

CTF-W SERIES

CTF-300-W / CTF-400-W / CTF-UF FILTER UNITS
Installation, Operation & Maintenance
Manual



1. PRODUCT OVERVIEW

The CTF-W Series provides multi-stage drinking-water filtration using sediment, activated carbon, ultra-filtration and UV treatment.

2. MODEL & FILTER CONFIGURATION

CTF-300-W	3-Stage Under-Counter Filter PP + UDF + CTO
CTF-400-W	3-Stage Under-Counter Filter + UV PP + UDF + CTO + UV
CTF-UF	5-Stage Ultra-Filtration Purifier PP + UDF + CTO + UF Membrane + Taste & Odour Membrane

3. FILTER STAGES

PP Sediment Filter

Reduces suspended particles such as sediment, rust and sand.

UDF Activated Carbon

Helps reduce substances that can be adsorbed by activated carbon and improves taste and odour.

CTO Carbon Block

Provides additional carbon filtration and helps improve taste and odour.

UF Membrane

Provides fine physical membrane filtration.

Taste & Odour Membrane

Provides final filtration to improve the taste and odour of the treated water.

UV

UV treatment uses ultraviolet light to help inactivate microorganisms when correctly operated and maintained.

4. SAFETY INSTRUCTIONS

WARNING

- Do not disassemble, modify or tamper with the internal components of the system.
- Do not operate the unit if any component is damaged.
- Do not cover the system. Adequate ventilation is required for heat dissipation.
- Do not place objects on top of the unit.
- Do not operate the system outside the recommended pressure and temperature limits.
- Never connect the system to a hot water supply.
- Keep the electrical components and power connections dry.
- Keep the system and all small components out of reach of children.

Failure to follow these precautions may result in equipment damage, water leakage, electric shock, fire or personal injury.

Disclaimer: Limits apply to water quality and quantity that the unit can handle. Have your water tested before installation to ensure that it is the right solution. It is important to note that the volume and quality of water will greatly influence the working of the unit and lifetime of parts.

5. BEFORE YOU START

Read this manual completely before beginning installation or operating the system. Failure to follow the installation and operating instructions may result in incorrect operation, water leakage or damage to the system.

IMPORTANT REQUIREMENTS

- Install the system using a cold, potable water supply only.
- Do not connect the system to a hot water supply.
- Feed water temperature must be between 5°C and 45°C.
- Feed water pressure must remain within the operating pressure specified for the system.
- If the incoming water pressure exceeds the maximum allowable pressure, a pressure-reducing valve may be required.
- Do not install the system on visibly contaminated water sources such as raw sewage.
- Well water or other non-potable water sources may require additional pre-treatment before being connected to the filter system.
- All components and tubing must be protected from freezing temperatures and direct sunlight.

NOTE: Water quality and usage will affect filter and membrane service life. Filter replacement intervals provided in this manual are guidelines only.

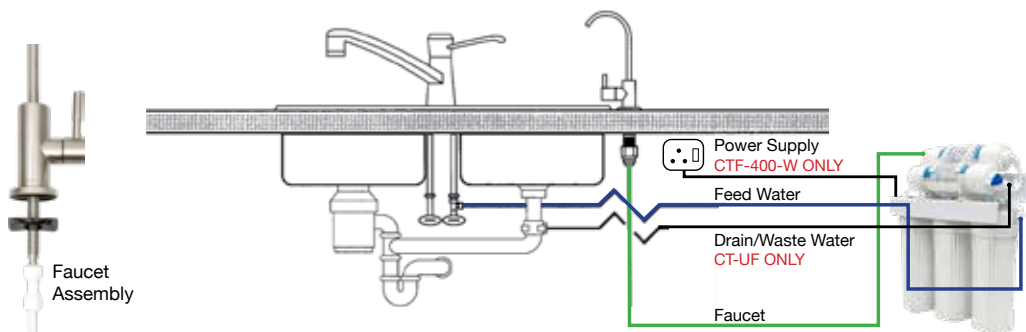
6. STARTING & FLUSHING

After installation or filter replacement:

- Slowly open the water supply.
- Open the filtered-water faucet.
- Allow water to flow through the system.
- Continue flushing until the water runs clear and free from initial carbon particles, taste or odour.
- Check all connections for leaks.
- Close the faucet when flushing is complete.

Do not drink water from new filters before they have been properly flushed.

