

NanoPad Domestic NF Unit

Installation and Maintenance Manual

Good water, Diamond life



Read through all the instructions before installing and using the unit.

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9. TROUBLESHOOTING

PROBLEM	CAUSE	SOLUTION
No product water	Water supply is off	Turn on feed water
Not enough product water	Water supply is blocker	Clear restriction
	Feed water valve is plugged	Open valve or unplug
	No drain flow	Clear or replace check valve
Pump not running	Low feed water pressure	Check source water supply
	No power supply or loose connection	Turn on power supply
	Transformer burnt out	Replace
Pump is running but system is not producing water	Pre-filters plugged	Replace filter cartridges
	Inlet solenoid valve not working	Repair or replace valve
System does not shut off	Auto shut off switch not working	Repair or replace switch
Abnormal pump noise	Pre-filters plugged	Replace filter cartridges
	Low feed water pressure	Adjust feed water pressure
No drain water	Plugged drain flow restrictor	Replace
Tubing leaks	Tubing connection incorrect	Check/reinstall tubing
	Defective or damaged tubing	Replace section of tubing

10. SAFETY INSTRUCTIONS

This appliance is intended to operate and function as per the instructions in this manual. It is not designed to operate outside of the specifications listed and any attempt to do so or tamper with the unit can cause damage to the unit and/or bodily harm. This unit is not a toy keep out of reach from small children. If the unit is requires service or repair, please contact your local service technician or sales representative.

- Please ensure feed water temperature is over 4°C. Using water below 4°C can cause ice to form and damage the unit.
- Please ensure power source is correct before connecting unit. Incorrect voltage could result in damage to unit and/or fire hazard.
- Do not cause damage to or use unit if the power cord is damaged. A damaged power cord could cause an electrical shock or fire hazard. If power cord is damaged, unplug and discontinue use immediately.

Filter Maintenance

To ensure the unit operates at its optimum level, routine maintenance is required. The frequency of maintenance depends on the feed water quality and amount of system usage. The following are some guidelines for scheduled filter changes, keep in mind the frequency of filter changes may vary. If in doubt, contact your local dealer or service technician.

- Change Spun PP Filter every 3-6 months or as required.
- Change Block Carbon Filter every 6-12 months or as required.
- Change NF Membrane every 18-24 months or as required.

If you will be away or not using the unit for an extended period of time, please disconnect unit from power supply. If the unit has been shut down and not used for an extended period of time, perform the same flushing procedure as in the initial set up.

Filter Replacement

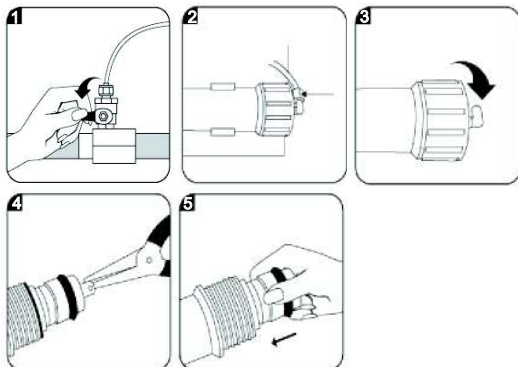
- Close Feed Water Valve.
- Open Faucet and drain any remaining water from system
- Disconnect quick connect filters.
- Replace filters, reconnect, and open valves.
- Perform pre-filter flush after filters have been changed



Note: Diagrams on how to connect using quick connect fittings can be found in the installation section.


Membrane Replacement

- Shut off Feed Water Valve and drain remaining water from system.
- Follow the same procedure as membrane installation to replace membrane.



1. INTRODUCTION

We would like to thank you for choosing NanoPad Nanofiltration Unit. This unit has been manufactured to strict quality standards to ensure you receive the best product possible. This unit is your first step to cleaner, healthier and better tasting water. This unit features 3-stage NF water filtration. These functions of the 3 stages are outlined below.

The 1st Stage:  Spun PP Filter – removes larger particles suspended in water such as sand or dirt.

The 2nd Stage:  Block Carbon Filter – removes any organics, chlorine, odor and turbidity.

The 3rd Stage:  NF Membrane – removes bacteria, heavy metals, dissolved matter, and salinity.

