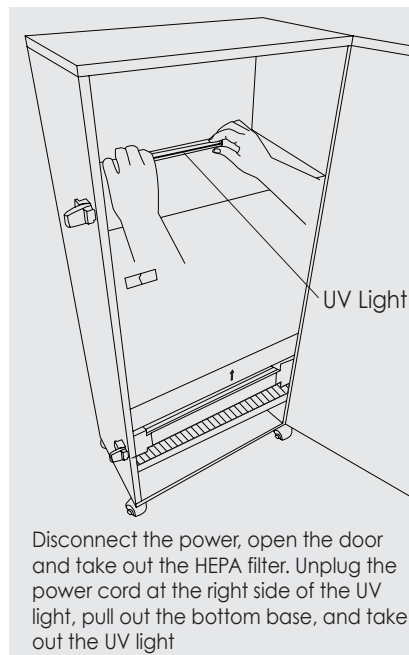
The medium efficiency filter should be replaced every 3~6 months, and the HEPA filter and UV light should be replaced every year

■ Take out the old HEPA filter



Shut off the power, open the door, hold the HEPA filter evenly with both hands, pull it out

■ Removing the old UV light



Disconnect the power, open the door and take out the HEPA filter. Unplug the power cord at the right side of the UV light, pull out the bottom base, and take out the UV light

■ Load the new HEPA filter

- The loading steps of a new HEPA filter are opposite to that of removing it
- Keep the arrow on the HEPA filter pointed in the same direction as it was taken out
- Hold the HEPA filter evenly with both hands, push it in carefully
- Record the next replacement time on the new HEPA filter

■ Install the new UV light

- The installing steps of a new UV light are opposite to that of removing it

Note: Please consult BROAD before replacing the filters or UV light, which can be purchased at BROAD shops or through the service hotline 400-883-9333

INSTALLATION

Installation Process

Preparation:
Determine the machine and air ducts installation location, draw lines, prepare tools and accessories



Drill the holes
Drill the fresh air outlet hole and mounting holes according to the lines



Air ducts installation:
Put the air duct kit into the wall, make sure the air inlet grille faces downward. Fill the gap between the air duct and the wall with foaming agent



Machine positioning:
Remove the round cover plate on the back of the machine and install the square cover plate at the bottom



Machine installation
Place the machine against the opening on the wall, secure it with screws, and then plug in

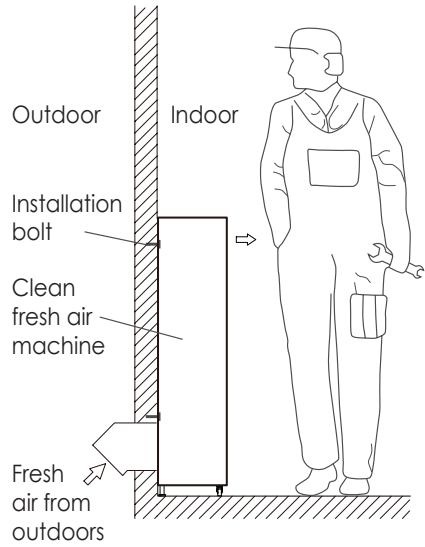
Notes:

1. Preparation
 - Complete materials without damage, reliable tools
 - Prepare thin films to cover the room from dust
2. Drill holes for air inlet and outlet
 - Avoid the beams and bearing walls. The exterior hole should be 5~10mm lower than the interior hole to prevent rainwater entering the room
 - Air ducts must be strong and tight, finish the installation in one day
 - There should be enough maintenance space by the door side

Test Run

- After installation, check the controller settings according to the "Operation" guidance stipulated in this manual
- Focus on the particle purification effect, temperature and carbon dioxide concentration
- Take out the electrostatic cleaner for inspection after one day of operation. If the cleaner collected no dust, there must be a fault. Please inform BROAD immediately

