

# Installation Guide

This installation guide covers the complete Osmio INDRA range

Osmio INDRA-100 Undersink Filter Kit & Tap

Osmio INDRA-200 Undersink Filter Kit & Tap

Osmio INDRA-300 Undersink Filter Kit & Tap

Osmio INDRA-PRO 300 Undersink Filter Kit & Tap

**The Indra series is a complete install ready filter kit with tap and filter system and accessories.**



# READ THIS BEFORE INSTALLATION

It is very important that the following must be considered before you install this product.

Incoming water pressure must be tested before the installation. You can do this by using a pressure gauge (available online or at plumbers merchants, an example shown FIG1). Please note that your standing water pressure can increase up an additional 2 bar at night time.

We highly recommending protecting your entire property with a Pressure Reducing Valve (PRV - see FIG2) which can protect all appliances and plumbing from any increases or spikes in water pressure that **can and do happen, which causes filter systems and other plumbing to leak.**

**Max Pressure: 4.5 bar**

## TOOLS & MATERIALS

The Osmio Indra range can be installed on a stainless steel inset sink or a laminate style worktop. If you have Marble, Granite, Corian type, it would be better to use a 3 way tap. If you do decide to drill those surfaces for the tap, then you must seek specialist advice before you drill.

For installation, you will need the following:

- Silicone Grease (Plumber's Grease)
- PTFE tape
- Spanner & Plumbers Wrench
- Philips head screwdriver & Flat edge screwdriver
- Pressure gauge
- Electric drill with metal drill bits
- Spirit level
- Marker pen

**Appropriate screws to mount the filter to the vertical surface (e.g. wood screws)**



FIG1: WATER PRESSURE GAUGE



FIG2: PRESSURE REDUCING VALVE WITH GAUGE

# INSTALLATION STEPS

## STEP1: MOUNTING THE BRACKET

**After planning your installation, you can first determine where you are going to mount the filter system and using the screws supplied.**



FIG3: DIRECTIONAL ARROW OF WATER FLOW

Note the arrows showing the **direction of flow. The arrow points in the direction of flow to the tap. You can mount the bracket either way round according to whether you are installing on the left or the right hand side of the cupboard. Using the phillips head screwdriver, screw the **bracket to the filter unit.****

## STEP2: GREASING THE O-RINGS

The o rings must be greased **thoroughly** with silicone grease (plumbers grease). This will ensure the o ring will slip as the housing bowl is screwed onto the head and make a water tight connection.

First clean your hands and then apply the grease to the ring **generously and run your finger** around the ring as shown.



FIG4: GREASING THE O RINGS

### STEP3: INSERTING THE FILTERS

Your housing unit is supplied with the housing manufacturers own manual which you do not need to use, but can keep for reference.

There is also a spacing ring supplied which again you do not need, but can keep if you plan to use **melt-blown spun sediment filters in the future or for any other housing**, as shown.

Skip to the relevant section for the product you are **installing. Please ensure you install the filters in the correct order shown which is in accordance with the flow directions.**



FIG5: SPACING RING IS NOT NEEDED BUT CAN BE USED WITH SEDIMENT FILTERS

#### Osmio INDRA-100 Undersink Filter Kit & Tap



Min-Max Pressure: 1 bar - 4.5 bar

**Recommended flow rate; < 4 LPM**

Filter 1: Osmio 2.5" x 10" Carbon Block 5 Micron Filter.

Change every 6 months or 11,000 litres whichever comes first.

Remove the packaging of the Osmio 2.5" x 10" Carbon Block 5 Micron Filter. **The filter is bi-directional so it does not matter which way around you put it in. There is a loose male centring hole and the bottom of the housing bowl where the filter sits. The filter should be centred and level if put in correctly.**

#### Osmio INDRA-200 Undersink Filter Kit & Tap



Min-Max Pressure: 1 bar - 4.5bar

**Recommended flow rate; < 3 LPM**

**Filter 1; Osmio 2.5 x 10 Chlorine & Limescale Filter**

**Remove the packaging and insert this filter as shown with the white O ring at the top of the filter bowl. The life of the filter varies with water hardness. Capacity; 1080 Litres @ 150ppm Total Hardness - 540 Litres @ 300ppm Total Hardness.**

Replace after 6 months of installation date or before if needed.

