



QUADRO H200/H200-TX QUICK CHANGE REVERSE OSMOSIS SYSTEMS INSTALLATION AND MAINTENANCE MANUAL



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1.0 SCOPE AND GENERAL

The condition of water in each geographical location and water requirements of any feed water appliance are different, hence attention is required before setting up Xsential's QuadRO H200 system. All RO systems should be installed by a qualified plumber or technician. It is important that all installers read this manual and the appliance manual carefully before commencing installation of Xsential's QuadRO H200 system. Any wrong installation and set up may result in serious damage to the appliance. Xsential will not be held responsible for the incorrect installation and set up of the system.

1.1 Disclaimer

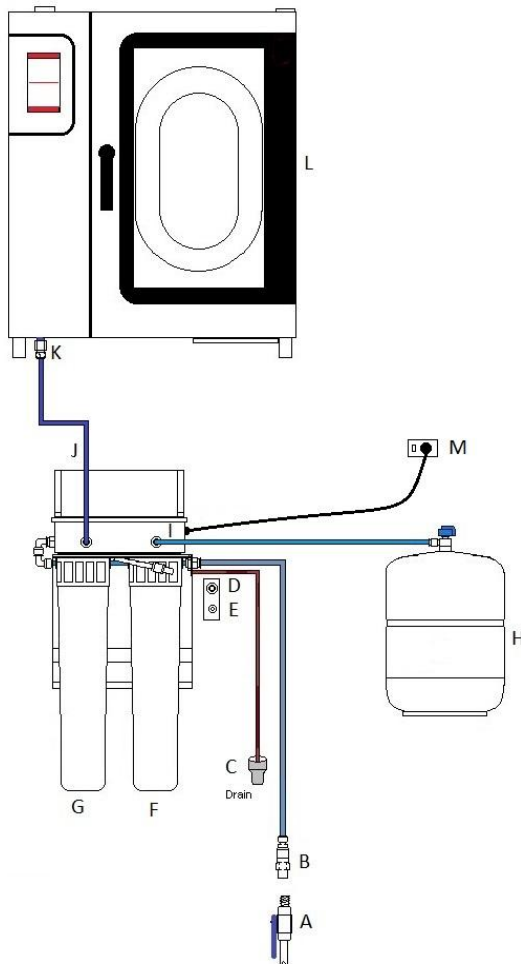
Xsential warrants that its reverse osmosis systems will reject up to 96% of salts. Specification of the requirements by individual appliances may vary. It has been proven that all Xsential's reverse osmosis systems help prevent scaling. However, it is up to the individual to check for compatibility of Xsential's reverse osmosis system for the intended application. Xsential will not be responsible for any wrong installation or water configuration.

2.0 QUADRO H200 QUICK CHANGE REVERSE OSMOSIS (R.O.) SYSTEM

Read through the following instructions carefully before proceeding with the installation. Be sure to follow any special plumbing codes in your area. Contact your local dealer if you are having problems installing it. Diagram 1 illustrates the plumbing connections that are needed to install the system.

CAUTION: DO NOT USE WITH WATER THAT IS MICROBIOLOGICALLY UNSAFE OR WITH WATER OF UNKNOWN QUALITY WITHOUT ADEQUATE DISINFECTION BEFORE OR AFTER THE SYSTEM.

