



Installation Manual

Orbital Tap (OM8811-E & OT8911-E)

5-06-0036

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Thank you for your purchase

This manual applies to model OM8811-E & OT8911-E

 Read the Safety Guide before starting the installation or before operating the product.

Thank you for purchasing the Orbital Tap from Orbital Systems. To enjoy the product's full potential, please read and follow the procedures in this manual. Make sure that you fully understand how to operate Orbital Tap and make sure that it is properly maintained in accordance with the instructions given in this manual and the User Guide. Do not discard this manual, keep it handy for future reference.

Service

Orbital Systems and our team of expert staff are available to assist you if you require product advice, experience any problems, need to purchase spare parts or to set up a service appointment.

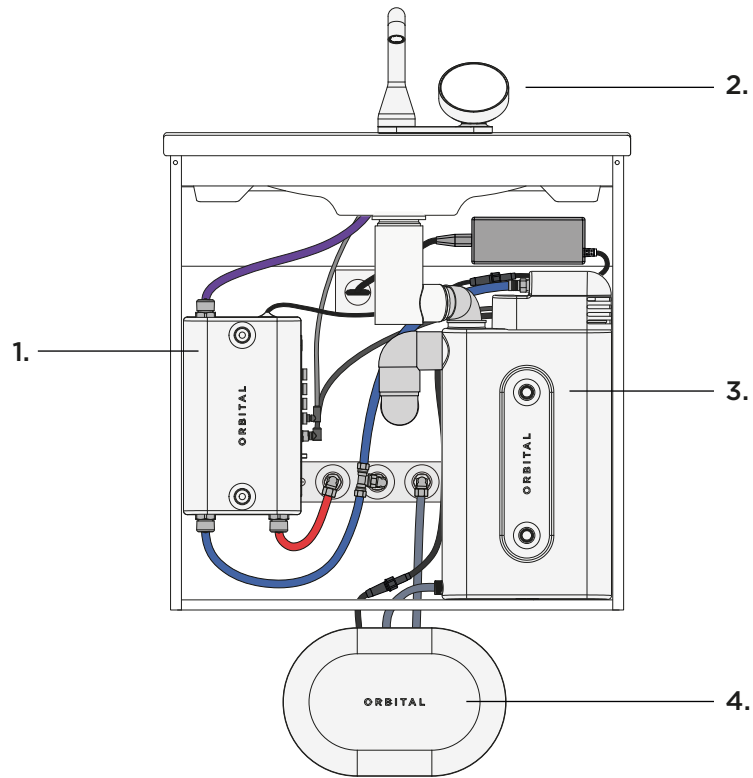
Repairs should only be carried out by Orbital Systems.

If the supply cord is damaged, it must be replaced by Orbital Systems to avoid a hazard.

Contact us

- support@orbital-systems.com
- www.orbital-systems.com

System overview



1. Mixer
2. Faucet with Control Dial
3. Tank
4. Pump

Technical specification

General performance

Savings rate:	Up to 100% water savings of water used in the sink
Water flow:	Up to 7 l/min
Temperature range:	Typically 4-55°C, depending on local water supply

Size and weight

Faucet:	162 x 169 x 155 mm, 1.5 kg
Mixer:	310 x 190 x 65 mm, 2.1 kg
Tank:	440 x 270 x 65 mm, 1.2 kg
Pump:	197 x 296 x 140 mm, 3.5 kg
AC/DC power supply:	152 x 63 x 30 mm, 420 g

Water supply

The water supply determines the available flow and temperature from the faucet

Incoming Hot & Cold water:	Recommended flow: 5-8 l/min Recommended incoming water pressure: 2-5 bar Maximum working pressure: PN10 Hot water temperature (min-max): 50-65°C Cold water temperature (min-max): 4-25°C
Water connections (Mixer and Faucet):	G 1/2 threads (ISO 228/1-G 1/2" external threads)
Water connections (Tank and Pump):	G 1/2 threads (ISO 228/1-G 1/2" external threads) and G 3/8 threads (ISO 228/1-G 3/8" external threads)
Water hardness:	3°dH-14°dH.

If the local water hardness on the installation site is more than 14dH it is recommended to install a water softener.

Recommended power supply

100-240V, 50/60Hz, 2.5A, 120W	Power consumption: Mixer unit; active mode: nominal 5W, max. 20W; standby mode: 1.8W Tank and Pump unit; active mode: nominal 25W, max. 70W; standby mode: 0.21W
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Installation area

Full system: All components are wall mounted: behind commode, below wash basin or up to 3 m from the wash basin. The top inlet in the Tank needs to be placed at a lower point than the outlet from the wash basin. The Mixer needs to be placed at the same height or lower than the Faucet. The Pump needs to be placed within 6 m from the toilet cistern. The Faucet is sink mounted.

Connectivity

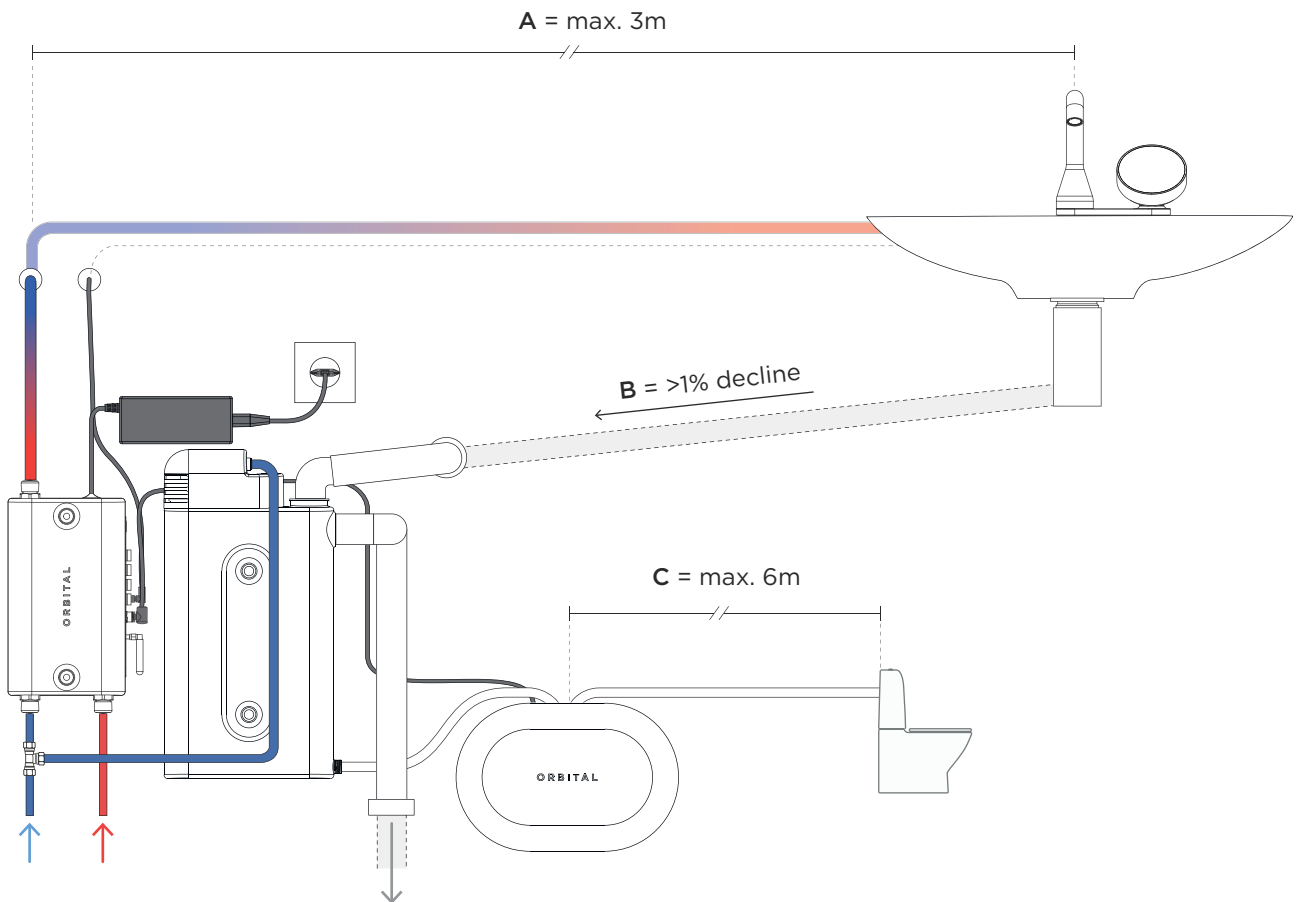
Internet connection: Password protected 2.4 GHz Wi-Fi network or Ethernet

Maintenance

Cleaning tablet: Add in the sink at regular intervals to both clean the product and get a fresher bathroom experience. The frequency depends on usage and preference.

Fresh Mesh: Cleaned by hand, in a dishwasher, or replaced when needed. The frequency depends on usage; typically once per month. It's important that the Fresh Mesh is not emptied and cleaned in the wash basin.

Installation requirements



Increased distance between the system and the faucet will delay temperature changes.

A. The faucet and Mixer can be placed at a maximum distance of 3 meters. For optimal performance, it is recommended to install the system directly below the sink. Increased distance will delay temperature changes.

B. The bottom valve outlet must be placed higher than the inlet on the Tank (minimum 1% inclination).

C. The Pump and toilet can be placed at a maximum distance of 6 meters. The Pump should not be placed at a higher position than the Tank.