7. INSTALLATION



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8. UNIT PLACEMENT

The RO unit may be installed upright or horizontally, depending on the available space and the configuration of the unit.

The system may be installed:

- Inside a cabinet
- Under a kitchen sink
- Beside the cabinet
- In another suitable protected location

When selecting the installation location, ensure there is:

- Access to a cold potable water supply.
- Access to a suitable drain connection.
- Access to a suitable electrical outlet.
- Enough space to access the filters and housings for future maintenance.
- Sufficient space around the unit for inspection and servicing.

The feed water connection should be positioned as close to the unit as reasonably possible.

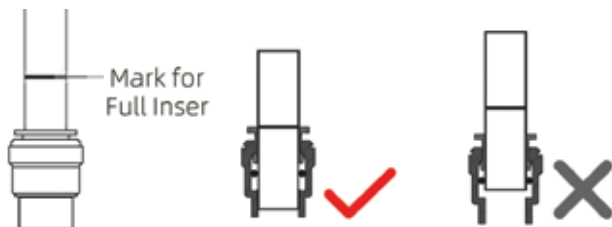
IMPORTANT: do not install the unit where it will be exposed to freezing temperatures, excessive heat or direct sunlight.

9. TUBING CONNECTIONS

The system uses quick-connect fittings. Always ensure tubing is inserted fully into the fitting.

- Quick-connect fittings
- Cut the tubing squarely.
- Push the tubing firmly into the fitting until it is fully seated.
- Gently pull on the tubing to confirm that it is securely locked into position.
- Check the connection for leaks once the water supply is turned on.

NOTE: incorrectly installed tubing can cause leaks, poor system performance or loss of water pressure.

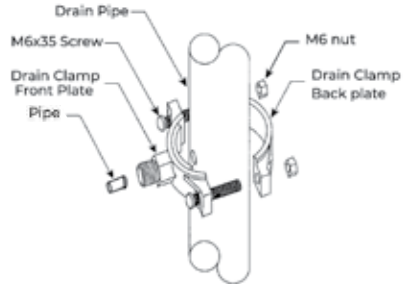


10. DRAIN CLAMP INSTALLATION (CTF-UF ONLY)

The drain clamp provides a connection for the reject water produced by the ro system.

Procedure

- Position the drain clamp on the drainpipe above the drain trap.
- Tighten the drain clamp securely.
- Using the drain clamp as a guide, mark the position of the tubing hole.
- Drill a 6 mm hole through one side of the drainpipe only.
- Do not drill through both sides of the drainpipe.
- Insert the reject-water tubing into the drain clamp connection.
- Connect the other end of the tubing to the appropriate reject-water outlet on the filter system.
- Check the connection to ensure the tubing is secure.



IMPORTANT: When cutting filter tubing, always make a clean, straight cut. Angled or damaged tubing ends may result in poor connections and leaks.

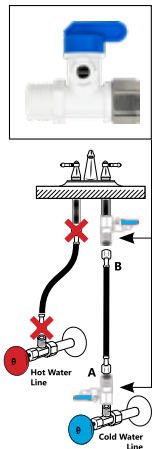
The tubing should run continuously downward toward the drain connection. Avoid creating low points or sagging sections in the tubing, as these may cause excessive noise while reject water is flowing to the drain.

11. FEED WATER VALVE AND TEE FITTING

The feed water valve provides the connection between the household cold-water supply and the filter system.

Procedure

- Shut off the household water supply before beginning installation.
- Install the tee fitting according to the installation diagram.
- Apply ptfe/teflon tape to the threaded connections where required.
- Install the feed water valve onto the tee fitting.
- Ensure all threaded connections are securely tightened.
- Connect the white feed water tubing from the filter system to the feed water valve.
- Ensure the tubing is fully inserted and securely connected.
- Turn on the water supply slowly.
- Check all connections for leaks.



