



DirtycleanCPF-20BB / 40BB

# **Water Purifier User Manual**

# User Guide

Users should strictly adhere to the installation specifications delineated in this manual. Professional installation services should be sought, and the water purifier must be operated in accordance with the instructions provided herein. Failure to do so absolves the company from any financial or legal liabilities arising from damages to the water purifier or leaks.

- Periodically inspect the water purifier and its associated pipeline components to identify and rectify potential leaks, mitigating the risk of property damage.
- Utilize replacement parts approved exclusively by Pentair Water (Suzhou) Co., Ltd. The use of unauthorized parts or accessories, resulting in issues, compromised performance, or property damage, falls outside the purview of the manufacturer's limited warranty.
- Maintenance and replacement of filter components for this water purifier are provided as fee-based services.
- It is crucial to diligently preserve this user manual for post-sales reference.

The sole authority for interpreting the aforementioned terms lies with Pentair Water (Suzhou) Co., Ltd.

The trademarks PENTAIR, EVERPURE, and other similar markings found on products, user manuals, and packaging are multiple registered trademarks owned by PENTAIR. The product's trademarked name is Everpure.

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# 1. PRECAUTIONS AND GENERAL NOTES

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## CAUTION

Please read this instruction manual carefully before installing and using this product. If you encounter any problems that are not addressed in this manual, please contact your local Pentair's distributor.

1. Prior to commencing the installation and utilization of this system, it is imperative to meticulously peruse this instructional manual. Ensure the readiness of all requisite installation materials and tools and execute the installation procedures precisely as delineated in this manual.
2. Conscientiously comply with pertinent national and local pipeline regulations. Assure that the installation and maintenance of this product are undertaken by duly authorized and qualified professionals employing approved accessories. Inappropriate maintenance practices may impede system performance, curtail its operational lifespan, and potentially result in the emission of contaminated water, thereby posing severe health risks or even fatalities.
3. Unauthorized manipulation of the equipment, including by children, is strictly prohibited.
4. The incoming water temperature for this system must fall within the range of 5-38°C (41-100°F). This product is exclusively suitable for installation in indoor environments maintaining temperatures between 4-40°C, with a relative humidity not exceeding 90% (at 25°C).
5. This system is designed solely for the treatment of cold water and should not be deployed on hot water conduits.
6. The water supplied to the system must originate from municipal sources. Connection to insecure or unclear water sources is expressly discouraged.
7. Optimal installation locations for this system should facilitate drainage, with no electrical power sources situated beneath the installation point.
8. Exercise caution to prevent the filter bottle from coming into contact with any chemicals or objects that may compromise its surface integrity.
9. Strictly ensure that the water purifier avoids exposure to soluble gases, mineral oils, alcohol, cleaning agents, and any other chemicals. The term "chemicals" herein specifically encompasses, but is not restricted to, chlorinated hydrocarbons, dilute alkalis, bromine water, concentrated acids, amines, ketones, and esters.
10. During installation, prioritize considerations for operational convenience and allow for adequate mobility space during maintenance.
11. Should any uncertainties arise post-installation, kindly reach out to the authorized dealer from whom the machine was procured. The dealer or service provider will dispatch a qualified professional to address any concerns.
12. Trademarks such as PENTAIR, EVERPURE, and analogous insignias featured on products, user manuals, and packaging represent various registered trademarks under the ownership of PENTAIR. The designated trademark for this product is Everpure.

## ⚠ WARNING:

Installation venues must be safeguarded against frost, and installation in areas susceptible to freezing is expressly prohibited. In instances where indoor or outdoor temperatures fall below 2°C, precautionary measures must be taken to prevent freezing of the filter. Furthermore, installations in environments exceeding 40°C are to be avoided.