Wall installation

The total weight of all components is approximately 12 kg when the Tank is filled with water. The surrounding structure must be able to support the forces that will stress the attachment points.

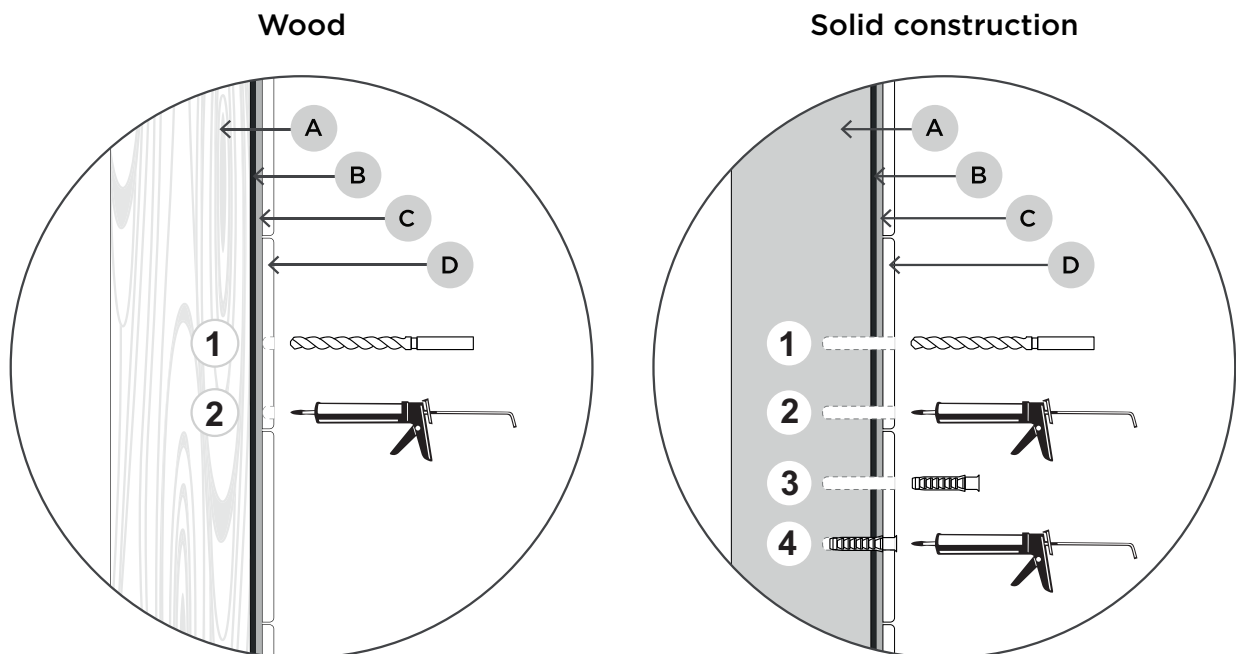
Seal mountings in wet zone

Seal the drill holes in accordance with applicable industry standards.



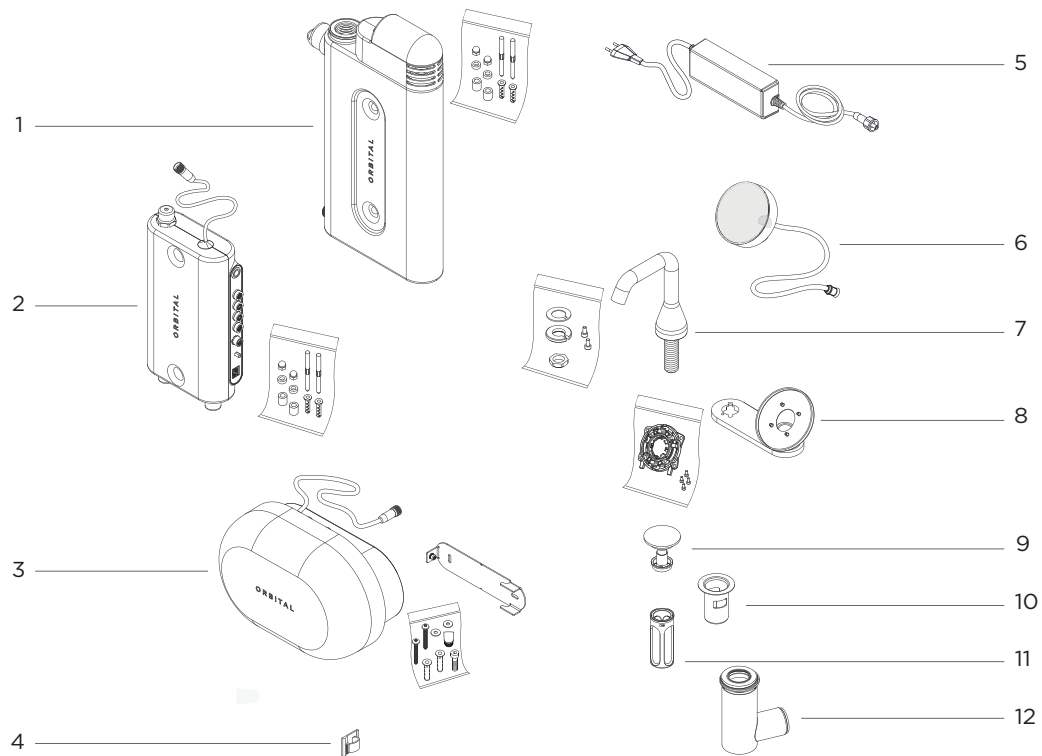
CAUTION

Installations in Sweden must be carried out in accordance with the current Industry Rules Safe Water Installation. All mountings in the wet zone must be sealed against the waterproofing layer of the wall or floor. Material for sealing must adhere to the substrate and be water-resistant, mold-resistant and aging-resistant.



- **A:** Wood / Concrete
- **B:** Waterproofing membrane
- **C:** Tile adhesive
- **D:** Tile

Component overview

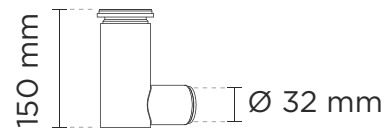
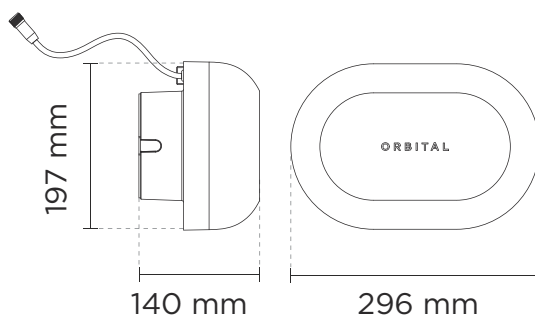
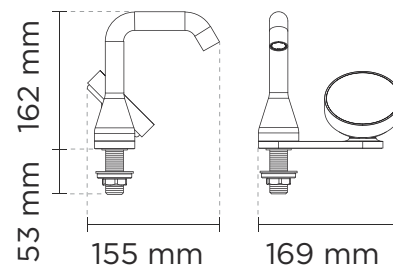
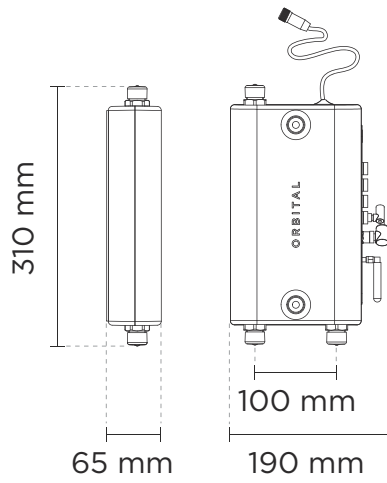
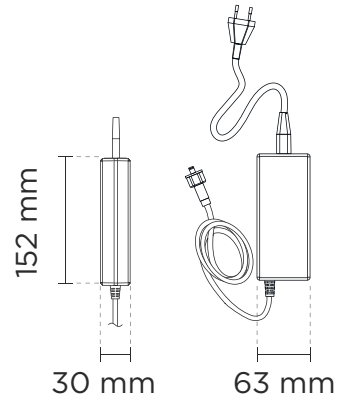
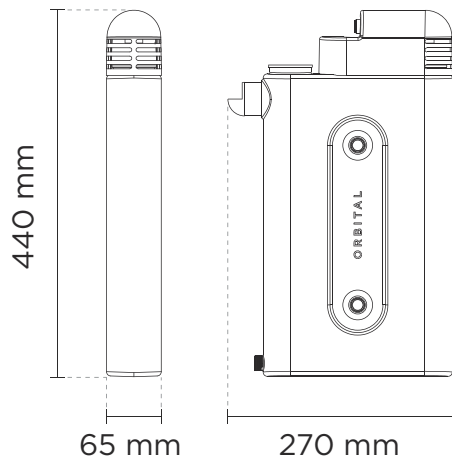


1. Tank with fastening kit
2. Mixer with fastening kit
3. Pump with wall bracket and fastening kit
4. Cable organizer, x2
5. AC/DC power adapter
6. Control Dial
7. Faucet
8. Control Dial holder with bracket and screws, x4
9. Bottom valve
10. Bottom valve flange
11. Fresh Mesh
12. Bottom valve outlet