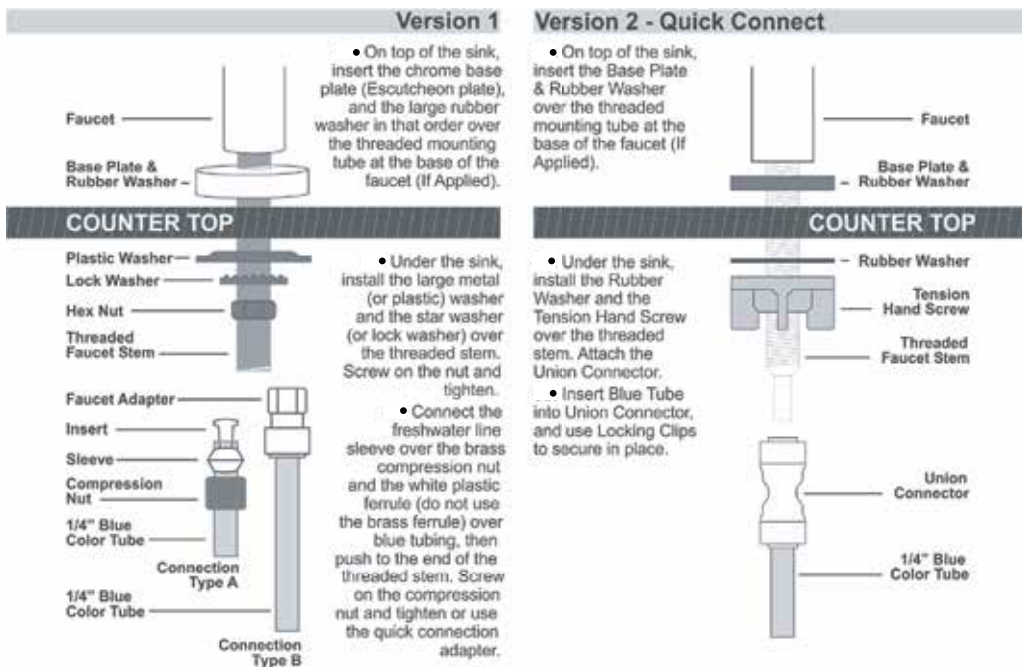
CAUTION: The filter system must be connected to a cold-water supply. Hot water can damage the filters, membrane and other components of the system.

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12. FAUCET INSTALLATION

Procedure

- Required Tools and Materials.
The following tools and materials may be required
Hand drill • Appropriate drill bit or hole saw suitable for the countertop material • Pipe cutter
• PTFE (Teflon) tape / thread seal tape • Needle-nose pliers • Purified water faucet kit • PE tubing
- Determine the most suitable location for the faucet on the countertop or sink.
- NOTE: If a suitable pre-existing hole, is available, it may be used to install the faucet.
- Drill a suitable hole using the appropriate hole saw for the countertop or sink material.
- Remove any drilling debris and clean the area around the hole.
- Remove the mounting nut from the faucet stem. Slide the stainless-steel base plate onto the threaded stem with the flat side to the top, removing any protective film if present. Then slide the large rubber washer onto the stem with flat side to the bottom. Insert the faucet stem through the drilled hole in the counter top or sink.
- From underneath the countertop or sink, install the thin rubber washer onto the threaded stem. Secure the faucet assembly by tightening the plastic mounting nut. Ensure that the faucet is firmly secured and does not rotate.
- Cut a suitable length of PE tubing. Connect one end of the tubing to the faucet and the other end to the pure water outlet on the main unit using the appropriate quick-connect fittings.

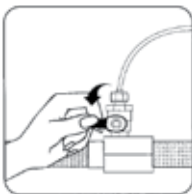


13. INSTALLING THE PRE-FILTERS

Filter order: From the feed-water side, the filters must be installed in the following order: **PP • GAC • CTO**

Procedure: IMPORTANT: do not overtighten the filter housings.

- Remove the filter cartridges from their packaging.
- Confirm that the correct filter cartridge is being installed in each housing.
- Remove packaging from filters before inserting into the housings.
- Install the PP filter in the first housing.
- Install the GAC filter in the second housing.
- Install the CTO filter in the third housing.
- Ensure each cartridge is correctly seated.
- Install 2x Orings per housing as supplied.
- Install the filter housings.
- Hand-tighten each housing securely.
- Use the supplied housing wrench only if additional tightening is required.
- Ensure each housing is correctly aligned and level to reduce the possibility of leaks.



CTF-400-W UV Lamp

- Remove UV lamp from packaging.
- Insert UV lamp half way into the glass quartz tube.
- Connect the Ballast power supply to the 4 pin points of the UV lamp.
- After connecting the ballast to the lamp, insert the UV lamp fully into the glass quartz tube.
- Switch on the power and check that the UV lamp operates correctly.
- After switching the unit on place the black cover over the stainless steel body.

Caution: Do not look directly at or into the lamp as the UV rays are damaging to your eyes.

