# Waterdrop®

# Countertop Reverse Osmosis

Water Filtration System

# **Instruction Manual**



🐱 service@waterdropfilter. com

🕸 1-888-352-3558 Mon-Fri 8:00 AM-5:00 PM (PST)

#### Find the installation video

Search "Waterdrop N1 Countertop RO Installation" on 
YouTube

#### Register 1-year manufacturer warranty\*

Visit warranty.waterdropfilter.com and enter the product serial number.

Any questions, please contact Waterdrop by live chat: www.waterdropfilter.com by phone: 1-888-352-3558 Mon-Fri 8:00 AM-5:00 PM (PST) or by Email: service@waterdropfilter.com



This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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# **Installation Instructions**

# **Before Installation**

## **Inspect the Package**

Open the box and take out the system, all the components and connect fittings. Inspect them according to the parts list to ensure nothing is left out or damaged during shipping. If there are any parts cracked or broken, please do not proceed with the installation and contact Waterdrop by live chat: www.waterdropfilter.com; by phone: 1-888-352-3558 Mon-Fri 8:00 AM-5:00 PM (PST) or by email: service@waterdropfilter.com.

## **Specifications**

To achieve the optimal performance, it is highly recommended to use the system within the operational parameters.

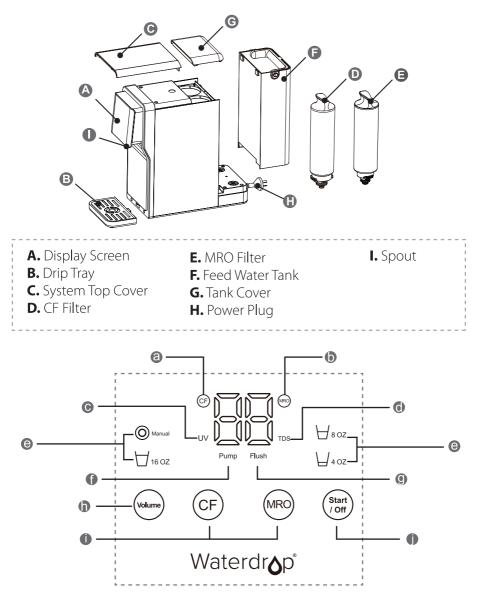
Model	WD-N1-W
System Size (L*W*H)	
Feed Water Temperature	41-100 °F / 5-38 °C
Daily Production Rate	
Feed Water Requirement	Municipal Tap Water
Power Specification	Input 100-240V AC Output 24V DC

## Note

• The daily production rate is measured under 77°F water temperature.

# **Product Introduction**

The brief introduction of various parts and sample connections are presented as follows. Please identify and get familiar with these parts and connection points for a smooth installation.



• **Display Screen:** TDS of filtered water / "L1" - Change water / Fault code / Automatically flush

a. CF Filter Life Indicator Light: "☞" Blue - normal status "☞" Yellow - replace soon "☞" Red - replace now	<b>b. MRO Filter Life Indicator Light:</b> "" Blue - normal status "" Yellow - replace soon "" Red - replace now		
<b>c. UV Indicator Light:</b> Blue - working Off - not working	<b>d. TDS Indicator Light:</b> Blue - Standard Red - Replace		
<b>e. Volume Indicator Light:</b> 4 OZ, 8 OZ, 16 OZ - the capacity of water Manual - manually control the water volume	<b>f. Pump:</b> Light on - filtering water Light off - not filtering water		
<b>g. Flush:</b> Light on - need to flush	<b>h. Volume Selection:</b> Touch to select the capacity of water		
<b>i. Filter Life Reset Button:</b> Press for 5s to reset filter life	<b>j. Start /Off:</b> Touch to dispense water or stop dispensing water		

# **Installation Steps**

Prior to installation, it is highly recommended to watch the video "Waterdrop N1 Countertop RO Installation" on D YouTube