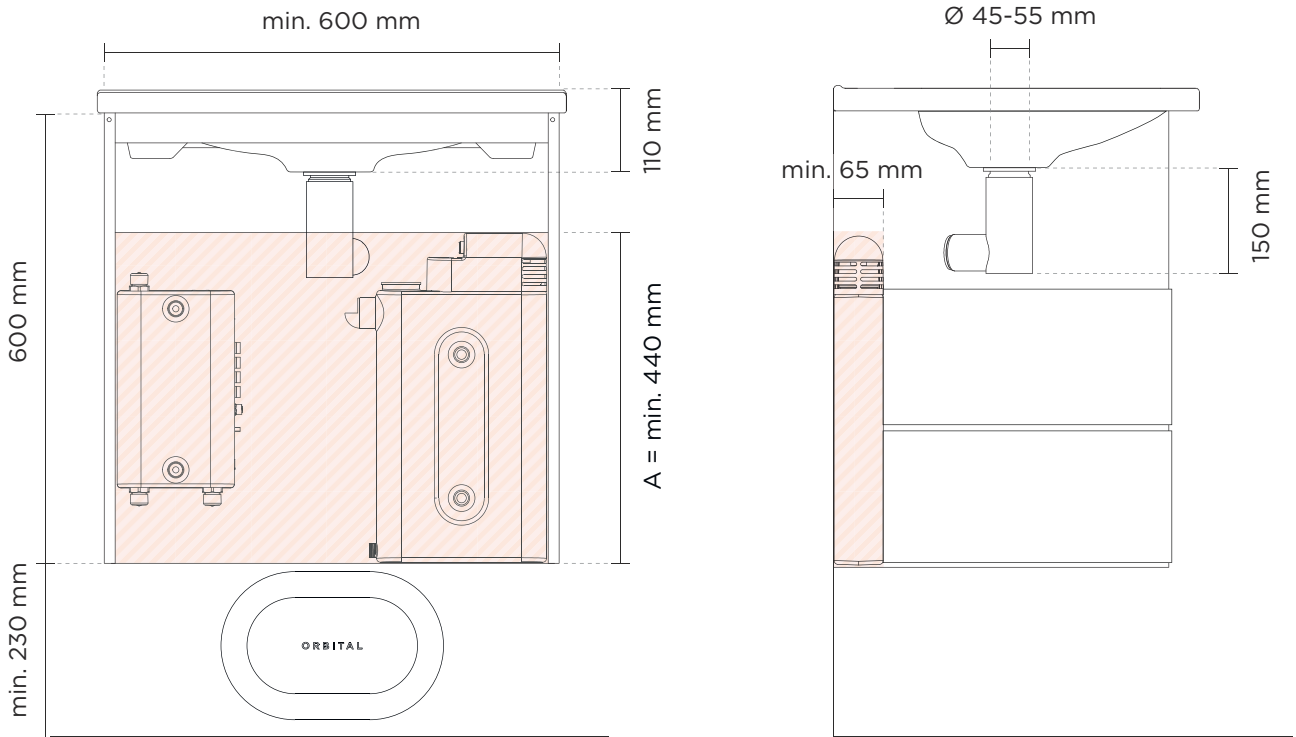
Additional components needed:

- Wall socket 220 V, x1
- Flex hose G 1/2" to 3/8", x1
- T-coupling G 1/2" male, x1
- Exposed flex hose G 1/2" female/nut, x2
- Connectors G 1/2" male to female, RSK 850 50 08
- Pipes D40
- Pipes D32
- Screws for mounting of the power adapter, x2

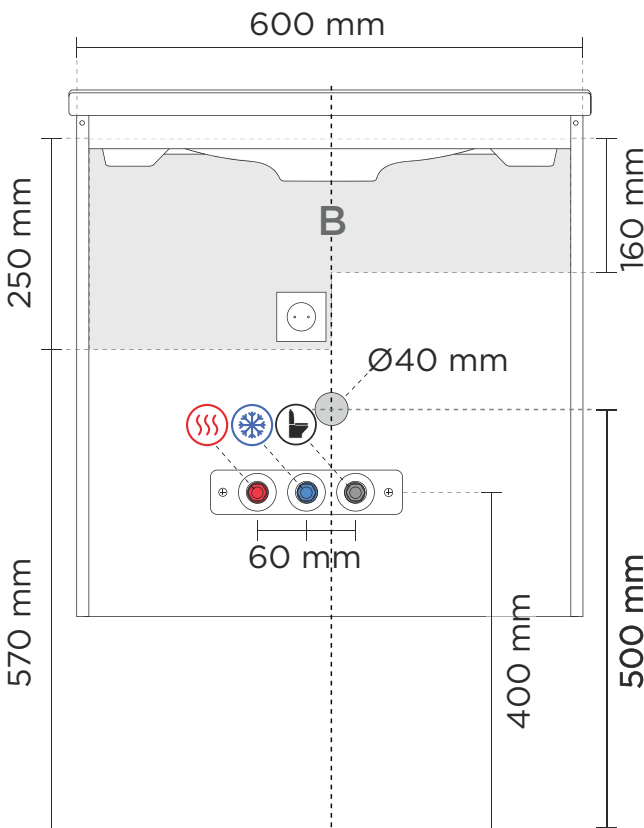
Product measurements



Recommended installation measurements



A = Area with open surface for mounting the wall mounted components.

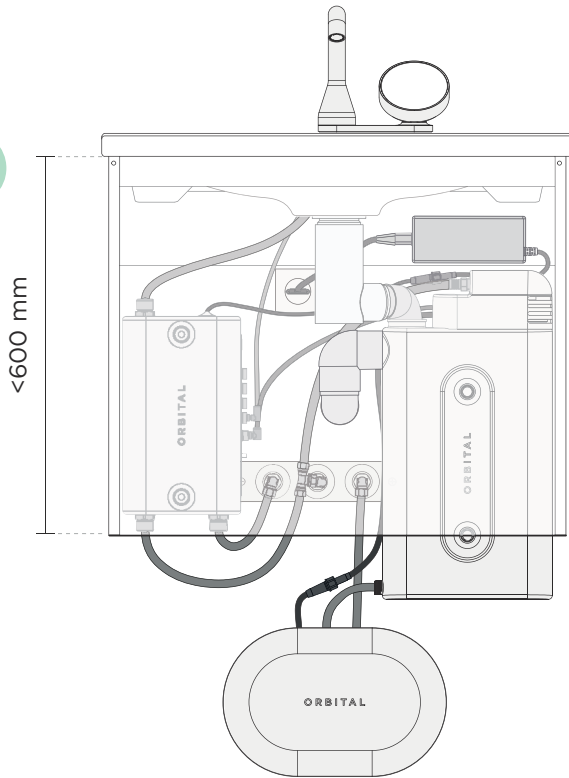


B = Area where the electrical outlet can be placed.



NOTE

The recommended commode height of 600 mm is only applicable for complete coverage of the components. You can use a commode with a lower height without affecting the product's functionality.

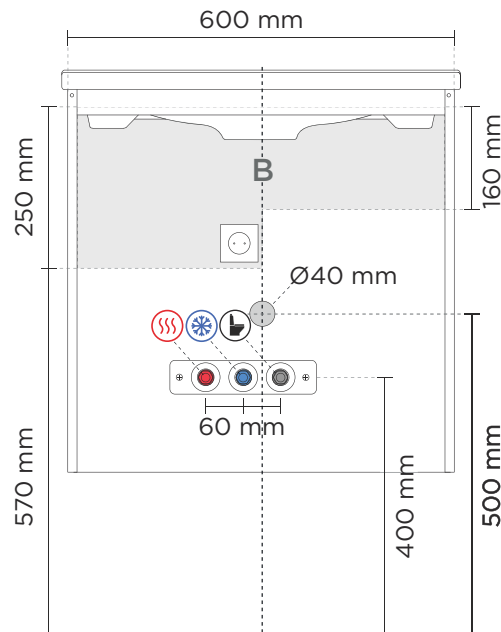


Installation

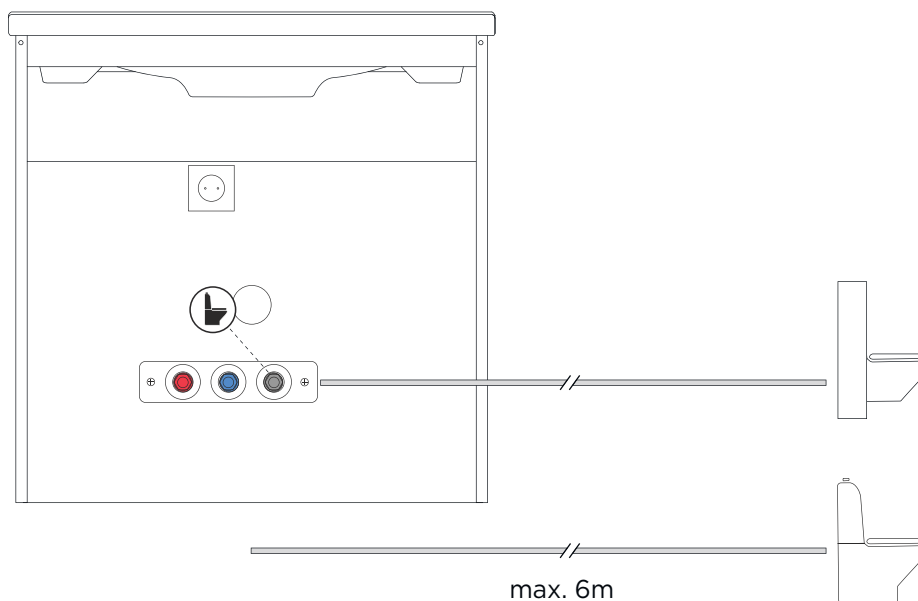
In the scenario displayed in this manual, the commode is 600 mm wide.