14. FILTER REPLACEMENT

Filter cartridges are consumable items and must be replaced regularly.

PP	3–6 months
UDF	6–12 months
CTO	6–12 months
UF Membrane	12–24 months
Taste & Odour	12–24 months
UV Lamp	12 months

Actual replacement intervals depend on water quality and usage.

15. FILTER REPLACEMENT PROCEDURE

- Turn off the water supply.
- Open the faucet to release pressure.
- Remove the filter housing.
- Remove the used cartridge.
- Rinse the housing with clean water.
- Check the O-ring and sealing surface.
- Install the correct replacement cartridge.
- Refit the housing securely.
- Slowly restore the water supply.
- Check for leaks.
- Flush the new filter before use.

Do not overtighten the housing or fittings.

16. UV MAINTENANCE (CTF-400-W ONLY)

The UV lamp must be replaced according to the recommended service interval.

Before servicing:

- Disconnect the UV power supply.
- Keep electrical components dry.
- Never look directly at the UV lamp.
- Do not operate the system if the UV components are damaged.

17. MAINTENANCE

Regularly check:

- Filter housings and fittings.
- Tubing and connections.
- Water leaks.
- Water flow.
- Filter condition.
- Faucet operation.
- UV operation on the CTF-400-W.
- Keep the system clean and dry.



18. TROUBLESHOOTING

Problem	Possible Cause	Solution
Low water flow	Filter blocked	Replace filter
Low water flow	Kinked tubing	Straighten tubing
Unusual taste/odour	Filter exhausted	Replace filter
Carbon particles	New carbon filter	Flush thoroughly
Water leak	Loose connection	Check connection
Housing leak	O-ring problem	Check/replace O-ring
No water flow	Water supply closed	Open supply
UV not operating	Power disconnected	Check power supply
UV fault	Lamp/system fault	Contact service technician

19. PERIODS OF NON-USE

If the system will not be used for an extended period:

- Turn off the water supply.
- Disconnect the UV power supply where applicable.
- Flush the system before returning it to service.
- Replace filters if required after prolonged non-use.

20. IMPORTANT REMINDER

For the best performance and longest service life:

- Use only cold potable feed water.
- Maintain the recommended feed-water pressure.
- Replace filters at the recommended intervals.
- Flush new filters before normal operation.
- Replace the ro membrane when required.
- Inspect the system regularly for leaks.
- Keep the system protected from freezing temperatures and direct sunlight.
- Follow all electrical safety precautions.
- Do not modify or bypass system safety controls.

Proper installation and regular maintenance are essential for reliable operation and consistent purified-water quality.

Service

If the system requires repair or service that cannot be safely completed using the procedures in this manual, contact your supplier or a qualified water-treatment service technician.

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21. SAFETY WARNINGS & PRECAUTIONS

WARNING: Failure to follow these instructions may result in equipment damage, water leakage, electric shock, fire or personal injury. This appliance is not intended to be operated, serviced or maintained by children or by persons with reduced physical, sensory or mental capabilities unless they have been given appropriate supervision or instruction by a responsible person.

- Children must be supervised to ensure they do not play with or operate the system.
- Keep small components, tubing, fittings and filter cartridges away from children.
- Persons who may have difficulty safely operating or servicing the system should only use it under appropriate supervision.
- Installation, servicing and filter replacement should be carried out by a responsible adult or suitably qualified person.
- Ensure the feed water shut-off valve and electrical isolation point remain accessible to a responsible adult in case of an emergency.

Electrical safety

- Confirm that the electrical supply is suitable before connecting the system.
- Incorrect voltage may damage the system and create a fire or electrical-shock hazard.
- Do not use the system if the power cord, plug or electrical components are damaged.
- If the power cord is damaged, disconnect the unit from the electrical supply immediately and discontinue use.
- Keep electrical connections dry at all times.
- Water temperature

Do not connect the ro system to a hot-water supply.

The system is designed for use with cold potable water within the specified temperature range.

EMERGENCY SHUT-OFF

If you notice a leak, electrical fault, unusual noise, smoke or other unsafe condition:

1. **CLOSE** the feed water valve.
2. **DISCONNECT** the electrical supply if safe to do so.
3. **DO NOT** operate the system.
4. Contact your supplier or a qualified service technician.

IMPORTANT: Water and electricity can be dangerous. Always shut off the water and electrical supply before servicing the system.



Service & Maintenance Record

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