2. PACKAGE CONTENTS

- NanoPad NF Unit – 1 pcs
- Housing Wrench – 1 pcs
- Food Grade Tubing – 3 pcs of 1.5m, 1/4" Red, 3/8" White, and 1/4" Blue
- Faucet – 1 pcs
- Drain Clamp – 1 pcs
- Tee Fitting – 1 pcs
- Feed Water Valve - 1 pcs
- NF Membrane – 2 pcs
- Manual – 1 pcs

3. TECHNICAL SPECIFICATIONS

- Voltage and Frequency: 220V/60Hz or 110V/60Hz
- Wattage: 80W
- Pure Water Flow Rate: 1.2L/min
- Inlet TDS: ≤ 250ppm
- Chlorine Level: ≤ 0.2ppm
- Rejection Rate: 80%-85%
- Inlet Water Pressure (min/Max): 14.5 - 43.5 psi
- Inlet Water Temperature (min/Max): 5°C - 45°C
- Flush type: Auto

4. BEFORE YOU START

- Read through all instructions before beginning installation and using this system. Follow all steps exactly or risk damaging system/incorrect operation.
- This system contains filters that need to be replaced at certain intervals. Replacement intervals will vary according to use, please contact your local dealer for details.
- Please install system on potable water only . On non-potable water sources, system will not function properly and additional pre-treatment may be needed.
- Ensure source water pressure is between 14.5 - 43.5 psi. If source water pressure exceeds maximum pressure a pressure reduction valve may be needed, consult your local dealer.
- Ensure source water temperature is between 5°C - 45°C. System will not function properly if these temperatures are exceeded. DO NOT INSTALL ON HOT WATER SOURCE.
- Do not use system on noticeably contaminated water such raw sewage or well water.
- This unit operates on 220V or 110V power. Please ensure you are using the correct power source.

CAUTION:

- Do not disassemble, open, or modify this unit. Tampering with the unit may cause failure or damage and will void warranty.
- Do not cover the unit, as this will prevent proper heat dissipation and can cause damage or fire.
- Do not place objects on top of the unit as this may cause damage to the unit and may cause leaking.
- Follow all recommended operating pressures and temperature, failure to do so will cause damage to the unit and void warranty.
- Avoid contact with corrosive materials.
- Keep away from heat.

⦿ Pre-filter Flushing (initial setup)

Prepare system for operation by flushing pre-filters:

- Disconnect NF element inlet tube on element housing cap. Open water main and inlet valve and allow system to run through the 2 pre-filters.
- Discard output water into container or drain.
- Continue flushing until output water is visibly clean. Reconnect tube.

Note: Pump and membrane may be severely damaged if system is run without flushing pre-filters. Discard all water from flush, it is not suitable for use or consumption.



- After flushing pre-filters open all valves to start operation.
- Wait approximately 2 minutes before opening faucet.
- Allow system to flush for first 10-15 minutes with tap on.
- Do not use water from unit at this time. When water becomes clear, it is ready for use.



After flushing the system is ready to use.

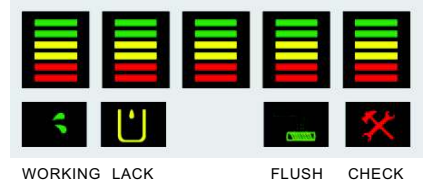
⦿ Regular Operation

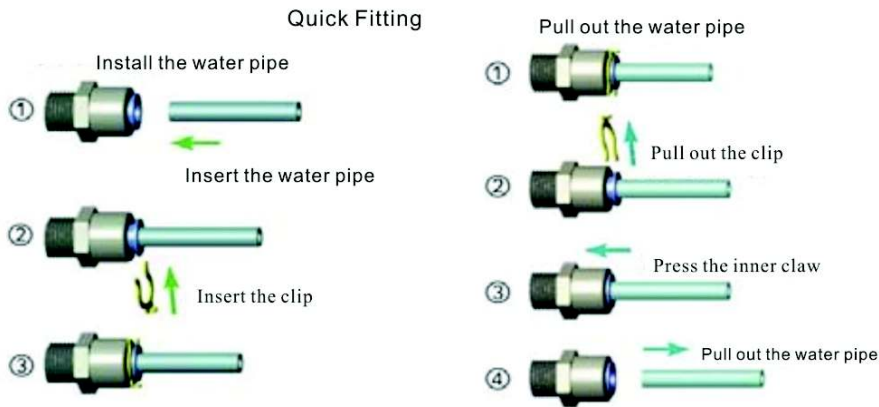
Once system has been set up and has been plugged into a power source, it will operate and begin treating water automatically the faucet is open. Once the faucet is closed, the unit will switch off automatically. After use, the unit will flush automatically.