# 2. PARTS INCLUDED

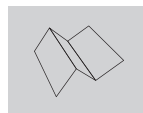
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Water purifier x 1



Expansion screws x 4

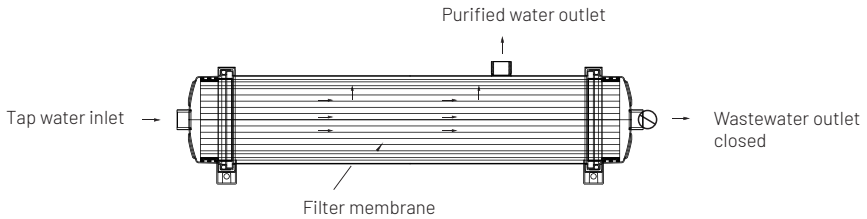


Water purifier manual x 1

## 3. WORKING PRINCIPLE

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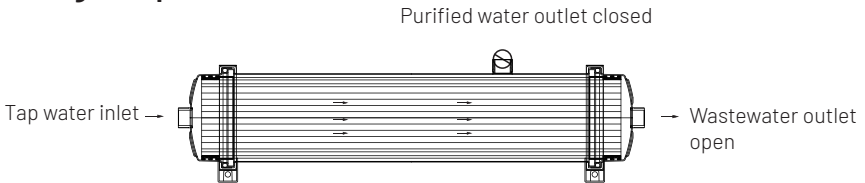
### 3.1. Purified Water Production Principle



#### Water Purification Process:

Tap water undergoes meticulous filtration through the ultrafiltration membrane, effectively removing E. coli and turbidity. The resulting purified water is dispensed through the dedicated outlet, ensuring a hygienic and uncontaminated supply.

### 3.2. Flushing Principle



#### Rinsing Procedure:

Secure the closure of the purified water faucet while opening the wastewater faucet. Enable the rapid infusion of tap water through the inlet for a thorough cleansing of the filter membrane. The discharge occurs seamlessly through the wastewater faucet, effectively eliminating all accumulated impurities. Once the rinsing process concludes, the wastewater outlet yields purified tap water.

## 4. PRODUCT INTRODUCTION

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The EVERPURE Dirtyclean CPF series pipeline ultrafiltration water purifier employs state-of-the-art PVC hollow fibre filter membranes with an average filtration pore size of 0.1 micrometres. This intricate design facilitates the physical elimination of E. coli while concurrently addressing impurities like sediment and rust, common culprits of water quality degradation and turbidity due to secondary contamination in municipal tap water. The result is a discernibly safer and impeccably clean source of drinking water.

Operating on municipal tap water as its primary source, the EVERPURE Dirtyclean CPF series pipeline ultrafiltration water purifier adheres to the stringent requirements outlined in the "Hygienic Safety and Functional Evaluation Standards for Water Quality Processors for Domestic Drinking Water - General Water Quality Processors" (2001). Tailored for diverse business environments with substantial daily demands for purified water, including hotels, guesthouses, and restaurants, this system ensures a consistently reliable and high-quality water supply.

## 5. TECHNICAL SPECIFICATIONS

Model	Purified Water Flow Rate* (L/min)	Rated Total Purified Water Volume* (m <sup>3</sup> )	Product Dimensions Diameter* Length (mm)	Filtration Precision	Operating Pressure	Product Net Weight	Inlet and Outlet Connection Dimensions
Dirtyclean CPF-20BB	8	10	Φ114*600	0.1μm	0.2-0.4MPa	5kg	3/4 inch
Dirtyclean CPF-40BB	12	10	Φ114*860	0.1μm	0.2-0.4MPa	7kg	3/4 inch

\*Note: Tested results are based on the testing methods specified by the Chinese Ministry of Health (MOH).