There is a loose male centring hole and the bottom of the housing **bowl where the filter sits. The filter should be centred and level if put in correctly.**

**PLEASE NOTE: Ensure the blue screw caps are fully hand tight before inserting the filter (at the top and bottom)**



## Osmio INDRA-300 Undersink Filter Kit & Tap



FIG6: THE RUBBER WASHER GOES ON THE TOP OF THE FILTER

Min-Max Pressure: 2 bar - 4.5bar

**Recommended flow rate; < 3 LPM**

Filter 1: Coldstream CF108W Ceramic Water Filter Cartridge:

This is a 0.2 micron ceramic cartridge, a very **fine filter, and is not recommended to install if your pressure is lower than 2 bar as it will impact your flow, unless of course the best water quality is your goal, in which case we would encourage your patience!**

**This filter has one end which is closed (at the bottom and one end which is open (at the top). The filter comes with two rubber washer, one is spare and only one is needed to be placed at the top end of the filter.**

We recommend replacement every 11,000 **litres or 6 months whichever comes first.**

## Osmio INDRA-PRO 300 Undersink Filter Kit & Tap

Min-Max Pressure: 2 bar - 4.5 bar

**Recommended flow rate; < 3 LPM**

**This system has two filters.**

Filter 1: Coldstream CF108W Ceramic Water Filter Cartridge - This is a 0.2 micron ceramic **cartridge, a very fine filter, and is not recommended to install if your pressure is lower than 2 bar as it will impact your flow, unless of course the best water quality is your goal, in which case we would encourage your patience!**

**This filter has one end which is closed (at the bottom and one end which is open (at the top). The filter comes with two rubber washer, one is spare and only one is needed to be placed at the top end of the filter.**

We recommend replacement every 11,000 **litres or 6 months whichever comes first.**

**Filter 2; Osmio 2.5 x 10 Chlorine & Limescale Filter:** As per previous section.



FIG7: THE BOTTOM AND CLOSED END OF THE FILTER

## STEP4: SCREWING THE BOWLS TO THE HEAD

Holding the bowl upright, hand screw the bowl **anticlockwise with the filter inside it to the filter unit head** to screw it on.

Once you have tightened it as much as you can by hand, then use the spanner provided in the kit to tighten it up.

### **IMPORTANT NOTE:**

Do not over-tighten this. Only tighten a 1/4 turn at a time (i.e. nip it up, don't go crazy making it too **tight, it will be very hard or impossible to get o**" otherwise!



## STEP5: CONNECTING THE FITTINGS

The system is now ready to be installed.

We supply two 1/2" Male to 1/4" push fittings.



Wrap the male threads in 7 wraps of PTFE tape and screw them straight on into the brass 1/2" female inlet and outlets of the housing.

Ensure that you use PTFE tape when **using the supplied push fittings.**

**Tighten the fitting using a spanner or plumbers wrench. Later on when you turn on the water you will need to check the fitting is water tight.**

**Be careful when screwing the fittings** in not to cross thread them by not starting to screw them in straight.



## STEP6: MOUNTING THE SYSTEM

**The filter system can now be mounted onto the side where you want to fit it. Use your own screws appropriate to the surface you are mounting them to, i.e. wood screws for kitchen cupboards, drywall screws for drywall etc. Mark the holes first with your marker pen and you can use the spirit level to ensure its perfectly horizontal.**

**Pressure Release Screw - There is a flat edge screw on the top of each housing. This is the pressure release screw and used to release air pressure. Turn this screw with your flat edge screwdriver to ensure this is fully closed before you turn the water on.**



## STEP7: FEED IN VALVE CONNECTION



The feed in valve has 1/2" male **and 1/2" female and a tee o".** PTFE with 7 wraps the male end of the feed in valve and the male end of the blue lever ball valve.

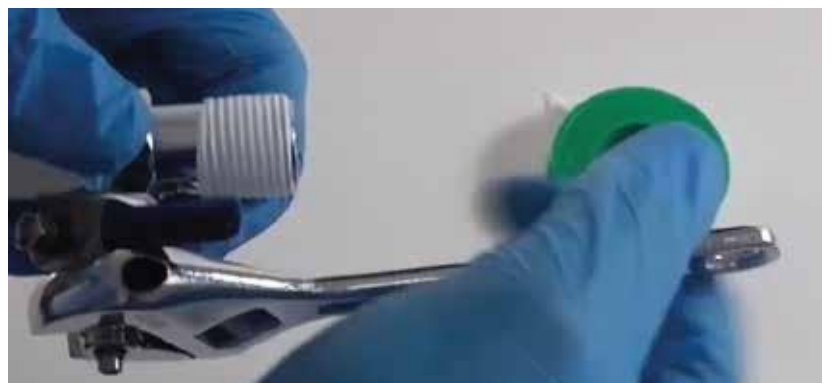
1) PTFE the male end of the feed in valve



2) PTFE the male end of the ball valve



3) Then using your spanner, screw the ball valve into the feed in valve and tighten it with your spanner.



## STEP8: CONNECTING FEED IN VALVE TO THE COLD LINE



The Feed in valve connects to the cold hose of the existing cold tap on the sink.

**Shut the water o" and disconnect the** existing cold water hose. If your tap does not use hoses then you can use another adaptor. Please contact us for advice.

As the Feed in valve has male on one side and female on the other side, it does not matter which way around it goes.