**Step 1:** Take out the machine and place it on the countertop. Install the drip tray.

**Step 2:** Remove the tank cover, hold the machine with one hand, and take out the feed water tank with the other hand. [*Figure 1.1*]

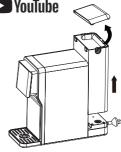
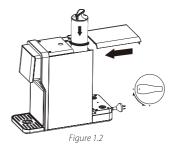
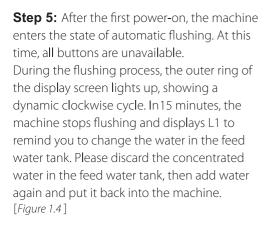


Figure 1.1

**Step 3:** Open the system top cover, screw the new CF and MRO filters into the machine respectively according to the identification prompts on the machine (after the filter is put into the filter cylinder, rotate 90°clockwise to the dot identification), and close the system top cover. [*Figure 1.2*]



**Step 4:** Fill the feed water tank with water and put it back into the machine. Close the water tank cover and plug in power. After the machine beeps, all the indicators will be on.[*Figure 1.3*]



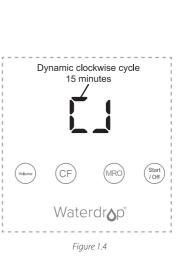
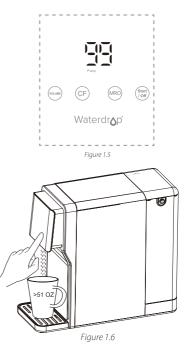


Figure 1.3

**Step 6:** After the water change is complete, the machine starts to filter water. It enters the 99-second countdown state. No filtered water is available during this time.[*Figure 1.5*]

**Step 7:** After the filtration countdown is over, the machine enters the manual flushing mode and the "Flush" indicator light will flash. After the "Pump" indicator light goes out, put a container (>51 oz) below the spout and press the "("") " button to dispense water until the "Flush" indicator light goes out. [*Figure 1.6*] The flushing time mentioned above is the basic requirement, and it might vary based on the local water quality. It's recommended to flush 2 or 3 more gallons of water until the water looks clean and four tanks of water are needed during the whole process.



**Note:** As in the manual flushing mode, the maximum allowed water withdrawal is 50 oz, which means you probably need to press the " (row") " button a few more times during the flushing process. The machine will restart the 99-second countdown state as the water tank is empty if flush it with the " **Pump** " indicator light on. The water dispensed during the flushing is not drinkable.

**Step 8:** Discard the concentrated water in the feed water tank and refill it with water before it can be used normally.

Warning: When the machine displays L1 to prompt a water change, it is necessary to pour out the remaining water in the feed water tank before adding new water. Water cannot be directly added to the water tank. If it is, the TDS value of the raw water will be high, affecting the filter life and use of the machine.

Congratulations!

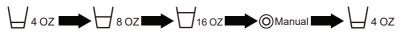
You have successfully installed the system! Register your product now for 1 year manufacturer warranty.

# **Display and Operation**

## Section 1: Dispense Water (How to Dispense Water)

## **Capacity adjustment**

There are 4 capacity options (4 OZ, 8 OZ, 16 OZ, and Manual). Touch the Volume button to choose the capacity you need.



### Dispense water

After selecting the amount of water you want, press the button "("start")" for a short time to get water. Press it again to stop getting water.

When the capacity options of 4 OZ, 8 OZ, or 16 OZ is selected, the system will automatically stop dispensing water after the selected water capacity flows out.

When you select Manual, the water capacity should be controlled according to your needs. When the required water capacity is obtained, the button  $(\operatorname{Start}_{\operatorname{rop}})^{"}$  should be pressed to stop dispensing water.

#### Note: The maximum water output on Manual operation is 50 oz.

## Section 2: Replenish Water

## Manual replenishment of the feed water tank

• During use, when L1 is displayed on the screen, the feed water tank is in a water shortage state. The  $(s_{tart})^{"}$  button will not be available at this time.