### Primary water-related components: Dirtyclean CPF-20BB

Component Name	Material	Specifications	Quantity	Service Life**
Stainless Steel Casing	304 Stainless Steel	Φ114mm x 600mm	One	10 years
Ultrafiltration Filter Cartridge Model: 20BB UF	Ultrafiltration Membrane Fiber: Polyvinyl Chloride (PVC) Shell: ABS Plastic	Pore Size: 0.1μm Φ108mm x 540mm	One	12 - 36 months

### Dirtyclean CPF-40BB

Component Name	Material	Specifications	Quantity	Service Life**
Stainless Steel Casing	304 Stainless Steel	Φ114mm x 860mm	One	10 years
Ultrafiltration Filter Cartridge Model: 40 BB UF	Ultrafiltration Membrane Fiber: Polyvinyl Chloride (PVC) Shell: ABS Plastic	Pore Size: 0.1μm Φ108mm x 800mm	One	12 - 36 months

\*\*Note: The stipulated replacement period is a recommendation based on suggested intervals. The actual lifespan of the filter cartridge may vary contingent upon specific water consumption patterns and the quality of local tap water.

# 6. INSTALLATION AND COMMISSIONING

## I. Installation Preparation

1. Meticulously unwrap the product, peruse the user manual, and validate the presence of all included accessories. In case of any disparities, promptly liaise with the authorized dealer.
2. Identify the installation locale, exercising particular caution when opting for wall-mounting on a load-bearing structure. After confirming the installation site, demarcate the points based on screw positions, employ an impact drill for perforations, insert expansion screws, and firmly affix the equipment.
3. Orient the installation of the equipment in a horizontal alignment. Alternatively, contingent upon on-site considerations, contemplate lateral or inverted installation.

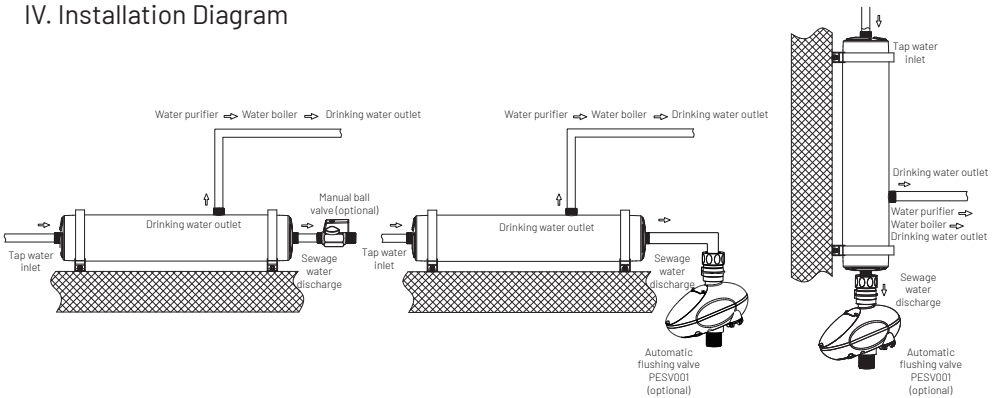
## II. Connect the Equipment

1. Adjust or extend the length of the water pipe according to practical needs.
2. Employ 6mm (3/4 inch) pipes to connect the inlet and outlet pipes and the flushing pipe. Reference the installation diagram and integrate the recommended EVERPURE automatic flushing valve (PESV001) or an alternative manual ball valve (PESV002) at the drainage outlet.
3. Gradually initiate the opening of the inlet valve, meticulously inspecting and verifying the absence of leaks in both the water purifier and all associated connections.

## III. Initial Use

1. Conclude the aforementioned preparatory measures.
2. Initiate the opening of the wastewater valve to initiate the flushing process of the ultrafiltration membrane's inner surface with municipal tap water. This action serves to expel impurities obstructing the ultrafiltration membrane and facilitates the discharge of purified water.
3. After several minutes of flushing through the wastewater outlet, the water purifier is primed for regular use.
4. Consistently activate the wastewater valve to perform routine flushing of the water purifier, contributing to enhanced filtration efficacy and prolonged membrane lifespan.

## IV. Installation Diagram



### **⚠ WARNING:**

1. Maintain the vertical orientation of the electric flushing valve during operation to prevent water ingress.
2. The dust plug on the water purifier is a disposable component. During installation, it is imperative to remove it to avert potential rupture under elevated water pressure.
3. The company reserves the prerogative to modify product designs without prior notice. For precise details, kindly refer to the physical product.