QuadRO H200 Installation Diagram

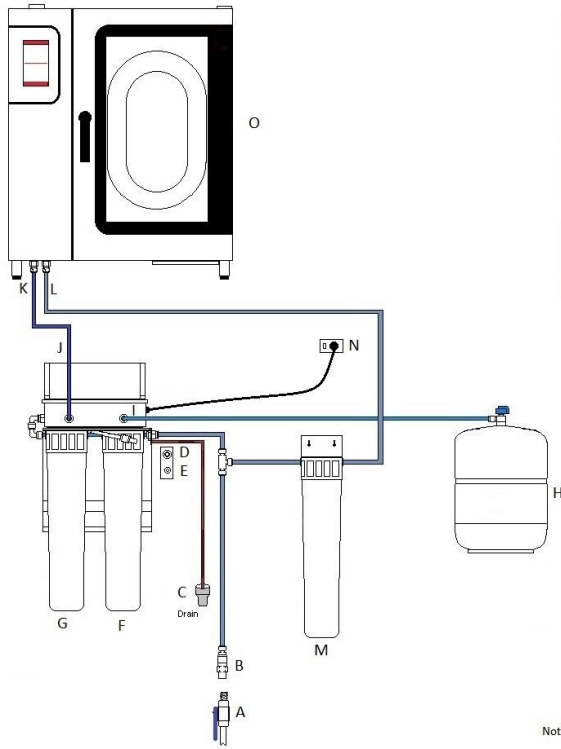


WaterMark
AS 3497
Lic 52017

Note: All water filter cartridges use are Watermark certified

Diagram 1

QuadRO H200-TX Installation Diagram



- A: Water supply isolation valve
- B: Multi-function pressure limiting valve
- C: Waste water tundish
- D: Water "IN"
- E: Waste water "Drain"
- F: AX12-ROM membrane
- G: AX12-WS water stabiliser cartridge
- H: RO storage tank
- I: "Tank" connection
- J: Appliance "APP" connection
- K: Soft water inlet
- L: Hard water inlet
- M: AX12-TX triple action cartridge
- N: 10 amp power plug

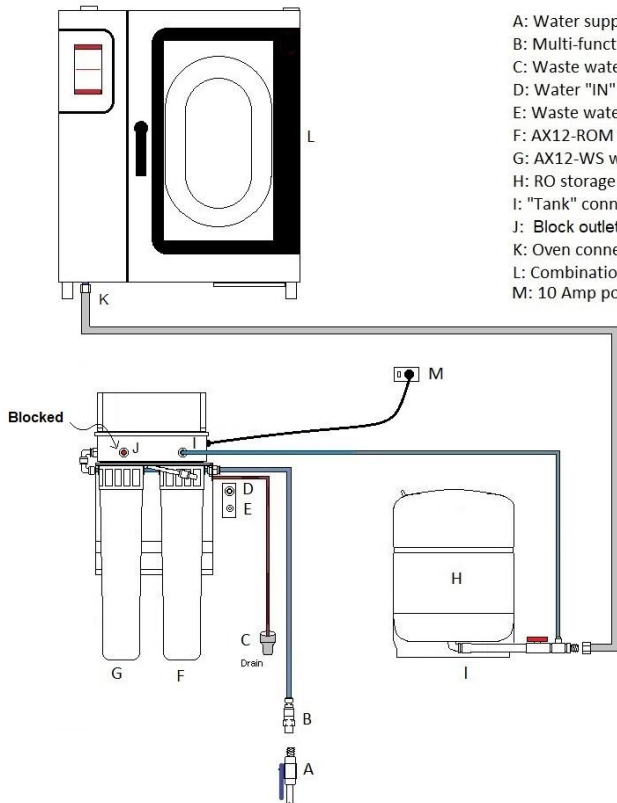


Note: All water filter cartridges use are Watermark certified

Diagram 2

QuadRO H200 Installation Diagram

With Hi-Flow Kit



- A: Water supply isolation valve
- B: Multi-function pressure limiting valve
- C: Waste water tundish
- D: Water "IN"
- E: Waste water "Drain"
- F: AX12-ROM membrane
- G: AX12-WS water stabiliser cartridge
- H: RO storage tank
- I: "Tank" connection
- J: Block outlet connection with plug
- K: Oven connection
- L: Combination oven
- M: 10 Amp power plug

Diagram 3

3.0 SYSTEM COMPONENTS

The QuadRO H200 R.O. system comes with the following components:

1. QuadRO H200 system
2. A multi-function pressure reduction valve (B)
3. 2M x 1/4" JG waste water tube
4. 6M x 3/8" JG tube
5. WA-UT0606 3/8" union tee connector. This is ONLY for QuadRO H200-TX system.
6. A storage tank with storage tank ball valve
7. 2 set of 3/8" tube to 1/4" connectors (K and L)

4.0 PREPARATION FOR INSTALLATION

QuadRO H200 should be mounted relatively near the appliance to maximise the flow rate and ease for service. The storage tank should be located where it can be removed if necessary but does not take away needed storage space. Make sure that the water pressure is at least 250kPa or higher (recommended operating pressure is 400kPa or higher).