Prepare bathroom

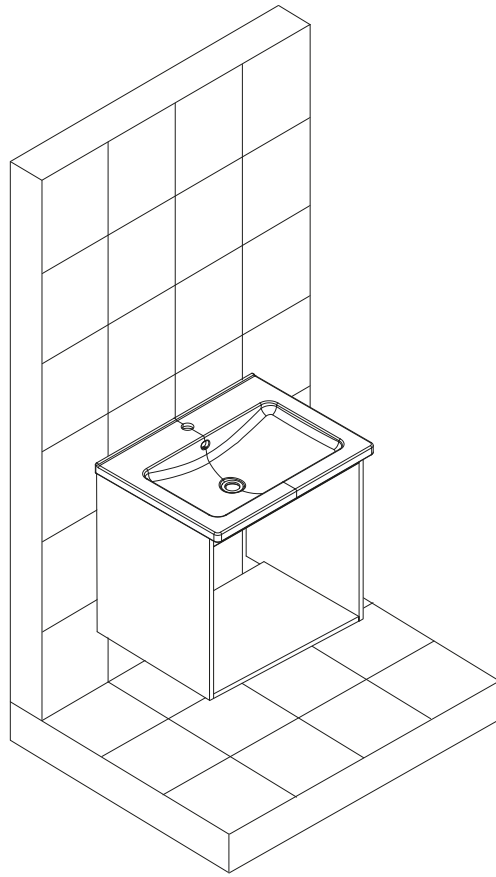
1. Prepare the installation area for incoming hot and cold water, drain, and electricity.
B = Area where the electrical outlet can be placed.



2. Install the connection to the toilet cistern. Adapt the piping according to the installation scenario. The distance between the Pump and the toilet cistern can be a maximum of 6 meters.

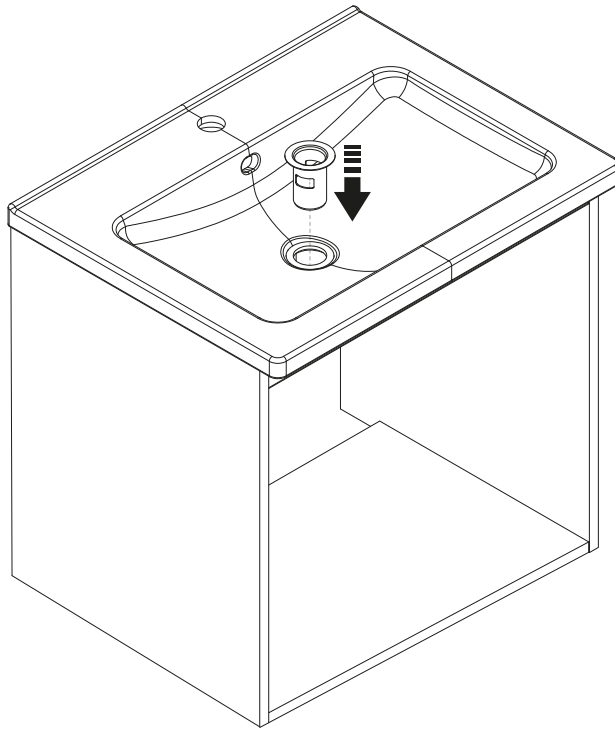


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3. Apply wall covering, tiling, and commode according to industry rules and the supplier's instructions.

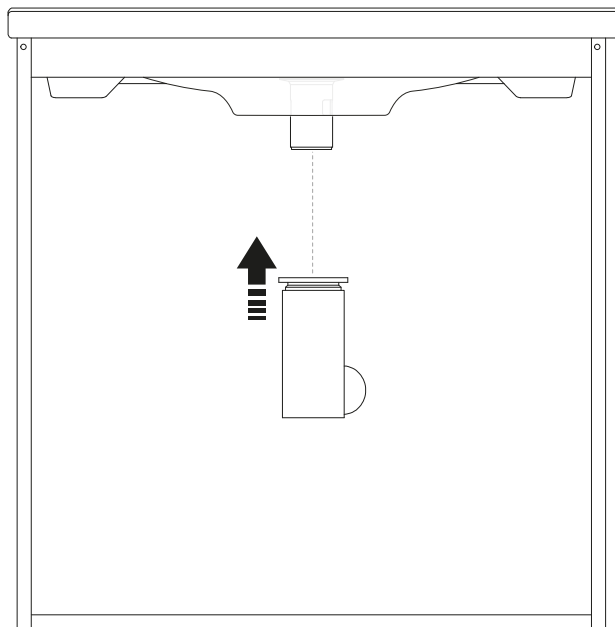


Install the bottom valve outlet

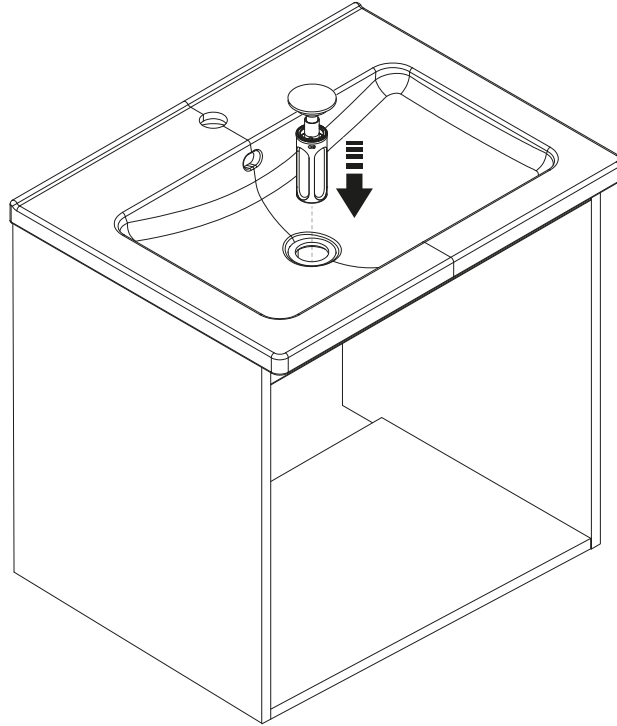
1. Place the bottom valve flange in the sink.



2. Mount the bottom valve outlet.

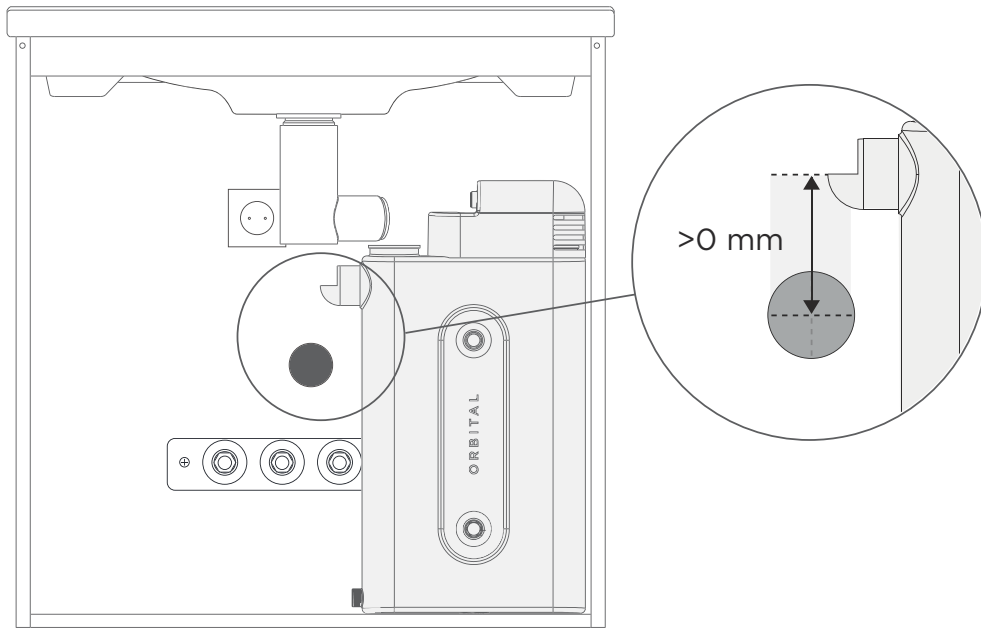


3. Place the bottom valve with the Fresh Mesh in the bottom valve flange.



Install Tank

1. Before drilling, make sure the components fit and that the overflow outlet on the Tank is located at a higher point than the drain.

