

KEEP THIS MANUAL IN GOOD CONDITION, PLEASE READ THIS MANUAL CAREFULLY BEFORE USING THE MACHINE

## DIRECT DRINKING WATER PURIFIER

# **User Manual**

Model: MRO1790B-400G

Before installing and operating your water purifier, please read the instruction manual carefully and keep it for future reference.

#### SAFETY INSTRUCTIONS

#### Please note the following brief icons and rules for safe use of this product



#### **Troubleshooting**

When the machine fails, please disconnect the power and water source immediately



#### Maintenance

Never remove the parts on the machine to avoid leakage or damage



## Avoid contact with children

Never have the machine operated by a child



#### **Temperature**

Please use the product in a dry place with the temperature of 4-38°C



#### **Electricity prevention**

To avoid leakage of electricity.



#### Accessories and filters

To maintain the normal operation of the machine, be sure to use accessories and filters supplied by original company



#### **Emergency call**

For any help, please call the local sale service center or the national service hotline



#### Correct repair service

This machine can only be repaired by qualified personnel designated by this company



#### Avoid direct sunshine

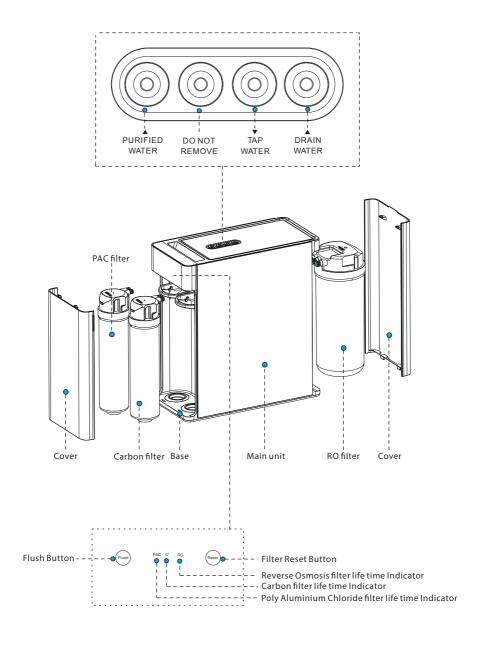
Do not install the machine in a place exposed to direct sunshine

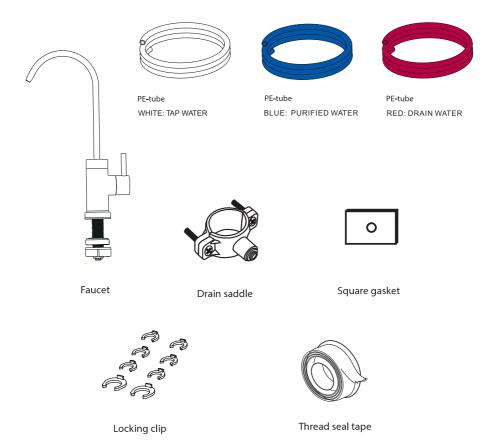


#### Anti-freeze

Never store or expose the product in an environment less than 0°C

- 1. This appliance can be used by children aged from 8 years and above if they have been given supervision or instruction concerning use of the appliance in a safe way and if they understand the hazards involved. Cleaning and user maintenance shall not be made by children unless they are older than 8 and supervised. Keep the appliance and its cord out of reach of children aged less than 8 years.
- 2. Appliances can be used by persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved.
- 3 Children shall not play with the appliance.
- 4.If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.
- 5.Do not store explosive substances such as aerosol cans with a flammable propellant in this appliance.
- 6.This appliance is intended to be used by expert or trained users in shops, in light industry and on farms, or for commercial use by lay persons.
- 7. The appliance is suitable for indoor use only.
- WARNING: Keep ventilation openings, in the appliance enclosure or in the built-in structure, clear of obstruction.
- 9.WARNING: Do not use mechanical devices or other means to accelerate the defrosting process, other than those recommended by the manufacturer.
- 10. The appliance must not be immersed.
- 11.WARNING: To avoid a hazard due to instability of the appliance, it must be fixed in accordance with the instructions.
- 12. The appliance must not be cleaned by a water jet.
- 13. The new hose-sets supplied with the appliance are to be used and that old hose-sets should not be reused

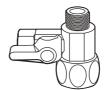




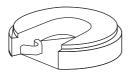
## **PRODUCT OVERVIEW**



Large rubber gasket



3-way valve



Plastic washer



Locking nut



Tooth lock washer

## Required tools (not included)



Power drill with 1/4" drill bit



Bucket



Cross-head screwdriver



Pipe cutter



Adjustable wrench



Safety glasses

#### **BEFORE FIRST USE**

**A WARNING** To avoid danger of suffocation, keep plastic bags away from children and pets. Do not use plastic bags in cribs, beds, carriages or playpens.