Please note a 10-amp power plug is required for this installation. Installation water temperature must not be exceed 38°C

5.0 INSTALLATION INSTRUCTIONS FOR QUICK CONNECTOR

Remove all dust plugs from the quick connectors. To connect the poly tubing;



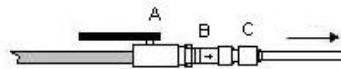
Diagram 2

CAUTION: To ensure proper assembly, tubing **MUST** be fully inserted into the fitting body until the tube stops.

1. Cut the tubing end squarely (with tube cutter)
2. Insert the tubing through the back of the connector all the way through the assembly until the tube stops in the fitting body (see diagram 2).

6.0 INSTALLATION OF COLD WATER SUPPLY CONNECTOR

The water supply connector that comes with the unit is made up of two parts; a dual check pressure valve and a straight 3/8" OD to 1/4" male connector. A cold-water supply ball valve should be installed next to the appliance. Install the pressure reduction valve and the 3/8" OD to 1/4" male connector as shown in diagram 3.



- A: Inlet ball valve
B: Pressure reduction valve
C: 3/8" OD to 1/4" male connector

Diagram 3

WARNING: *INADVERTENTLY CONNECTING THE UNIT TO HOT WATER WILL DESTROY THE MODULE AND VOID THE WARRANTY. THE FEEDING WATER TEMPERATURE CANNOT EXCEED 40° C.*

7.0 INSTALLATION QUADRO H200 REVERSE OSMOSIS SYSTEM

QuadRO H200 can be installed in various ways.

7.0.1 Wall Mount Installation

Remove the rubber feet – not required for wall mounted installation. Please make sure the wall and fixings are capable of holding the weight of the system – including water when the system is filled.

1. Remove the cartridges and use the system bracket to mark the mounting holes.
2. Mark screw locations at the desired positions according to the marking and drill the holes.
3. Turn the screws into the drill holes.
4. Leave screw heads proud of the wall to allow bracket to rest on them.
5. Hang the QuadRO H200 R.O. system onto screws.

7.0.2 Horizontal Installation

1. Determine a suitable location free of dust, water, electrical and other hazards with adequate space to service the system and place the system horizontally ensuring the system is adequately protected.

8.0 INSTALLATION OF WASTE WATER

The wastewater from the QuadRO H200 system must be removed by allowing the wastewater to be drained away. This flow of the waste water will assist in keeping the membrane free from mineral deposits and fouling. Cut the 1/4" red tube to the length that is required to connect the drain

connector on the RO System to suitable drainage / drainage system. Insert the tube into the drain connector (location G in diagram 1) and secure the tube to a suitable drain / drainage system.

9.0 INSTALLATION OF AX12-TX TRIPLE ACTION SYSTEM (This is for QuadRO H200-TX system only)

1. Mark the bracket holes of the AX12 -TS triple action system.
2. Drill and screw the screws into the drilled holes – leave screws proud of the wall to allow the bracket to rest on them.
3. Hang the system on the screws.

10.0 INSTALLATION OF STORAGE TANK

NOTE: PRESSURE ADJUSTMENT IS NOT REQUIRED as the storage tank is shipped with pressurised air.

1. Tape the 3/8" male end of the cone reducer with Teflon tape.
2. Tighten the 1" to 3/8" cone reducer to the storage tank (hand tight only).
3. Tighten the 3/8" feed water ball valve to the reducer.
4. Cut the JG 3/8" tube from the system to the tank.
5. Unscrew the ball valve screw from the storage tank.
6. Insert the 3/8" poly tubing into the nut and insert into the ball valve. Tighten the nut to the thread on the ball valve.
7. Insert the other end of the tube to the position marked **Tank** on the QuadRO H200 System.
8. Turn OFF the ball valve at this stage.