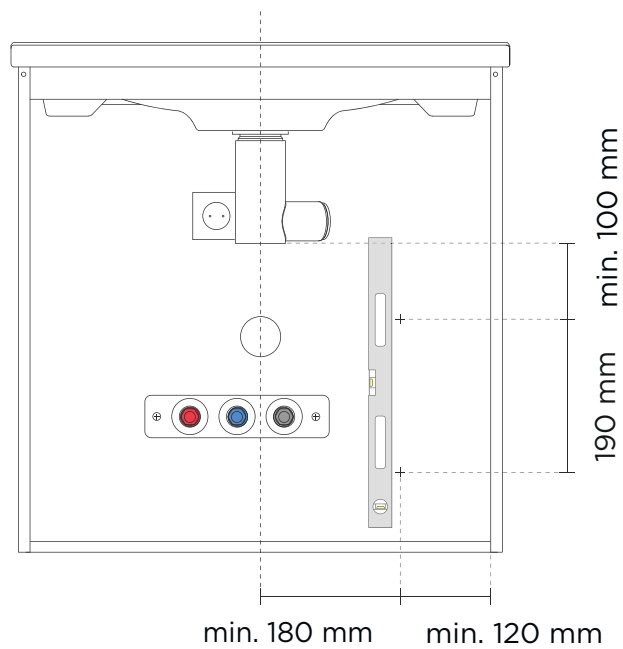


2. Pre-drill holes for the Tank fastening kit.

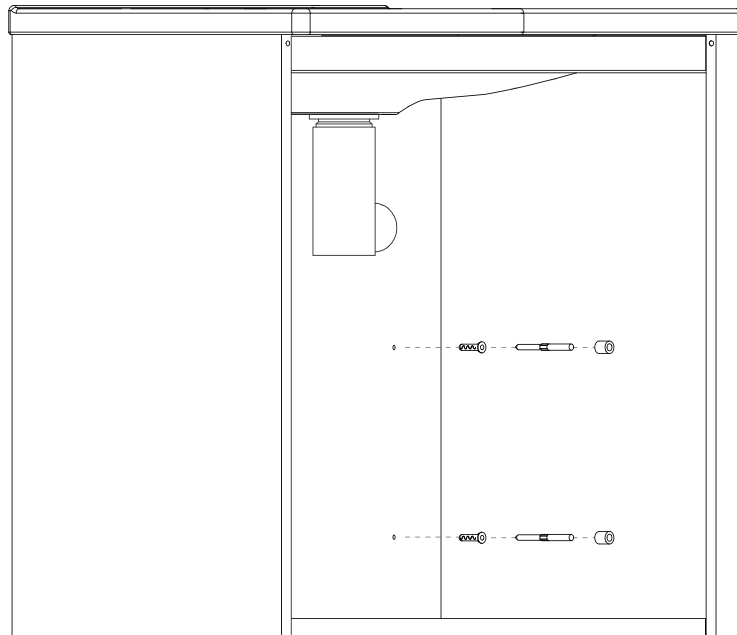


CAUTION

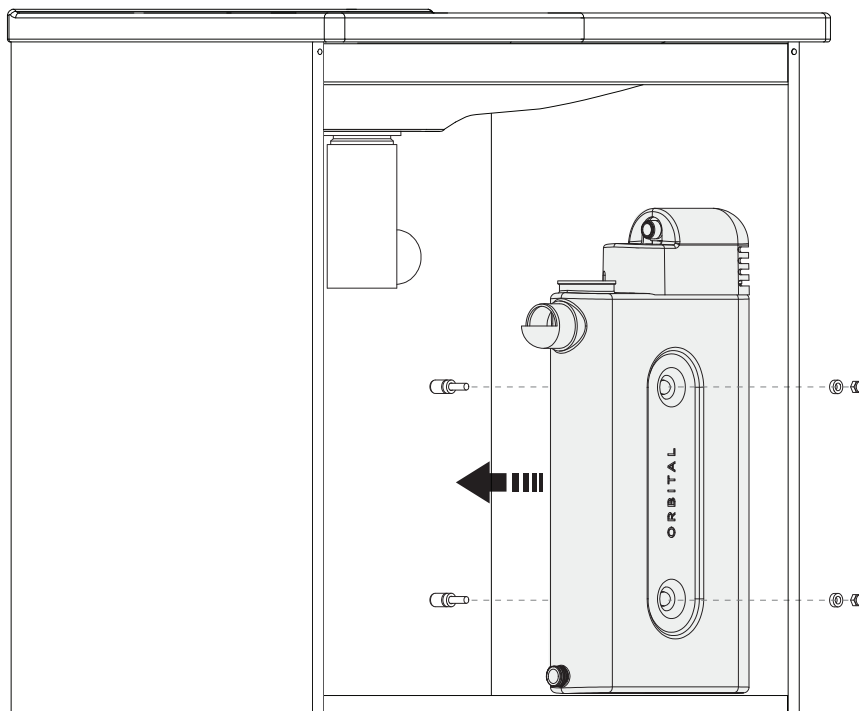
- The length of the plugs is 40 mm. Adapt placement according to the piping.
- Make sure the two holes are vertically aligned to ensure the Tank is not tilting.



3. Insert the plugs, screws, and the long spacers.

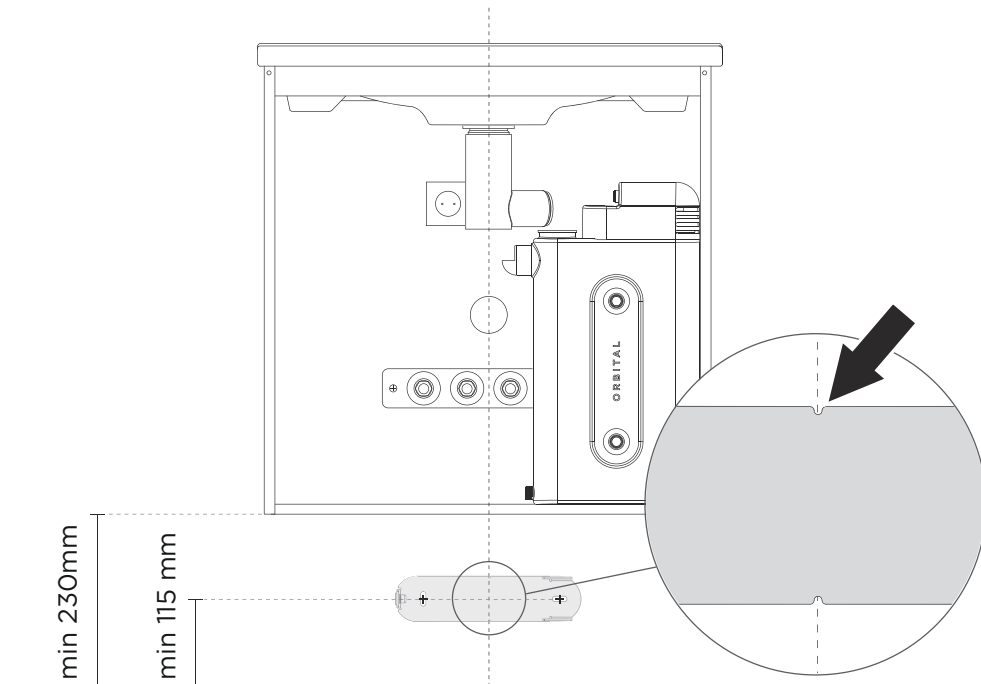


4. Attach the Tank. Add the thin washers, and secure with the nuts.

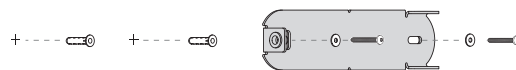
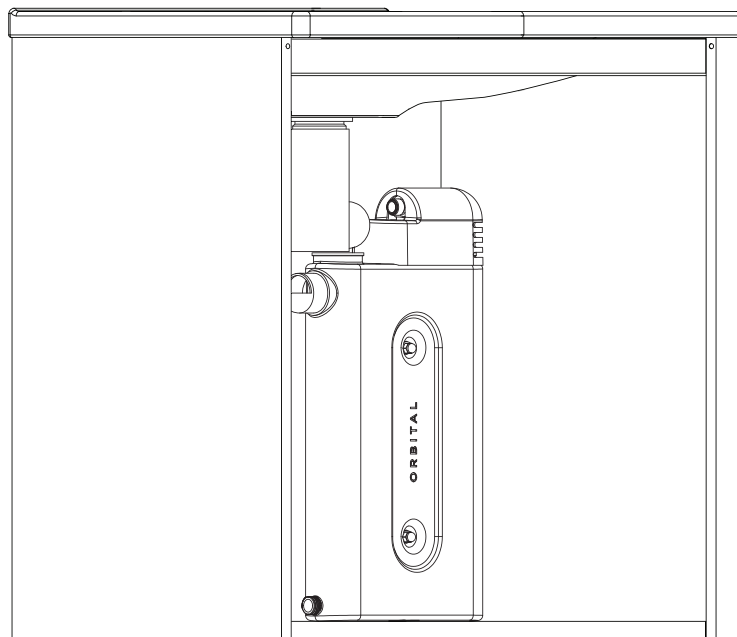