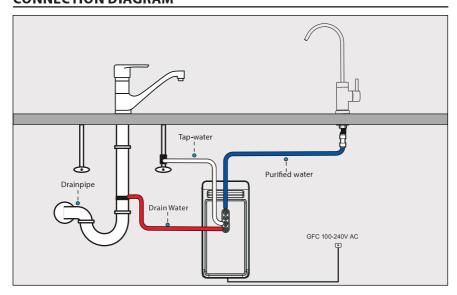
- 1. Remove all the packing materials.
- 2. Remove and review all components before use.
- 3. Check the product for transport damages.
- Before connecting the product to the power supply, check that the power supply voltage
  and current rating corresponds with the power supply details provided on the product rating
  label.

#### **PREPARATION**

- This product should be installed and maintained only by an experienced adult following Uniform Plumbing Code (UPC) or other applicable state or local codes. If in doubt, consult a professional.
- 2. Ensure the mains water supply meets the product requirements, see chapter **Specifications**.
- It is recommended to place the main unit in the cabinet under a sink on a flat and level surface. Before starting the installation, place the product in its planned location to ensure the location is suitable.
- 4. Ensure there is sufficient access to the plumbing under the sink and the main water valves.
- 5. Ensure the supply cord and PE-tubes can be routed without kinking or bending.
- 6. Ensure all required tools are available before starting the installation.
- 7. Leave at least 4" (10 cm) of free space around the product to allow for proper ventilation.

**NOTICE** It is normal for the water purifier to emit some noise and slightly vibrate when in use, this is normal.

#### **CONNECTION DIAGRAM**



#### **HOW TO USE THE QUICK-CONNECT FITTINGS**

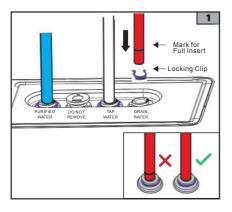
All parts of the product that connect with PE-tubes are equipped with quick-connect fittings.

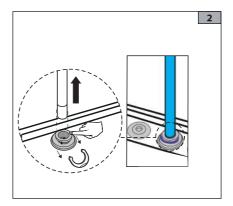
To attach a PE-tube to a quick-connect fitting:

- Push the PE-tube into the fitting. There
  is an existing mark at the end of the
  tube for you to confirm if the tube
  is fully inserted into the fitting.
- Slide the Locking clip between the quick-connect release and the fitting (Fig.1).

To disconnect a PE-tube from a quick-connect fitting:

- 1. Remove the locking clip.
- 2. Push and hold the quick-connect release.
- 3. Pull the PE-tube out of the fitting (Fig. 2).





#### **INSTALLATION STEPS**

#### Step 1: Installing the 3-way valve

1. Shut off the water supply. Turn on the faucet to release the water pressure.

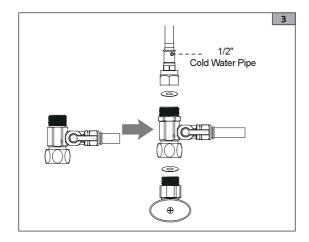
**NOTE:** Make sure the water has stopped before proceeding to the next step. Use a towel or bucket to catch any excess water.

- 2. Disconnect the cold water pipe from the cold water supply valve.
- 3. Connect the white 1/4" inlet water tubing to the feed water adapter and pop the lock clip on the fitting.

NOTE: Make sure it is fully inserted until you reach the mark on the tubing.

**NOTE:** The cold water pipe is 1/2", unscrew the converter from the A end of the feed water adapter, and then screw it on the B end of the feed water adapter (Figure 3). Next, follow step 4.