11.0 CONNECTING THE APPLIANCE

1. Screw the 3/4" connector with 3/8" tube reducer on to the water inlet of the oven. Or, both water inlets of the oven (if installing QuadRO H200-TX system).
2. Measure the distance between the oven and the QuadRO H200 system and cut a 3/8" poly tubing with the length measured.
3. Connect the tubing to the QuadRO H200 at the position marked **APP**.
4. **Do not** connect it to the oven at this stage.

12.0 CONNECTING THE INCOMING WATER FEED

Please check what system are you installing.

12.0.1 QuadRO H200

1. Measure the distance between the pressure valve and the QuadRO H200 system.
2. Cut the 3/8" tube and insert the tube from the incoming water feed valve to D Water In on the R.O System.

12.0.2 QuadRO H200-TX installation

1. Measure the distance between the water feed valve and the R.O. system
2. Cut a 3/8" poly tubing with the length measured
3. Insert the tube to the connector B.
4. Insert the other end of the tube to the 3/8 tube union tee adapter
5. Insert one end of the union tee connector to the inlet of the AX12-TX filter as shown in diagram 2
6. From the outlet of the AX12-TX, insert the other end of the tube to the RAW water inlet of the oven (L on Diagram 2).

13.0 START UP PROCEDURE

1. Plug in the power plug and switch on the power.
2. With the tube that is connected at the position marked **APP**, move the end of the tube to a drain or bucket.
3. Turn on water supply slowly.
4. Check for leaks. (If anything is leaking shut off water and unplug the power plug, repair, then start with step 1 again.
5. Within a few minutes the water will start to flow from the tube connected at the position marked **APP**.
6. Let the water run for 10 minutes. This flushes out the preservative in the membrane. You will see the TDS drop significantly by pressing the TDS meter "Black" button. The meter will show the TDS of the incoming water and RO water.
7. Turn off the water supply and power.
8. Insert the end of the tube that is connected at the position **APP** into the soft water inlet of the appliance.
9. Turn on the storage tank ball valve.
10. Turn on the water supply - the tank will take about 15-30 minutes to fill up (depending on the size of the tank and water pressure).

Note:

Xsential will not be responsible for any wrong installation and setup of the QuadRO H200 system.

14.0 SYSTEM MAINTENANCE AND FILTER CHANGE PROCEDURE

CAUTION FOR YOUR SAFETY: Change the sediment and carbon filters regularly every 4-6 months and have the R.O. membrane checked annually. Refer to the following table for the recommended filter change interval.

1. Turn off the power supply
2. Turn off the water supply isolation valve
3. Take note of the cartridges position before removing them.
4. Grab the cartridge that is to be changed with both hands and turn the cartridge anti-clockwise until it stops.
5. Pull the cartridge down to remove the cartridge.
6. Repeat steps 2-3 on the remaining cartridges.
7. All cartridges are labelled with a number on the top right-hand corner. Use the correct numbered cartridge for the replacement.
8. Insert and turn clockwise until the cartridge stops.
9. Once all cartridges have been replaced turn on the isolation valve and switch on the power. Refer to step 13.0 for system start up procedure.

15.0 TROUBLE SHOOTING GUIDE

This trouble-shooting guide will give you a basic idea of the problems that can occur with an R.O. system. If in doubt, contact the local dealer.

| Problem | Cause | Solution |
|---------------------------------------|--|--|
| Small amount of water in storage tank | 1. System just starting up 2. Air pressure in the storage tank is low | 1. Normally it takes 1-2 hours to fill tank. Low-pressure and/or temperature can reduce production rate. 2. Add pressure in the storage tank. Refer to the storage tank label for pressure detail. |
| Slow production | 1. Low water pressure 2. Kinks / Crimped tubing 3. Clogged pre-filters 4. Fouled membrane | 1. The system requires a minimum of 380kPa of incoming water pressure. A booster pump may be needed in a low water pressure area. 2. Check tubing is straightened or repair as necessary 3. Replace pre-filters 4. Replace membrane |
| No drain water | Clogged flow restrictor | Replace flow restrictor |
| Leaks | 1. Fitting not tightened 2. Missing O-ring 3. Misalignment of hole in the drain saddle | 1. Tighten fitting as necessary 2. Contact local dealer 3. Realign drain saddle |

16. FILTERS SERVICE INTERVAL

It is very important that the filter cartridges are replaced regularly to keep up with the performance of the system. Failure to replace the cartridges regularly will result in no or lack of water production and premature fouling of the membrane.