Install Pump

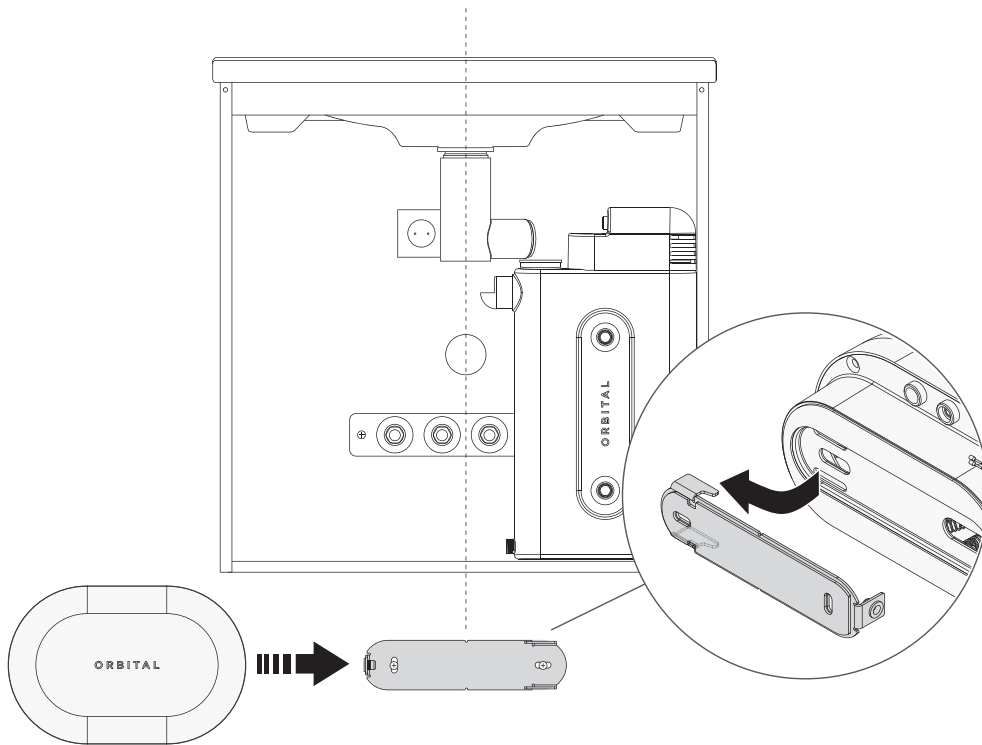
1. Measure and pre-drill holes for the wall bracket.



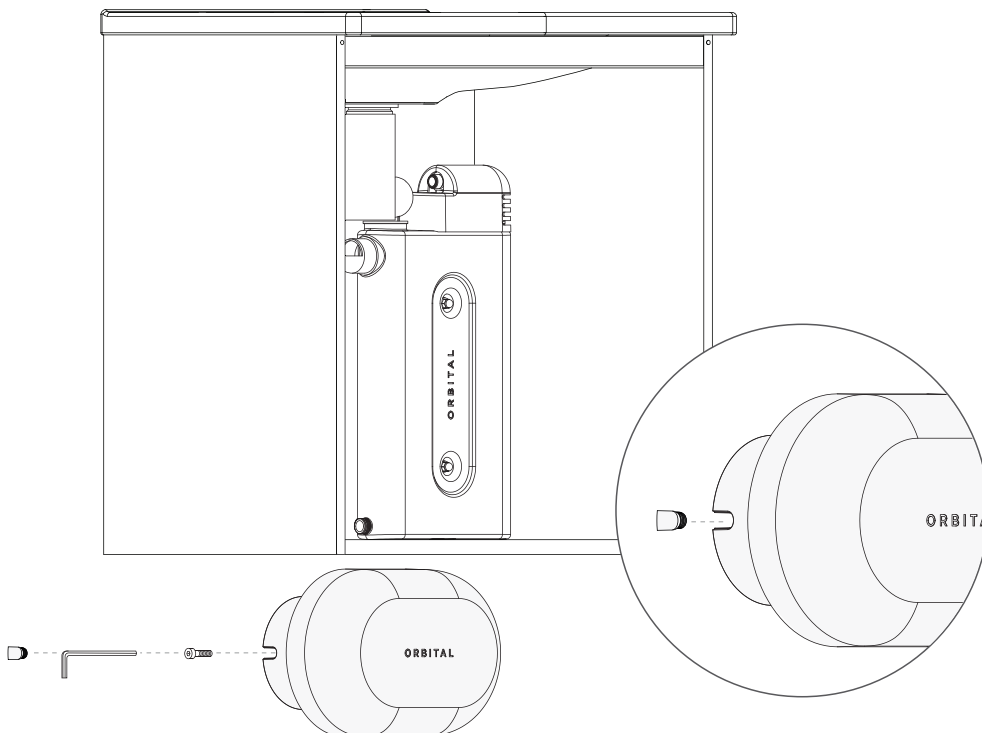
2. Insert the plugs and screw the wall bracket in place.



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3. Attach the Pump by threading the back piece onto the bracket from the left and sliding the Pump in place.

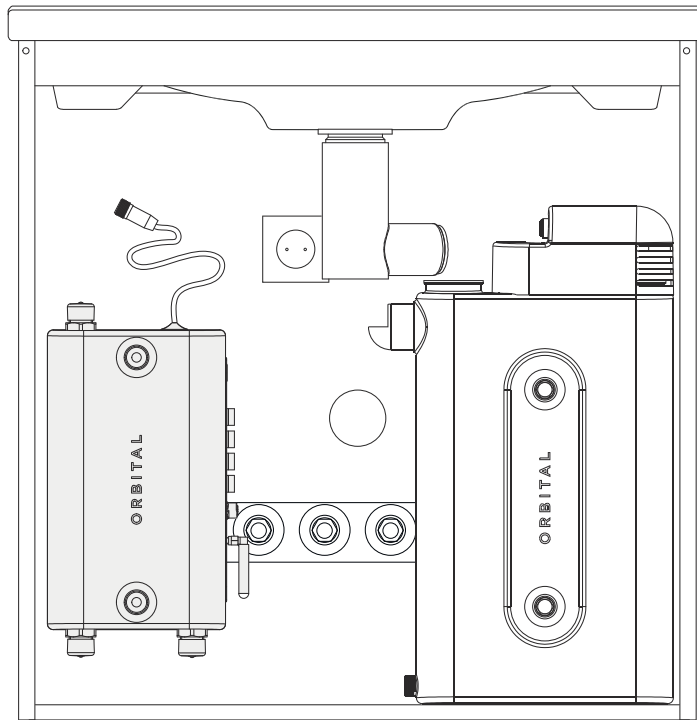


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4. Lock the Pump in place by tightening the screw on the left side with a straight 4 mm Allen key. Add the rubber plug to cover the hole.

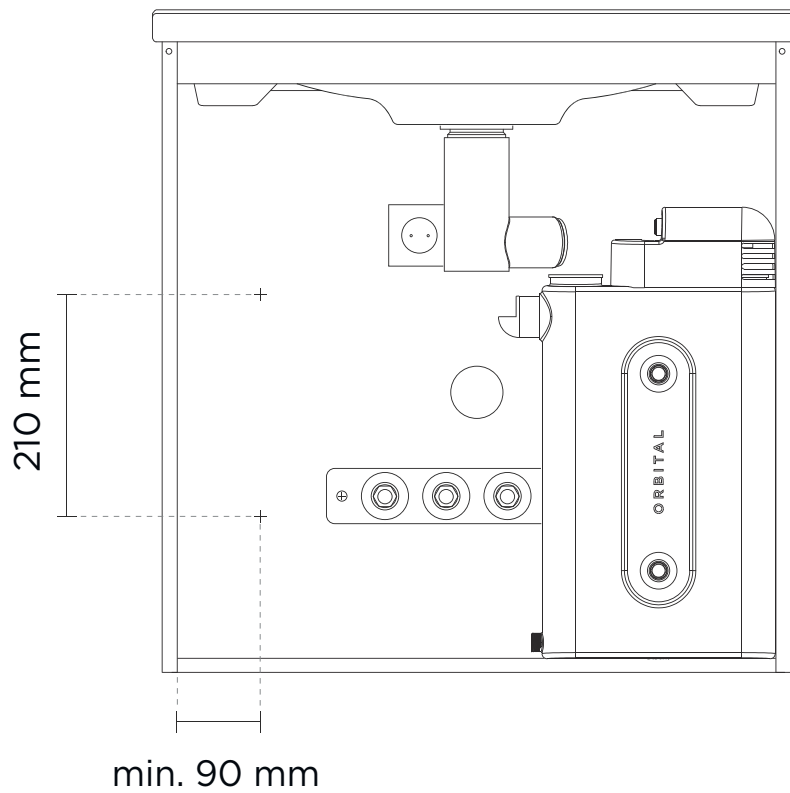


Install Mixer

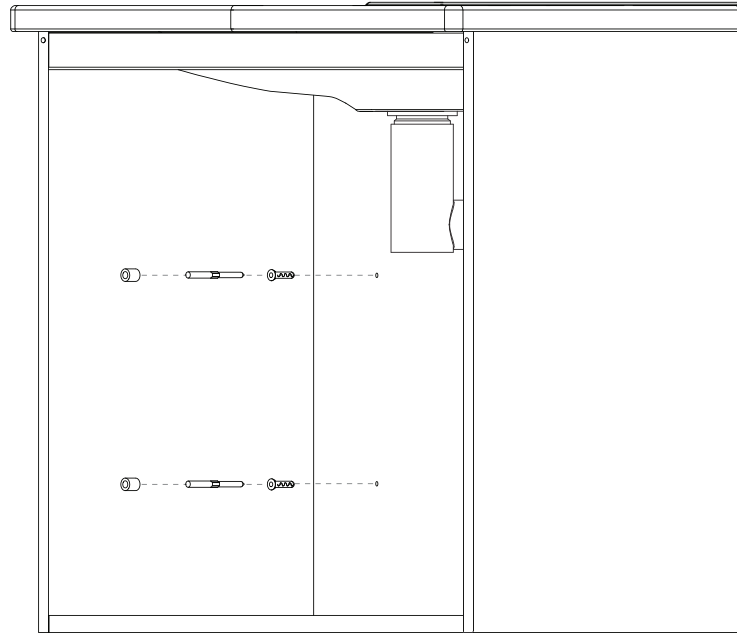
1. Before drilling, make sure the components fit.