5. Twist the cold water pipe (with its washer) onto the feed water adapter and tighten it with an adjustable wrench.



#### INSTALLATION

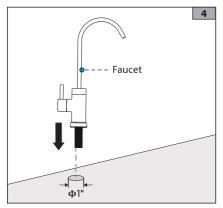
#### Step 2: Installing the faucet

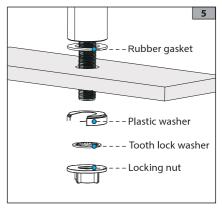
## A CAUTION Risk of damage!

Some kitchen counter top materials, including granite, porcelain, steel and plastic resin, require specialized tools and can be irreparably damaged if unsuitable tools are used.

Installing the faucet requires a hole in the counter top or sink. The hole size must be 1" in diameter.

- 1. Use a pre-existing hole if available. If no pre-existing hole is available, consider hiring a professional.
- 2. Place the large rubber gasket over the hole and place the stem of the faucet through the hole (Fig. 4).
- 3. First place the plastic washer and then the tooth lock washer onto the stem of the faucet and secure them using the locking nut on the threaded stem (Fig. 5).





4. Connect one end of the Blue purified water PE-tube (BLUE) to the faucet by pushing it into the quick-connect fitting. Secure the PE-tube with the safety clips (see chapter **How to use the quick-connect fittings**).

NOTICE

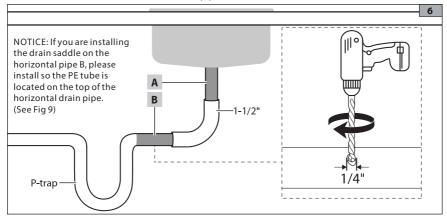
Do not connect the other end of the PE-tube to the main unit at this time.

#### INSTALLATION

#### Step 3: Installing the drain saddle

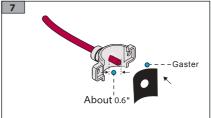
**NOTICE** The drain saddle fits around a standard 1-1/2" drainpipe.

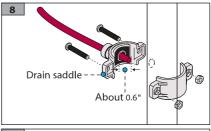
- Select and mark a location on the drainpipe (A or B). The location must be straight, at least 3" and before the P-trap (Fig. 4). It is recommended to use a vertical location (Fig. 8)
- 2. Place the drain saddle around the drainpipe to check the fit.

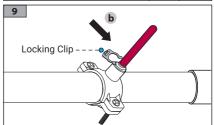


- 3. Drill a 1/4" hole. Make sure to only drill through one side of the drainpipe (Fig. 6).
- 4. Remove any loose plastic from the drainpipe.
- Push the wastewater PE-tube (RED) into the quick-connect fitting on the drain saddle (Fig. 8). Insert the wastewater PE-tube at least 0.6" to avoid any leakage.
- 6. Remove the protective plastic from the square gasket.
- 7. Place the square gasket through the PE- tube and it to the inner wall of the drain saddle (Fig. 7).
- Connect the two halves of the drain saddle with the nuts and screws. While leaving the tubing in the hole. Tighten both sides equally to secure the drain saddle and remove the drill bit from the quickconnect fitting (Fig. 9).
- Secure the PE-tube with the safety clips (see chapter How to use the quickconnect fittings).

**NOTICE:** If you are installing the drain saddle on the horizontal pipe B, please install so the PE tube is located on the top of the horizontal drain pipe. (See Fig. 9).







#### INSTALLATION

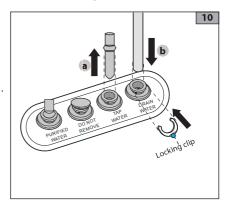
#### Step 4: Connecting the PE-tubes to the main unit

The main unit has one **Wastewater** outlet, **Purified water** outlet and **Tap-water** inlet. These correspond to the three PE-tubes.

 Remove the protective silicon plugs from the inlet and outlets on the main unit (Fig.10-a)

- Push the Red wastewater PE-tube into the quick-connect fitting of the **DRAIN WATER** outlet (Fig.10-b). The other end of the wastewater PE-tube is connected to the drain saddle.
- Push the White tap-water PE-tube into the quick-connect fitting of the **Tap-water** inlet.
   The other end of the tap-water PE-tube is connected to the 3-way valve.
- Push the Blue purified water PE-tube into the quick-connect fitting of the **Purified** outlet. The other end of the purified water PE-tube is connected to the faucet.

 Secure each of the PE-tube with the safety clips (see chapter How to use the quickconnect fittings).