• Please remove the feed water tank, pour out the concentrated water, add water again, and put the feed water tank back into the machine.

**Note:** The water cannot be directly poured into the feed water tank. Otherwise, the RO filter life may be shortened or the machine may break down.

## Automatic replenishment of the purified water tank

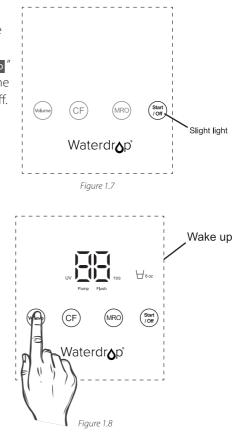
• When the built-in purified water tank is short of water during normal use, the machine will automatically enter water replenishment mode. At this time, the display screen will display a countdown of 99 seconds and the "Pump" indicator light will be on.

• In the replenishing water state, the "()" button is not available and can be used normally only after the 99-second countdown is completed. (After 99 seconds, the machine will continue to filter water until the purified water tank is full.)

## Section 3: Standby Mode and Sleep Mode

## Standby mode

• Wake up standby mode: Touch any button (" CF "" (R) " reset button, " (W) " button, or " (Starf)" " button) to wake up the machine. The machine exits the standby state and returns to the interface before standby.[*Figure 1.8*]



#### Sleep mode

• Sleep mode: After 120 hours of no use, the machine will enter the sleep state and all lights go out.

• Wake up sleep mode: Touch any button (" (F)"" (RO" reset button, " (WIND" button, " (WIND")" button, or " (Start (Start)")" button) to wake up the machine.

• Manual flushing: Because the machine has not been used for a long time, the water stored in the purified water tank should be drained and replaced with fresh water before use. After that, the "Flush "indicator light will flash constantly. Place a container (>51 oz) below the spout. Press the " $\binom{\text{Start}}{\text{/off}}$ " button to get water for flushing until the "Flush " indicator light goes out before the water is drinkable. [Figure 1.9]



[Figure 1.9]

Note: A total of 102 oz of water must be discharged. The whole operation takes about 8 minutes. The water dispensed during flushing is not drinkable.

## Section 4: Empty the Purified Water Tank

It is recommended to empty the purified water tank before using the system if the system doesn't been used for a period of time.

Press the " (CF) " and " (MRO) " filter life reset buttons for 3 seconds, the system will enter the drain mode after a beep and the "Flush "indicator light will flash constantly. Place a container (>51 oz) below the spout. Press the " $\left( \begin{array}{c} \text{Start} \\ \text{vor} \end{array} \right)$ " button to get water and press it again to stop. The drain mode will be end after the purified water tank is empty and the "Flush " indicator light stops flashing. The screen displays a countdown of 99 seconds to filter water again. The filtered water is drinkable after the flush process. If the filtered water still tastes weird, it is recommended to empty the purified water tank again.

## Section 5: Filter Life Reminder and Replacement Guide

#### 1. Filter life reminder

a. CE: Pre-Sediment and Carbon Block Filter Service life: 6 months b. MRO: Multiple Reverse Osmosis Membrane Filter Service life. 18 months

#### NOTE:

Filter life may vary depending on source water quality and water usage. Please replace the filters according to the reminder of the filter life indicator light.

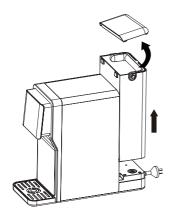
There are helpful " CF " & " MRO " filter life indicator light on the front panel that will notify you to perform routine filter replacement by color change. Be sure to reset the filter life indicator light every time you replace your filter.