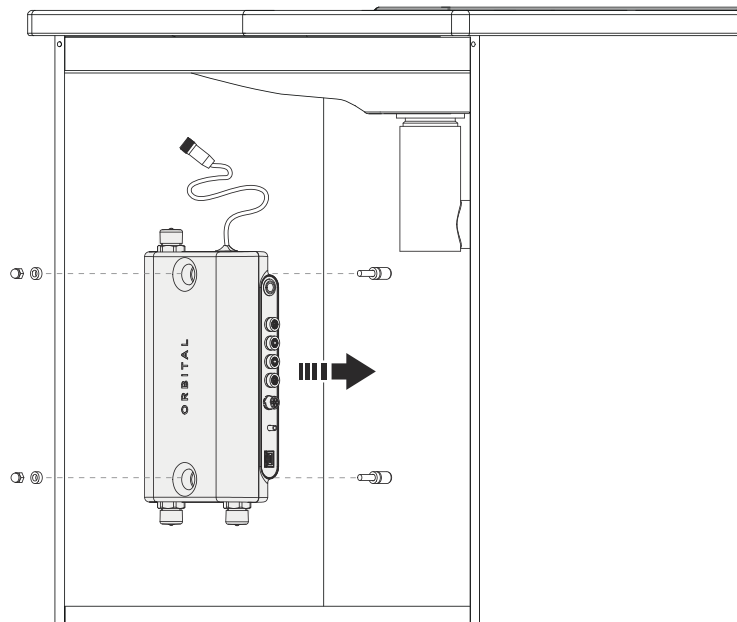
2. Measure the position of the Mixer fastening kit. Proceed by pre-drilling the holes.



3. Insert plugs in the holes and mount the screws with the long spacers.

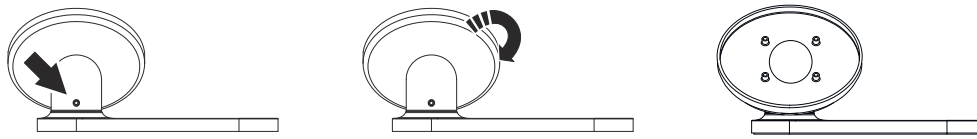


4. Attach the Mixer. Add the thin washers, and secure with the nuts.

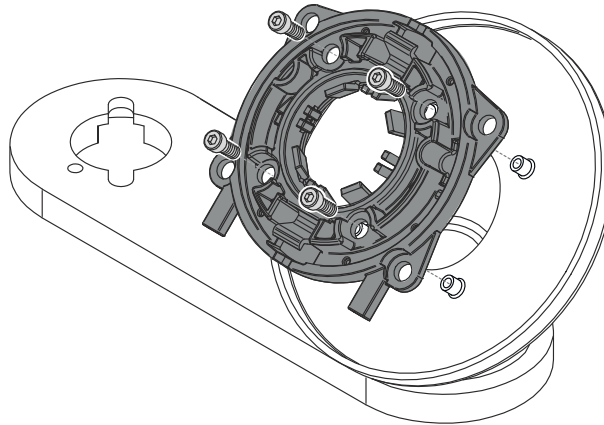


Mount the faucet

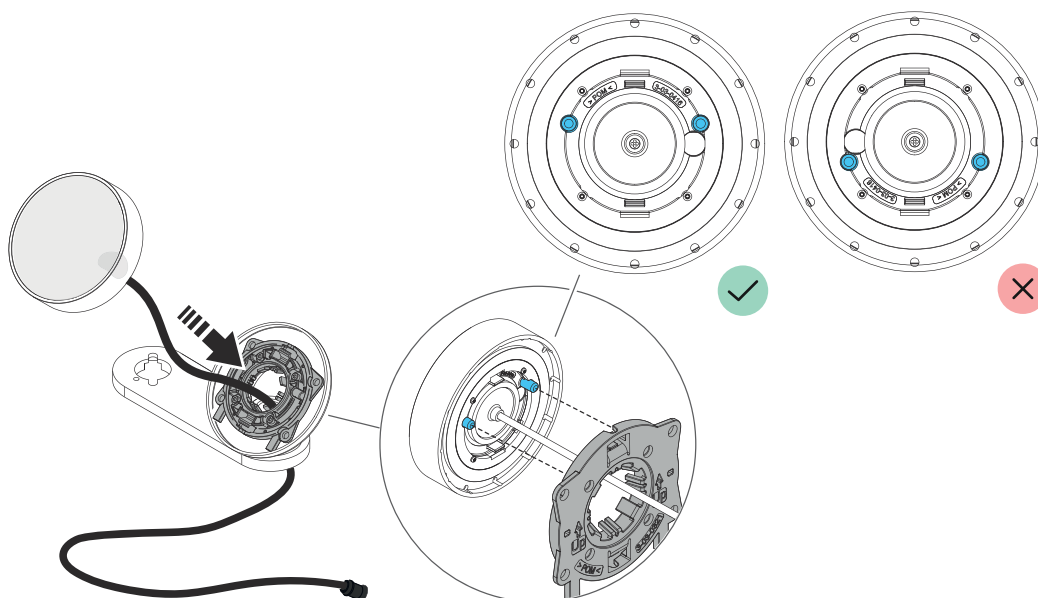
The faucet is delivered right oriented. To make it left oriented you can rotate the Control Dial bracket by loosening the screw in the back. Tighten the screw again when the bracket is set in the correct position.



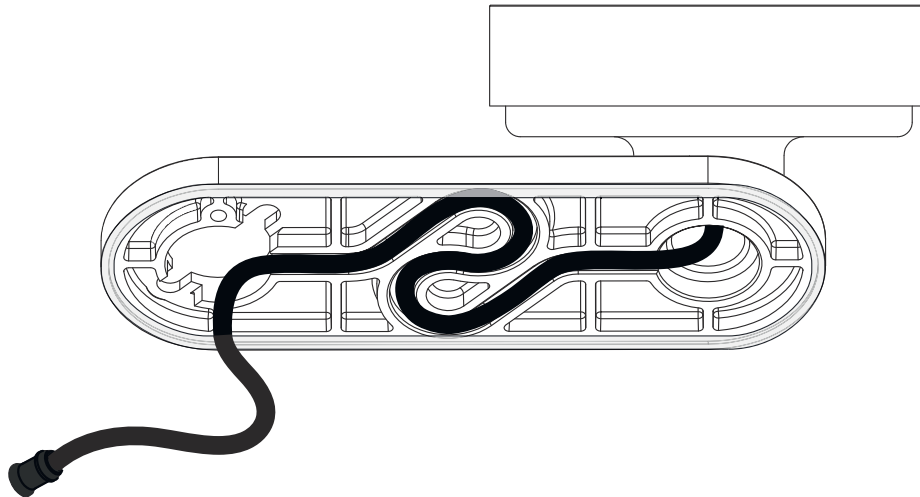
1. Mount the Control Dial bracket to the holder using the four screws.



2. Mount the Control Dial on the bracket. Position the Control Dial according to the “up marking” before assembly.



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3. Fit the cable in the channel on the bottom of the base plate.

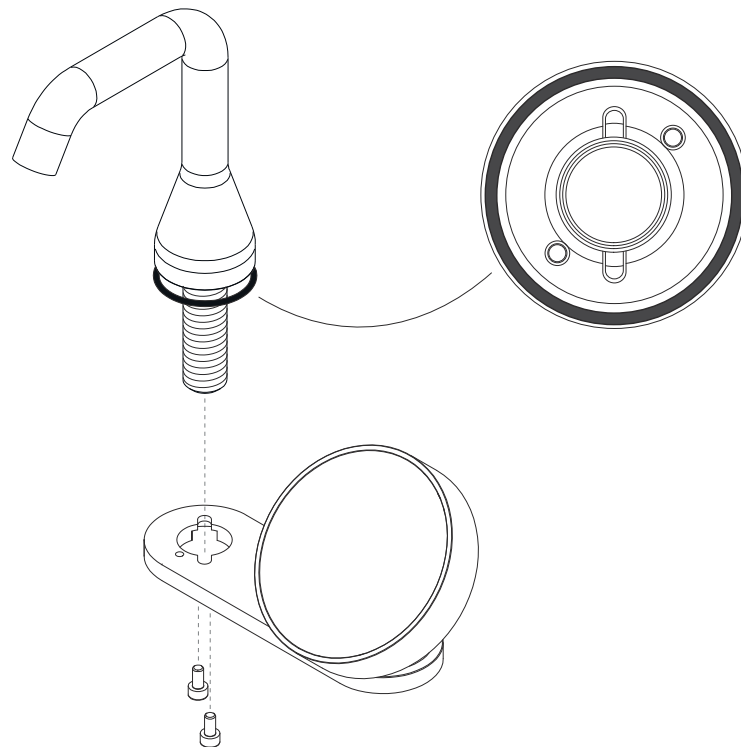


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4. Mount the faucet to the base plate.