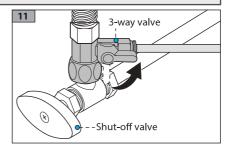


#### Step 5: Checking for leaks

### **CAUTION** Risk of damage!

Do not connect the main unit to the power supply at this time. Always check for leaks before connecting the product to the power supply.

- Close the faucet.
- 2. Open the 3-way valve and the water supply shut-off valve (Fig. 11).
- 3. Check all connection points for any leaks.
- Use the water supply shut-off valve to turn off the water supply if any leaks are spotted.



#### USING THE PRODUCT

## **CAUTION** Risk of damage!

- Close the 3-way valve and disconnect the product in the event of a water shutdown or
  pipeline maintenance. Always flush the water lines after any maintenance work has been
  carried out to avoid larger debris to enter the filters.
- If you plan to not use the product for an extended period of time, close the 3-way valve.

  Before using the product again, open the 3-way valve and allow the water to run through the faucet for 3 to 5 minutes.

#### **USING THE PRODUCT**

Buttons		
button (Reset)	Press after replacing filters (see chapter <b>MAINTENANCE</b> ).	
button (Flush)	Press to flush newly installed filters.	
Signals		
Filter indicator lights	When blinking, indicate it is time to change filters.	

Modes	
Safety mode	The product automatically switches off if water runs continuously for 30 mins. To reset, close the faucet, power off few minutes. Power up again, The product returns to normal.
Auto-cleaning mode	The product is cleaning the filters.

#### Start up

- Connect the adapter and faucet to the unit cable connector then connect the plug to a 100-240V GFCI power outlet.
- All indicators on the front panel blink simultaneously for 5 seconds, After this the system is starting up. The main unit will enter the auto-cleaning mode for 25 seconds.
   Do not use faucet during this time.
- 3. After the product has completed its auto-cleaning mode, it is recommended to open the connected faucet and allow water to run for at least 20 minutes to flush the filters before drinking the water for the first time.

#### Use

- 1. Slowly turn the handle of the faucet from its upright position 90° anti-clockwise to start the flow of water.
- 2. Turn the handle of the faucet 90° clockwise to stop the flow of water.

**NOTICE** The amount of purified water depends on water pressure and water temperature.

#### **MAINTENANCE (FILTER REPLACEMENT)**

#### **NOTICE**

- The filter need to be replaced when the corresponding indicator starts to blink.
- Both filters have a limited service life. Changes in the taste, odor, color and flow of the water being purified indicate that the filter should be replaced.

To change a filter, proceed as follows:

- 1. Close the 3-way valve (Fig. 12).
- 2. Open the drinking water faucet to release pressure.
- 3. Disconnect the plug from the power outlet.
- 4. Remove the cover from the main unit (Flag.13).
- 5. Push up the locking handle. (Fig. 15)
- 6. Pull up the filter pops out. (Fig. 16)
- 7. Insert new filter (The bottom of the filter should be inserted into the hole of the Base.(Fig. 17)
- 8. Pressed the upper part of the filter into the corresponding hole. (Fig. 18)
- 9. Push back the locking handle. (Fig. 19)
- 10. Install the front cover. (Fig. 20)

#### NOTICE

Please make sure the PAC filter is on the left side and the carbon filter is on the right side, not interchangeable (Flag. 14).

## PROMPTED FILTER REPLACEMENT

- 11. After the product has completed its start up, press and hold the button (Reset) for 3 seconds.
- 12. Open the connected faucet and allow water to run for at least 20 minutes to flush the filters before drinking the water for the first time.

**NOTICE** Any other servicing than mentioned in this manual should be performed by a professional repair center.

## MANUAL FILTER REPLACEMENT

Follow steps 1-12 above and then proceed as follows:

- Press the button
   (Reset) to select the filter to be replaced. A blinking indicator signals which filter has been selected.
- 14. Once the correct filter is selected, press and hold the button (Reset) for 3 seconds until the indicator of the selected filter remains on.
- 15. Flush the filter for at least 20 minutes.





