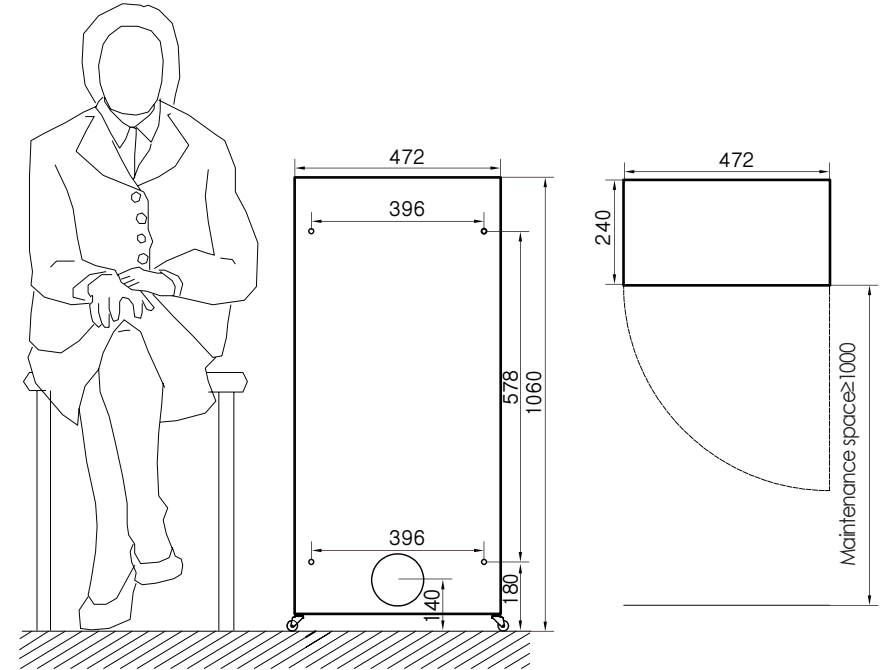
INSTALLATION ILLUSTRATION



Special Notes:

- The fresh air can be sent to the room either through air ducts or directly from the machine
- The room maintains a slight positive pressure while ventilation is carried out by the fresh air machine
- While connecting the fresh air ducts, rainwater must be prevented from seeping in

INSTALLATION DIMENSIONS



(Unit: mm)

TROUBLESHOOTING

No.	Problem	Cause	Solution
1	The fan is making noise	1. The fan bearing or rotor is faulty 2. The wall surface is uneven	1. Examine and repair * 2. Fasten the bolts or smooth the wall surface *
2	There is no air coming out from the machine	1. The door is not closed tightly 2. The fan is faulty 3. The power plug is loose	1. Shut the door again 2. Examine and repair * 3. Reconnect the power
3	The screen interface is garbled	There is electrostatic interference	Open the door and shut it again
4	The electrostatic cleaner does not absorb dust	1. The tungsten filament is broken 2. The electrode grid is bent 3. Power failure	Repair or replace the electrostatic cleaner *
5	Bad dust absorption performance	The electrostatic cleaner or the power connection is faulty	Contact BROAD for examination and repair *
6	Poor purification efficiency	1. There is a possible air leakage in the HEPA filter 2. The room positive pressure is not high enough	1. Examine and reinstall the HEPA filter 2. Make sure the rooms are in positive pressure
7	The electrostatic cleaner does not fit	The electrostatic cleaner is installed backward	The arrow direction should be inward
8	The cleaning prompt appears repeatedly	The default "cleaning cycle" is too short	Extend the "cleaning cycle" in setting
9	There is a cracking sound	1. The electrostatic cleaner is not dried thoroughly 2. The electrostatic cleaner has collected too much dust	1. Remove it and blow dry 2. Clean it
10	The fresh air volume is insufficient	1. Wrong frequency setting 2. The air inlet/outlet is blocked 3. The coarse filter has collected too much dust 4. The medium efficiency filter and HEPA filter has collected too much dust	1. Reset 2. Clear the inlet/outlet immediately 3. Clean or replace the coarse filter immediately 4. Replace the HEPA filter with a new one

Note: for items marked with *, seek help from BROAD or a BROAD designated service provider immediately

SERVICE POLICY

1. Service Classification

- ① Equipment maintenance and repair
- ② Coarse filter and electrostatic cleaner cleaning
- ③ Medium efficiency filter, HEPA filter and UV light replacement

2. Warranty (only for service stipulated in ①)

- 1-year warranty from the date of purchase
- For problems caused by design, manufacturing or factory transportation, free repair or replacement shall be provided. Repair work will be charged for other causes
- Damages caused by natural disasters, substandard power or human error will not be covered by the free warranty
- Free warranty does not include filter cleaning and replacement
- Users can also sign a long-term warranty agreement with BROAD

3. Coarse filter and electrostatic cleaner cleaning

- BROAD Customer Center can provide paid single or annual service
- See page 6 for self-maintenance method

4. Filters and UV light replacement service

Can be purchased at BROAD shops or through the service hotline

5. Service Standards

Item	Standard
Regular maintenance and accessory replacement	Strictly abide by the maintenance requirements
Maintenance Quality	Ensures the long-term air quality of each unit meets the standard of Indoor Air Quality Checklist

6. Service Discipline

It is strictly prohibited for BROAD service engineer to privately collect service fee without permission, or sell other manufacturers' products for profit. Otherwise, the case will be filed as suspected corruption or fraud for further investigation

7. Paid Service

① Annual Service Agreement

It is recommended that the user sign an annual service agreement with BROAD (or a BROAD authorized service provider), with the charge determined by the size, function, number of units and service years of the machine, plus the travel expenses of service personnel. The annual service agreement shall be in standard format

② Single service

- The user can contact BROAD for a single service agreement to purchase spare parts
- If the user decides to do maintenance work by themselves and encounters a major failure of the unit, the user can ask for help from BROAD or a BROAD designated service provider. The maintenance fee will be determined by the parts price and maintenance hours, plus the travel expenses of service personnel

8. Service Hotline

24 hrs Service Hotline:
400-883-9333
E-mail: bfw@broad.net



BROAD Fresh Air Purifier has obtained domestic and international quality and safety certifications



BROAD CLEAN AIR TECHNOLOGY
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