⦿ Display Panel

- During initial set up, all symbols on front display will light up for 5 seconds.
- If the () symbol stays on after initial set up and the alarm sounds, then there is either no feed water
- entering the unit or the feed water pressure is too low
- If the unit is operating normally on initial set up the () will light up and the machine will flush for 90 seconds.

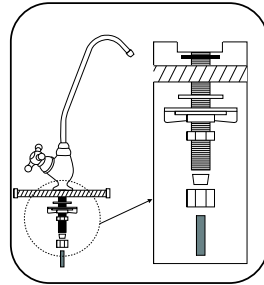
The () symbol shows the approximate usage expectancy of each filter inside the system. When it is time to change a particular filter, the () symbol will blink and the alarm will sound. After replacing the filter, reset the unit using the confirmation buttons. .





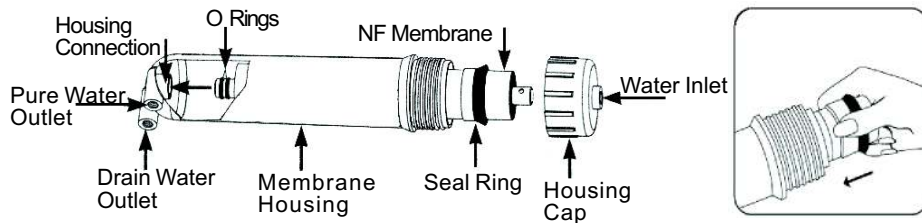
⦿ Faucet Installation

- Select a convenient location near your sink to place the faucet.
- Drill a hole 12mm in diameter in counter top.
- Place washers, plates, seals and nuts in order as per diagram and tighten on to counter.
- Attach Blue Pure Water tubing to the bottom of faucet and connect tubing to unit.



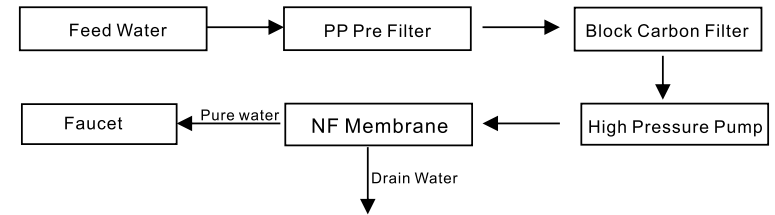
⦿ Install NF Membrane Element

NOTE: Before proceeding with membrane element installation, please flush pre-filters thoroughly. (Instructions on how to perform filter flush provided in next section)

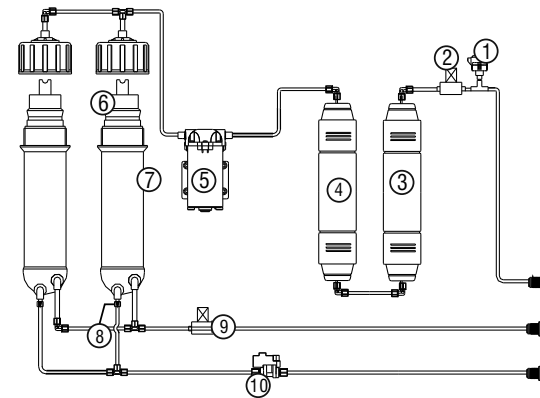


- Remove NF housing cap using wrench.
- Remove NF element from packaging.
- Insert NF element into housing with the small double O rings facing inward.
- Install membrane housing cap and tighten with wrench provided.
- Repeat steps for second membrane.