Chatura	Status Remaining Life (Day)	Remaining	Indication		Chatura	
Status			Light	Status	Status	
Normal	>15	>40	N/A	N/A	Good	
Pre- warning	≤15	≤40	Yellow	Beeps 3 times when dispensing water	Replace Soon	
Warning	≤ 0	≤40	Red	Beeps 3 times when dispensing water	Replace Now	

## 2. Filter replacement guide

## a. How to replace filters:

1. Open the tank cover, remove the feed water tank, and open the system top cover. [*Figure 2.0*]



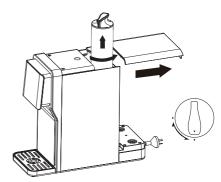
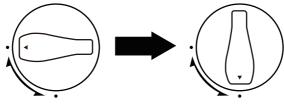


Figure 2.0

2. Twist the expired filter counterclockwise to "• ". [Figure 2.1]





3. Remove the wrappings and protective cap from the new filter.

4. Insert the new filter into its corresponding hole.

Twist the filter clockwise to "• ". [Figure 2.2]

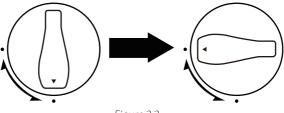


Figure 2.2

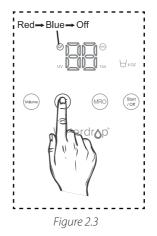
5. Close the system top cover and change the water in the feed water tank. Then put it back and close the water tank cover.

6. Reset the filter life indicator light and flush the filter after replacement (please refer to the following steps).

# b. How to reset the filter life indicator light (resetting the CF filter life indicator light, for example):

• Press and hold the " **CF** " filter life reset button for 5 seconds until the system beeps. [*Figure 2.3*]

**Note:** The filter life reset of MRO is the same as the reset of CF.



#### c. How to flush the filter after replacement:

• For CF filter: It will be flushed automatically for 5 minutes. During the flushing process, the outer ring of the display screen lights up, showing a dynamic clockwise circulation. After 5 minutes, the machine stops flushing, and L1 is displayed to remind you to change the water in the feed water tank. Please remove the water tank to pour out the concentrated water, then add water again. [*Figure 2.4*]

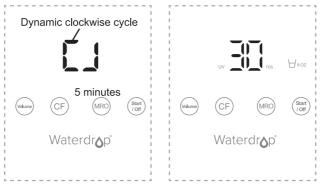


Figure 2.4

• For MRO filter: After the filter life is reset, the system will flush automatically for 15 minutes, and then the "Flush "indicator light will flash constantly.

After the "Pump" indicator light goes out, put a container (>51 oz) below the spout. Press the "("") " button to get water for flushing until the "Flush" indicator light goes out. [*Figure 2.5*]



Figure 2.5

Note:The flushing time mentioned above is the basic requirement, and it might vary based on the local water quality. It's recommended to flush 2 or 3 more gallons of water until the water looks clean and four tanks of water are needed during the whole process.

## **Section 6: Malfunction Display**

#### **Timeout protection**

If the machine continuously filters water for longer than 40 minutes, the screen will display E4 and the system will alarm 5 times. The fault can be rectified after the power supply is unplugged and replugged. If you cannot carry out this process yourself, please contact the customer service hotline at 1-888-352-3558, Mon-Fri 8:00 AM-5:00 PM (PST), for assistance.

# **System Maintenance**

• If you have not used the machine for a minimum of 3 days, it is suggested that you discard the remaining water in the purified water tank.

• During the daily water change, it is recommended to clean the feed water tank manually (Once a week is highly recommended) to avoid the accumulation of impurities and organic matter in the feed water tank. Such impurities and matter affect the filtering effect of the product.

• At the same time, it is recommended to frequently clean the floating ball, floating ball silicone cover, and filter screen in the feed water tank to avoid limescale. See the following figures for the specific disassembly and assembly steps.

- a. Pull out the silicone cover of the floating ball and then take out the floating ball. [*Figure 2.6*]
- b. Pull out the two filter screens in the same direction, as shown in the figure. [*Figure 2.6*]

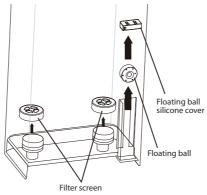


Figure 2.6

c. After cleaning, insert the floating ball into the groove. Then close the floating ball silicone cover and filter screen covers tightly, as shown in the figure 2.7]

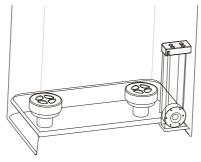


Figure 2.7

• Use a descaling agent (such as citric acid) to soak the feed water tank for 30 minutes every month and then clean it. Do not use organic solvents such as alcohol to wipe it.