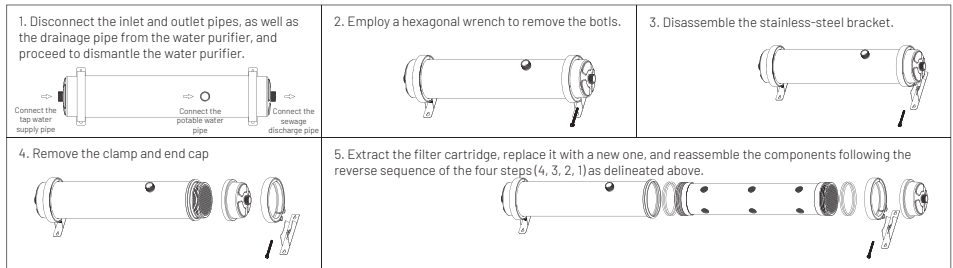
# 7. MAINTENANCE AND CARE

## I. Routine Flushing

Following standard operational procedures, regular manual flushing of the wastewater is essential to uphold the durability of the ultrafiltration membrane component. Under typical tap water conditions, it is advisable to initiate a flushing cycle every 4 hours, with each cycle lasting 3 minutes. In regions characterized by suboptimal source water quality, it is recommended to consider augmenting the flushing frequency or extending the duration, especially during peak operational periods.

## II. Filter Replacement Procedure

1. Close both the inlet and outlet valves to preclude water leakage within the pipelines.
2. Disassemble the water purifier by unscrewing the fasteners, opening the covers at both ends, and carefully extracting the ultrafiltration membrane.
3. Thoroughly cleanse the interior of the water purifier. Subsequently, install the new ultrafiltration membrane, ensuring the proper placement of the accompanying O-rings. Reassemble the additional components in adherence to their original configuration.
4. Execute the aforementioned steps meticulously to finalize the water purifier filter replacement process. Reinstall the water purifier at its designated location and ensure leak-free operation by following the prescribed initial usage guidelines.



## III. Storage Procedures

This product can be hermetically sealed and stored for up to one year before initial use. In the event of product unsealing without immediate utilization or an inactive period exceeding three consecutive days during operation, it is advisable to conduct a water production flush lasting 10-30 minutes prior to deploying the water purifier.

## 8. INSTALLATION PRECAUTIONS AND REQUIREMENTS

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1. Following the installation and commencement of operations of the water purification system, it is imperative to consistently maintain the ultrafiltration membrane filter element in a moist state, as storing it in a dehydrated condition poses a risk of potential damage.
2. In instances where the water purifier remains unused for a period exceeding 3 days, it is recommended to conduct a brief flush of the purified water outlet before utilization. This ensures the expulsion of any residual stored water within the unit.
3. Upon the resumption of tap water supply after an interruption, it is advisable to first open faucets in other rooms to flush out sediment, rust, and other contaminants from the water pipes. Subsequently, activate the waste water outlet to purge any remaining air in the pipes, mitigating potential membrane damage due to pressure. The purified water tap should be opened last for use.
4. The water flow rate at the purified water outlet is contingent upon the characteristics of the local water source. Optimal water quality results in a higher flow rate, whereas subpar water quality may lead to a diminished flow, consequently shortening the operational lifespan of the filter cartridge.
5. The water flow rate of the water purification system is also influenced by the efficacy of routine flushing and maintenance. Regularly flushing the water purifier through the waste water faucet effectively extends the operational lifespan of the filter cartridge.
6. During prolonged periods of absence (exceeding 2 days), it is advised to secure the closure of the water purification system's inlet water valve, maintaining the system in a depressurized state to enhance the longevity of the filter cartridge.
7. Over extended usage of the water purification system, the water flow rate may gradually decrease. However, the water quality consistently adheres to established standards, ensuring confident and reliable usage.
8. In the event of a system malfunction, promptly close the tap water supply valve to the water purification system to cease water supply. Avoid any attempts at self-disassembly.
9. For any anomalies or uncertainties encountered during the operational lifecycle of this product, please contact the designated service outlet or reach out to our company via telephone. We are committed to providing comprehensive assistance.
10. Install the water purifier in areas equipped with floor drainage or effective drainage measures to mitigate potential property damage resulting from unforeseen leaks.