5. HOW YOUR SYSTEMS WORKS



6. SYSTEM COMPONENTS

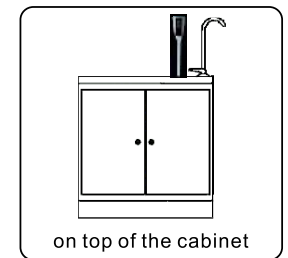
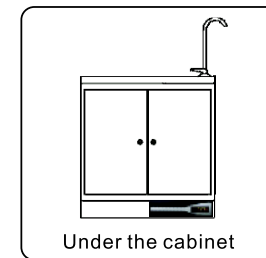
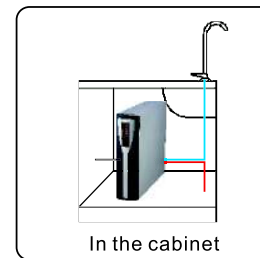


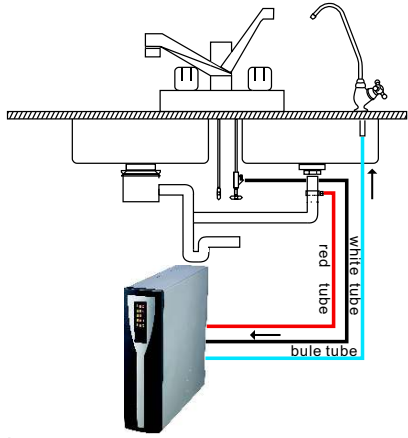
1. Low Pressure Switch
2. Inlet Solenoid Valve
3. PP Pre Filter
4. Block Carbon Filter
5. Booster Pump
6. NF Membrane
7. Membrane Housing
8. Check Valve
9. Flush Solenoid Valve
10. High Pressure Switch

7. INSTALLATION

⦿ Unit placement

The unit can be placed flat or upright and on top, inside, or under the cabinet. Feed Water connection should be as close as possible to unit.





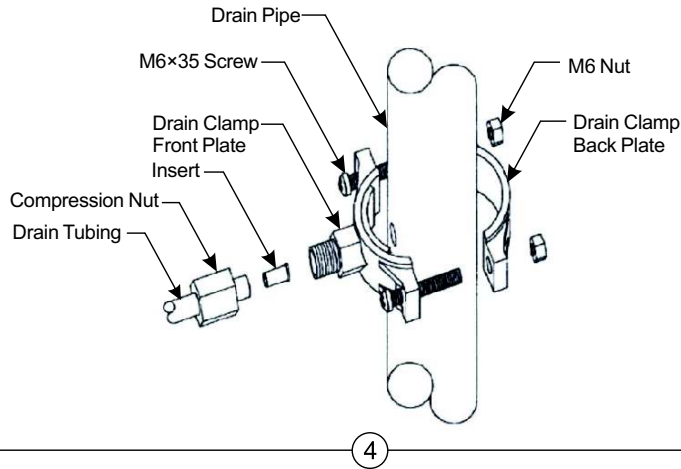
④ Drain Clamp Installation

- Position drain clamp on drain pipe above the drain trap and tighten securely.
- Using the drain clamp as a guide, drill a 6mm hole, enough for the 1/4" tubing to pass, through one side of the drain pipe. **DO NOT** drill through both sides.
- Connect Red Waste Water Tubing from unit to Drain Clamp.

NOTE: When cutting the tubing make clean, square, cuts, failing to do so result in poor connection and possible leaks.

CAUTION: The lowest point of the line should be the point of connection to the Drain Clamp. There should be no sag in the line as this may cause excessive noise as the reject water is flowing to drain.

DRAIN CLAMP ASSEMBLY



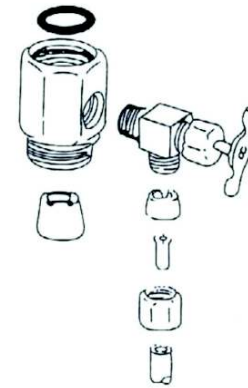
④ Feed Water Valve and Tee Fitting

- Install Tee Fitting and Feed Water Valve as per diagram.
- Wrap threads of Feed Water Valve and Tee Fitting with Teflon tape.
- Connect White Feed Water Tubing from unit to Feed Water Valve.

Install the Feed water valve

Install the Feed water valve Tee fitting, and then connect to source water.

Caution: The water supply to your unit **MUST** be from COLD WATER LINE



NOTE: Use only a **cold potable water** supply as Feed Water, hot water will damage your unit. Softened Feed Water will extend the life of the NF Membrane.

④ Tubing Connection