• Clean the drip tray regularly (once a week is recommended) to avoid bacteria and residual water overflow.

• Replace the filters regularly according to the filter life indicator light.

• Clean the system with clear water. Do not spray the water directly onto the filters.

• Do not use steel wool, an abrasive cleaner, or a corrosive liquid such as gasoline or acetone.

• If you are using well water as the source, ensure that the feed water has been through a pre-filtration system.

• Empty the feed water tank before refilling. Adding water without this step will shorten the service life of filter cartridges.

# Troubleshooting

# 1. Why is the TDS value in the feed water tank higher than that of the added tap water?

Our system uses advanced recycling technology. The recycled water will go back into the feed water tank, so the TDS value of the water in the tank will be higher than that of the feed water. With this technology, you will save at least 80% water than the traditional reverse osmosis system.

# 2. When the machine filters water, the TDS value in the feed water tank is always changing.

When the machine filters water, the recycled concentrated water continuously enters the feed water tank and the TDS value of the concentrated water is changing, resulting in continual changes in the TDS value after the concentrated water is mixed with the raw water. The TDS value will tend to be stable after filtration.

#### 3. The TDS value of the purified water is high.

When working properly, the system will provide a 90%+ TDS rejection rate (tested under standard laboratory conditions). If the TDS reading is high, the following are the possible causes.

a. The new filters haven't been flushed thoroughly. Refer to the instructions to flush them correctly.

b. The RO membrane filter has expired. Replace the RO membrane filter immediately. c. The source water in the tank may have a high TDS. Test the source water in the tank and the filtered water. The filtered water's TDS should be about 5%-10% of your source water's TDS. This is a normal range. If the source water has high TDS, it may reduce the service life of the system. When the filtered water's TDS creeps up to 15%-20% of the source water's TDS, please perform routine filter replacement.

#### 4. The TDS value of the purified water is not stable.

The TDS value of purified water is positively correlated with the TDS value of the feed water, which is generally 5%-10% of feed water. Feed water with an unstable TDS value will lead to purified water that has an unstable TDS value.

a. The TDS value of tap water may change based on the water source.

b. The TDS value of the feed water tank is not stable. As this system works with the function of "Concentrated Water Return and Reuse", with the concentrated water flowing back to the feed water tank, it will influence the TDS of the purified water.

#### 5. The water has a peculiar smell.

a. The new system is not fully flushed and can be used after flushing according to the instructions for the first installation.

b. If the system has not been used for a while, follow the emptying mode prompt to flush.

c. If the filter is not replaced in time, please replace the filter immediately.

# 6. If the water in the feed water tank does not reach the lowest water level, the machine displays L1 to prompt a water change.

When the TDS value of the filtered water is higher than 99ppm and the water quality is poor, the screen will display L1 to prompt a water change. Continuing to use the water in the feed water tank will shorten the filter life and damage the machine. Therefore, when the machine displays L1, please pour the water out of the feed water tank and replace it with new water to use the machine.

#### 7. No water from the machine.

a. If the machine is not powered on, check on whether the power plug is loose or not plugged in.

b. The purified water tank (not the feed water tank) is short of water. The screen displays a countdown of 99 seconds. Water will be taken after the countdown is over.

#### 8. The machine is leaking.

a. When the drip tray is full, empty the water stored in the drip tray.

b. Foreign matter is stuck in the check valve at the bottom of the feed water tank. Use a small thimble or your finger to resist the sealing valve and remove the foreign matter.

c. Leakage inside the machine: Turn off the power and water supply and contact our customer service hotline, 1-888-352-3558, Mon-Fri 8:00 AM-5:00 PM (PST), for assistance.