## 9. TROUBLESHOOTING

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Faults	Causes	Troubleshooting
Reduced water production	1. Insufficient inlet water pressure	Install a pressure boosting device.
	2. Low inlet water temperature	Water production decreases with a decrease in temperature, which is considered a normal occurrence.
	3. Inadequate inlet water flow	Increase the inlet water flow or install a pressure boosting device.
	4. Contaminated inlet water	Increase pre-treatment or enhance flushing frequency.
	5. Water supply interruption or pipeline maintenance	After water supply interruption, flush out rust, sediment, etc., from the interior walls of the ultrafiltration membrane filament before producing purified water.
Leakage from clamp	Loose screws	Re-tighten the loose screws diagonally.
Turbid water output	1. Large fluctuations in inlet water pressure causing membrane filament rupture	Replace the ultrafiltration membrane core.
	2. O-ring seal on the ultrafiltration membrane is damaged	Replace the O-ring seal.

# 10. TERMS AND CONDITIONS OF WARRANTY

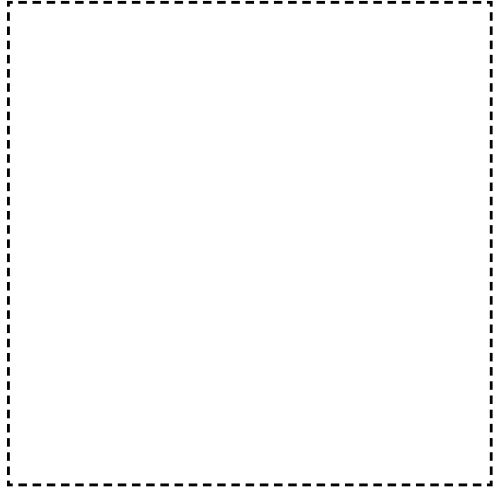
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1. The warranty period is 1 year from the date of purchase. During the warranty period, Pentair (Company) is responsible for providing free warranty for faults arising from normal operation and use according to the installation manual and user’s manual. Pentair will charge repair and maintenance fees after the warranty expires.
2. The user should keep valid purchase invoice, which serves as the basis for after-sales service.
3. Installation, maintenance and repair services will be provided by Pentair’s authorized distributors. In the event that the user is unable to present the warranty card or valid purchase invoice, Pentair will deem the warranty to have expired and charge the relevant fees.
4. Warranty will be void in the following conditions:
  - Installation by personnel who are not authorized by Pentair;
  - Product malfunction or damage resulting from user’s failure to follow the instructions described in user’s manual to operate the system;
  - Error or damage caused by the user’s self-repair or modification of the equipment;
  - Error or damage caused by force majeure (including but not limited to natural disasters such as fires, floods, earthquakes, lightning strikes, etc.);
  - Error or damage caused by human factors (including but not limited to drop, knock, etc.);
  - Where the user is unable to present warranty card or purchase invoice, or the content of the invoice has been altered;
  - Any problems caused by using parts that are not approved by Pentair.
5. The repair parts replaced during the warranty period are owned by Pentair.
6. Warranty does not cover for all consumables, such as filter element and materials.
7. Pentair reserves the right to charge a certain service fee for maintenance or repair service provided on-site in remote areas.

# 11. MAINTENANCE RECORDS

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Date	Cause of Error	Replacement Part	Maintenance Personnel
<b>Remarks</b>			



**PENTAIR**  
**EVERPURE**

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