## **TROUBLESHOOTING**

Problem	Possible causes	Solution		
Decreased flow of	The 3-way valve is not fully open.	Fully open the 3-way valve .		
purified water.	The filter is blocked or has reached the end of its life cycle.	Replace the filter.		
Change in water taste.	The filter was not used for several days.	Turn on the faucet and allow the water to run for 5 minutes.		
	The filter has reached the end of its life cycle or is defective.	Replace the filter.		
The purified water contains a high level of total dissolved solids (TDS).	The level of TDS in the water supply exceeds	Immediately stop using the product and close the 3-way valve to avoid damage.		
	the maximum level permitted by the EPA for public drinking	Install a pretreatment device ahead of this product in the water supply.		
	water.	Reinstall the product.		
	System component failure	Close the 3-way valve and disconnect the plug from the power outlet.		
The main unit is		Immediately contact customer support.		
leaking.	Filters not installed correctly	Close the 3-way valve.		
		Remove and refit the filters.		
		Open the 3-way valve.		
There is no purified water coming out of the connected faucet.	The water leakage detector has been triggered.	Close the 3-way valve and disconnect the plug from the power outlet. Inspect the lines and pipes for external leaks. Tilt the main unit to check for internal leaks:		
		<ul> <li>If leakage is internal, water will drain out from the main unit. Contact customer support.</li> </ul>		
		<ul> <li>If the leakage is external, inspect for leaks and fix the leak accordingly. Drain any water from main unit by tilting it.</li> </ul>		
		Reset the leakage detector: disconnect the plug from the outlet. Disconnect the tap - water PE-tube (BLUE). Reconnect the tap-water PE-tube (BLUE) to the Tap-water inlet, and connect the plug to the power outlet.		
	An air bubble is blocking the PE-tubes (usually after a filter replacement or water supply shutdown).	Close the 3-way valve and disconnect the plug from the power outlet.  Turn on the kitchen faucet and make sure the water is flowing.  Open the 3-way valve and connect the plug to the power outlet.		

#### **CLEANING**

- Before cleaning, disconnect the product from the power supply.
- Do not use any aggressive cleaners, brushes with metal or nylon bristles, or sharp or metallic cleaning utensils such as knives, hard scrapers, and the like. They could damage the surfaces.
- Use a damp cloth to wipe off the of the product. Let the product dry completely.

### **SPECIFICATIONS**

Model Number	MRO1790B-400G	
Total Filtration Capacity	3600L	
Rated Voltage/Frequency	quency 100-240V~ 50/60Hz	
Rated Power	75W	
Service Flow Rate	1.0L/min	
Feed Water Pressure	0.1-0.6MPa	
Feed Water Requirement	Municipal Tap Water	

#### **Filter Specifications**

Model	Function	Quantity	Recommended Replacement Cycle
PAC compound filter	Filter the dust, rust, suspended matter, residual chlorine and odor effectively.	1	3-6 months
Post carbon filter	Improve the water taste and absorb the abnormal color and odor in the water.	1	6-12 months
RO filter	The theoretical filter precision can reach 0.0001-0.001 micron which can filter the organicmatter (trichloromethane, carbon, tetrachloride), heavy metal (AS, Lead and cadmium).	1	12-24 months

#### 1 YEAR LIMITED WARRANTY

This is the only express warranty for the product and in lieu of any other warranty or condition.

This product is warranted to be free from defects in material and workmanship for a period of one year from the date of original purchase. During this period, your exclusive remedy is repair of replacement of this product or any component found to be defective, at our option; however, you are responsible for all costs associated with returning the product to us and our returning the product or component under this warranty to you. If the product or component is no longer available, we will replace with a similar one equal or greater value.

This warranty does not cover wear from normal use, and operation doesn't conformity with the instruction manual, or damages to the product resulting from accident, alteration, abuse, or misuse. This warranty extends only to the original consumer purchaser, or gift recipient. Keep the original sales receipt, as proof of purchase is required to make a warranty claim. This warranty is void if product is used for other than single-family household use or subjected to any voltage and waveform other than as specified on the label.

We exclude all claims for special, incidental, and consequential damages by breach of express of implied warranty. All liability is limited to amount of the purchase price. Every implied warranty, including any statutory warranty or condition of merchantability or fitness for particular purpose, is disclaimed except to the extent prohibited by law, in which case such warranty or condition is limited to the duration of this written warranty.

This warranty gives you specific legal rights. You may have other legal rights that vary depending on where you live. Some states or provinces do not allow limitations on implied warranties or special, incidental consequential damages, so the foregoing limitations may not apply to you.