#### 9. The machine does not filter water.

a. The feed water tank is short of water, and the machine displays L1 to prompt a water change.

b. The TDS of the water in the feed water tank is higher than 99ppm, and the machine displays L1 to prompt a water change.

c. The feed water tank is not installed in place. Check the feed water tank to ensure that it is installed in place.

#### 10. The indicator light on the display screen turns on and off.

a. The "**Pump**", "**Flush**", and filter life indicator light, as well as the Volume and UV indicator light, are displayed according to the actual working status of the machine and are not constant all the time. Please refer to the display part for details. Therefore, if the display indicator light are consistent with the instructions, which means there is no problem, feel free to use the machine.

b. If the circuit board is disconnected, please contact our customer service hotline by live chat: www.waterdropfilter.com; by phone: 1-888-352-3558 Mon-Fri 8:00 AM-5:00 PM (PST) or by email: service@waterdropfilter.com.

# **Limited Product Warranty**

The warranty of our product covers defects in materials and workmanship from the original date of purchase. During the warranty period, we will replace or repair any part which is deemed to be defective, if the product has not been subjected to tampering, alteration, lack of regular maintenance or improper use after delivery. The cost of repair or replacement under those excluded circumstances shall be borne by the consumer. This limited warranty does not cover the following items: filters and all other parts or components that require regular replacement as a result of ordinary usage. This limited warranty only applies if the system is installed, used, and maintained in compliance with all instructions and requirements enclosed with the system.

#### This limited warranty shall only be valid if:

- 1. The feed water temperature must be no less than 41°F and no more than 100°F;
- 2. Working conditions are 4°C~40°C /39.2°F~104°F;
- 3. The feed water must have a pH between 6.5 and 8.5;
- 4. Turbidity must be less than 1.0 NTU.

#### Any information or suggestion with respect to our product concerning applications, specifications or standards is provided solely for your convenience.

The quality of water supplies may vary seasonably or over a period of time. Your water usage may vary as well. The manufacturer shall assume no liability for the determination of the proper equipment necessary to meet your requirements, and we do not authorize others to assume such obligation on our behalf. You must verify and test the suitability of any information with respect to the product for your specific application.

#### This limited warranty shall be void if:

1. The cartridge filters are not replaced on the recommended maintenance schedule; 2. The product is purchased from someone other than our official website or our authorized dealers, as we cannot verify or guarantee the integrity or authenticity of the product. Our sole obligation under this warranty shall be repair or replacement of a non-conforming product or parts of this product, or at our option, return of the product and a refund of the purchase price. Our obligation does not include the cost of transportation. We are not responsible for damage in transit, and claim that such damage should be presented to the carrier by the customer.

**Note:** In case some states do not allow limitations on how long an implied warranty lasts, you may choose to return the system. If you choose to keep it, you agree that the above limitations still apply to you.

The warranties set forth herein are the only warranties made by us with respect to the product. We make no warranties, expressed or implied, including, but not limited to, any warranties of fitness or merchantability, except as expressly set forth above.

**Note:** In case some states do not allow limitations on how long an implied warranty lasts, you may choose to return the system. If you choose to keep it, you agree that the above limitations still apply to you.

# **Warranty Registration**

Please visit our website **www.waterdropfilter.com** and go to the "Warranty Registration" tab to register your product for the warranty.

We offer a 30-day money back guarantee, a 1-year manufacturer warranty, and lifetime tech support for all our products. Please be sure to fill in the order information upon registration of your system. For any questions and concerns about the product, please feel free to call or email us. Your satisfaction is our top priority!

If you are happy with our products and service, please share with your friends or share on Amazon. We would greatly appreciate your voice and support. Thank you!

#### **How to Contact Us**

service@waterdropfilter.com 1-888-352-3558 Mon-Fri 8:00 AM-5:00 PM (PST) www.waterdropfilter.com (live chat available)





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