All you need to do is connect the feed in valve to the cold hose. Use the spanner and wrench together to make it tight.

To connect the ball valve to the tubing for the **water filter, start by removing the nut on the blue ball valve.** Then place the nut over the tubing.



Push the tubing ontop the stem of the ball valve. Ensure it has been pushed all the way over the little ridge.

Use your wrench to tighten it up. The blue **lever is your on and o" lever for turning the water on and o". When the blue lever**





## STEP9: INSTALLING THE TAP



**Ensure a flat surface available under** on the other side of the worktop before marking the place the drill the hole for the tap. This is to ensure that **the tap fixings which tighten the tap underneath have a clean flat surface** to screw up against.

You should also consider the reach of the tap and ensure it is able to drip into the sink itself (if you are not drilling the corner of the sink).

Start by using a 5mm drill bit to drill a pilot hole.

Then use a 12mm drill bit.

For easy installation your tap has the 1/4" tubing already connected. Feed that into the 12mm hole and then insert the tap stem into the hole.

The part circled in red below is the **flange and nut which you attach to the** under side of the worktop. Tighten this nut using a spanner, or box spanner.

**Then use the 1/4" push fit union adaptor** to connect the tap tubing to the **fitting.**



## STEP10: FLUSHING THE SYSTEM

**Now your tap is fitted, the system with fittings mounted and the cold water feed in connected, you can now push fit all the tubing in place.**

**When ready you can then turn on the tap to flush the filter system for at least 5 minutes with a good flow of water.**

**It is perfectly normal for the first water to come out black and this should quickly go away but smaller fines can still be there so flush for 5 minutes.**

Once this is done, you can close the tap and open the pressure release screw to release any air pressure until a bit of water comes out then screw it back in fully (this is very similar to bleeding the valve on a radiator and something you can do **before/after new filter installation.**

**It is perfectly normal for the water to appear cloudy at first and this can last up to 5** days in some cases. This is air in the water and to show that you can pour a glass of water and wait 30 seconds and see it go clear. If there is any residue at the bottom of **the glass that has settled after 5 minutes flushing, then please contact our technical** customer care team.

**Once you have finished flushing, thoroughly check all the fittings and connections for any leaks.**

## FILTER CHANGES

**Please refer to Step 3 for average filter durations. Due to massive variation in water conditions, this is meant to be taken only as a guide. Filters can and do block because of variations in the incoming water quality and situations surrounding supply zones or private water supplies.**

A very key point for healthy maintenance of your system is to take note of the following **recommendations in the filter change steps;**

**Step 1: Turn off the water supply to the system and open up the nearest tap and leave open.**

**Step 2:** Use the spanner provided with the housing kit turn the bowl **CLOCKWISE** to unscrew it from the head. Once you have loosened it with the spanner, use both **hands to roll it off**. **Please note it will be full of water and have the filter inside it so lower it down straight. Empty the water out and set the filter to one side.**

**Step 3:** Remove the O ring in the bowl and setting it aside. You can use a thin edge stanley knife to help prise it out of the groove of the bowl. Then you can give the bowl a clean like normal washing up but only with cold water and a soft sponge. Washing up liquid is OK but do not use anything else including bleach or abrasive chemicals.

**Step 4: Insert the new filters in accordance with the installation Step 3 in the installation steps.**

**Step 5:** Refer to Step 3 of the previous section.

**To order replacement filters, contact [sales@reverseosmosisworld.co.uk](mailto:sales@reverseosmosisworld.co.uk)**

## TROUBLESHOOTING

**Problem: Leak coming from between the housing bowl and filter head.**

**Solution: Take the bowl off and ensure the o ring is correctly seated. Remove the o ring** and check it for any bumps or stretches. Re-grease the o ring, thoroughly to ensure all sides of it are nicely greased. Reseat the o-ring and apply some more grease for good measure. Then screw the bowl back on and use the spanner to tighten it up and **re-check. If you have a problem with the Coldstream filter housing leaking, ensure that you have not used the bottom and only the top rubber ring on the filter itself. If this** does not work, contact our technical customer care team.

**Problem: Leaking coming from pressure reducing valve screw**

**Solution:** Tighten the screw up. If this does not work, contact our technical customer care team.

**Problem: Leak from inlet and outlet fittings.**

**Solution: If this is coming from the push fitting side, then take out the pipe and ensure the end is clean and straight and not burred or miscut. Push the fitting back in thoroughly** to ensure the collet ring pops out. Then retest it. If this does not work, contact our technical customer care team. If the leak is coming from the male/female threaded side, then this is most likely because there is not enough tape on the thread or can be **because there is too much tape. Remove any tape and put 7 wraps around it. Refit the fitting and try again. There is a chance the fitting, if plastic has become cross threaded** and therefore will not seal. If so contact our technical customer care team for help.