The table below serves only as a guide to the recommended service interval. It is very important that the owner checks the water quality regularly to ensure that the reverse osmosis system works properly.

| Parts number | Description | Recommended service interval (depending on the usage & water quality) |
|--------------|---------------------------|---|
| AX12-CCF | Sediment filter cartridge | 3-6 months |
| AX12-GAC | Carbon filter cartridge | 3-6 months |
| AX12-ROM | Reverse osmosis membrane | 12-24 months |
| AX12-WS | Water stabiliser | 6-12 months |
| AX12-TX | Triple action cartridge | 3-6 months |

Xsential has developed a program to help our customers to keep track of their water filter service schedule. The program will automatically send out an email reminder when your water filters are due for service. The default service interval is 6 months. Simply email support@xsential.com.au the following details to register:-

Product and Contact Details

| | | | |
|---------------------------|--|----------------|--|
| Company | | Contact person | |
| Address | | Phone | |
| Water Filter Model | | Email | |
| Service Interval Required | | | |
| Date installed | | | |

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17.0 OTHER WATER APPLIANCE PROTECTION RANGE OF XSENTIAL WATER FILTRATION SYSTEMS

There are many appliances that require water of good quality. These appliances include coffee machines, ice makers, hot water urns, post mix dispensers, dishwashers and other water feed appliances. A good quality water filtration system will help prolong the life of your investment. We also carry whole range **retro-fit** filter cartridges.

Xsential water filters will;

- Reduce sediment, rust and sand particles
- Reduce unpleasant taste and odour
- Reduce chlorine
- Reduce scale build up



Contact Xsential on **1300 366 295** or sales@xsential.com.au

18.0 IMPORTANT NOTICE

Issues which can affect the water quality of RO systems

Xsential warrants that its reverse osmosis systems will reject up to 92-96% of salts in potable water.

The reverse osmosis (RO) technology has been around for many years and has shown that this technology provides the best solution when it comes to the protection of scaling of water feed appliances. Such appliances include combi-steamer ovens and coffee machines.

The use of RO systems have also been known to contribute to the extension of life of water feed appliances. However, RO systems cannot prevent corrosion from occurring. RO systems will invariably remove the elements in water that could contribute to corrosion thereby prolonging the life of appliances but corrosion can commence in any number of ways. **All corrosion issues should be investigated by a corrosion expert.**

Below are some factors which can affect the warranty of our RO systems.

1. **Water source:** Australia's water can come from dams, underground wells, desalination plants, or a mixture of various and other sources. This results in an inconsistent quality of water whereby some water sources could have more dissolved salts than others. For example underground sources of water have more dissolved salts than water from a dam. Hence RO systems might not be suitable for use in some areas. Highly saline water can affect the performance of Xsential's RO systems. Please check the water quality with your local water authorities.
2. **Seasonality:** The concentration of salts in water increases in some seasons due to lack of rainfall while in other seasons, the water may be less saline.
3. **Chemical treatment:** The amount of chemicals used to treat the water e.g. chlorine, fluoride, etc can lead to inconsistencies in the water quality. Water is treated periodically by the local water authority leading to times when the water may contain high doses of elements that can cause corrosion.
4. **Manufacturer's water requirements:** The requirements by individual water feed appliances such as combi steamer ovens may vary from the specification produced by Xsential's RO systems. Please refer to the manufacturers reference guide for further details and requirements.
5. **Wrong installation.**
6. **Service interval:** it is very important that all of Xsential's RO systems are serviced regularly. Failure to service (replace filter cartridges) regularly can cause the RO system to not function properly. See the installation manual for details.

Although all care has been taken by Xsential to ensure that its RO systems perform according to its manufacturer's specification, Xsential cannot guarantee the performance of its water treatment systems due to factors which are beyond its control. Some of these factors have been listed above. Please note these factors and other could affect the life of water feed appliances.