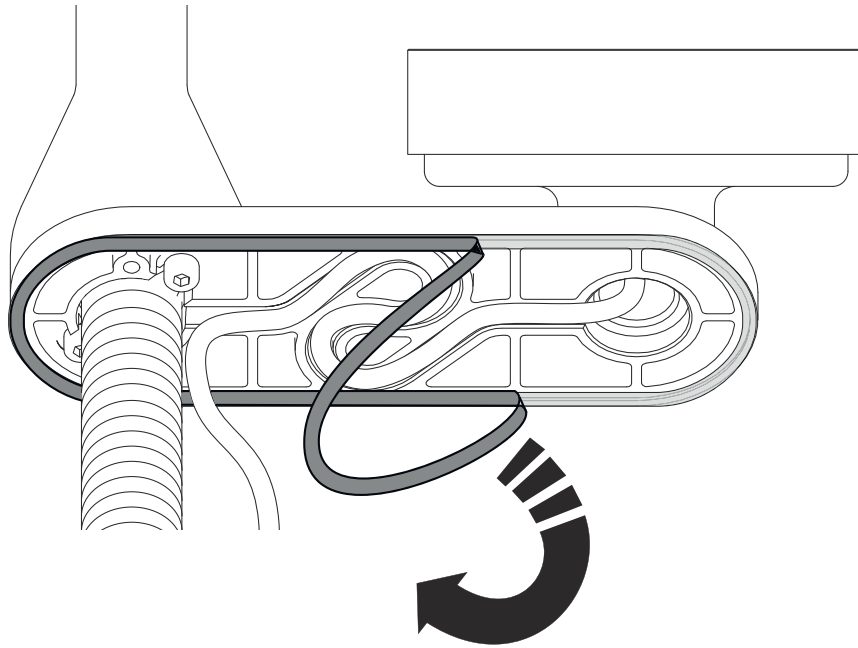


CAUTION

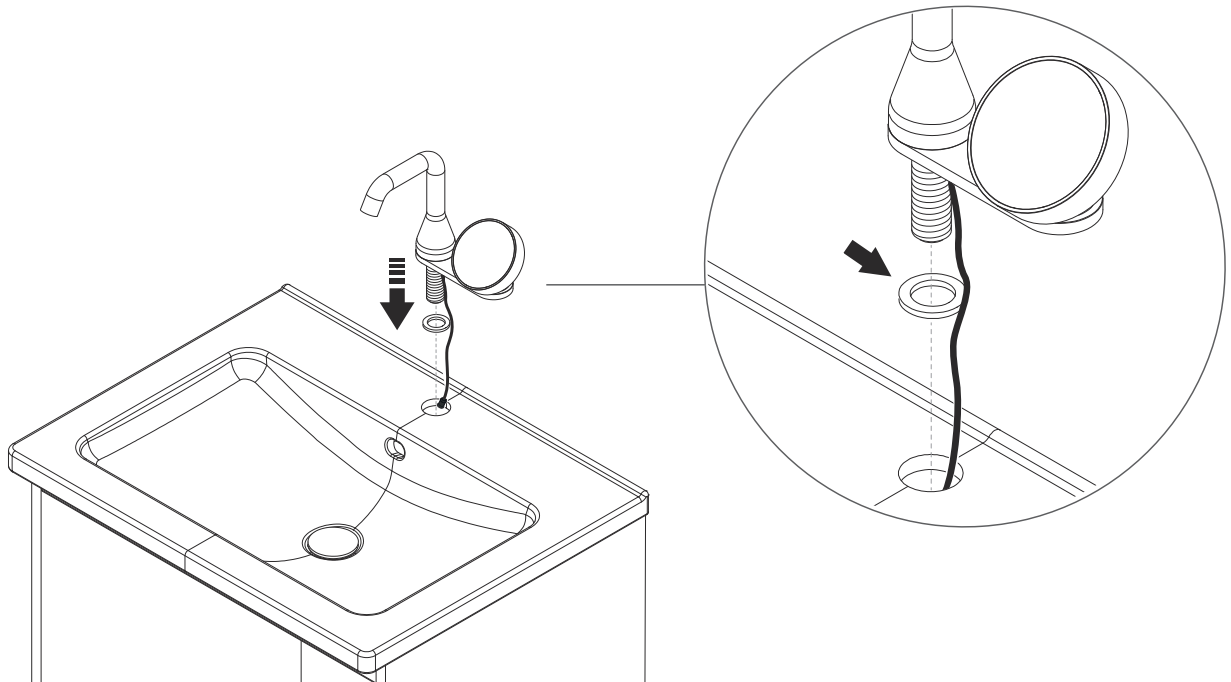
Make sure the o-ring in the bottom of the faucet is in place.



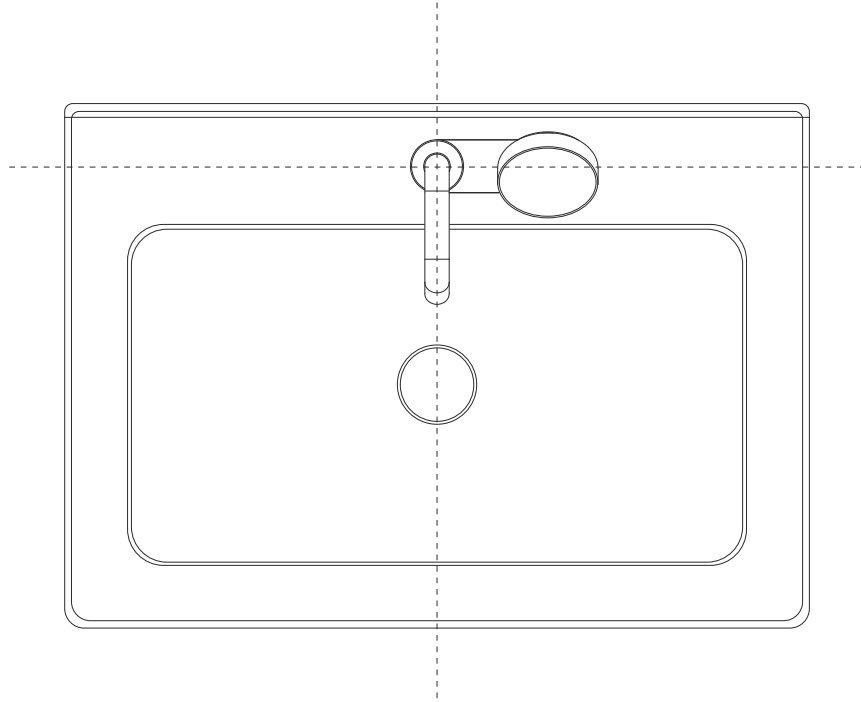
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5. Remove the plastic cover from the adhesive strip at the bottom of the base plate.



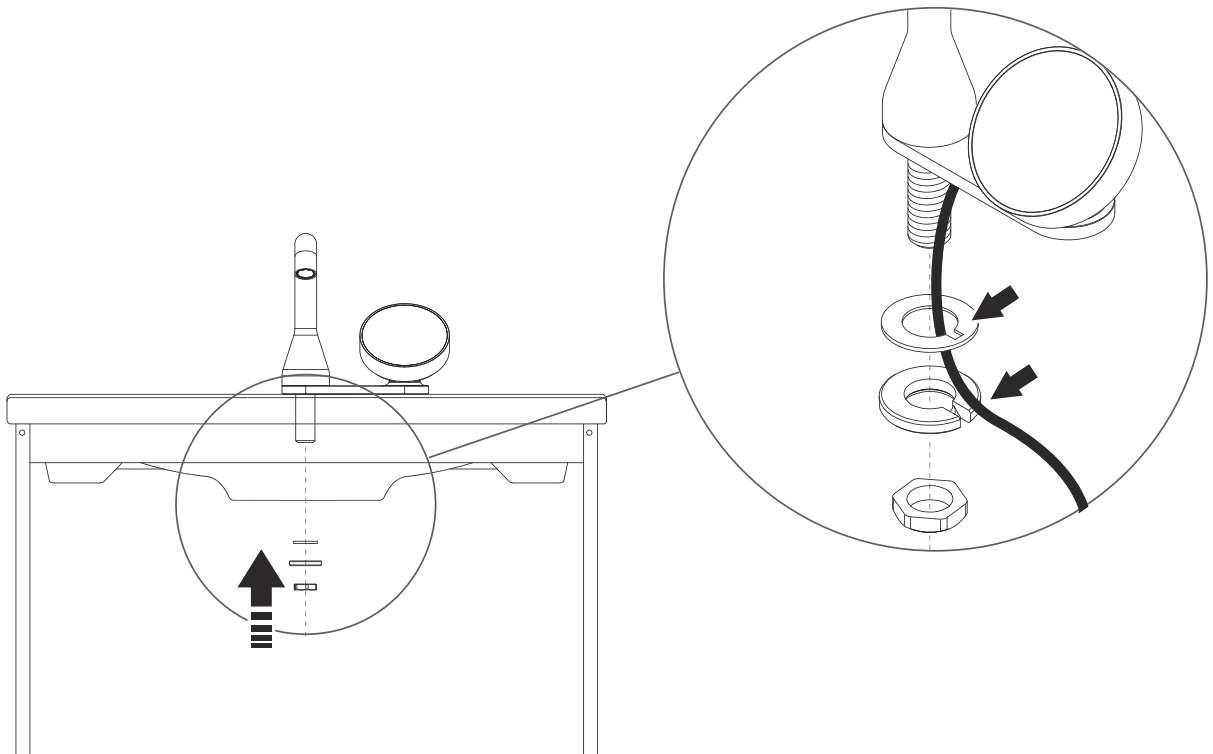
-
6. Place the gasket between the faucet and the wash basin, before threading the faucet and cable through the opening.



7. Center the faucet on the sink and secure it with the adhesive.

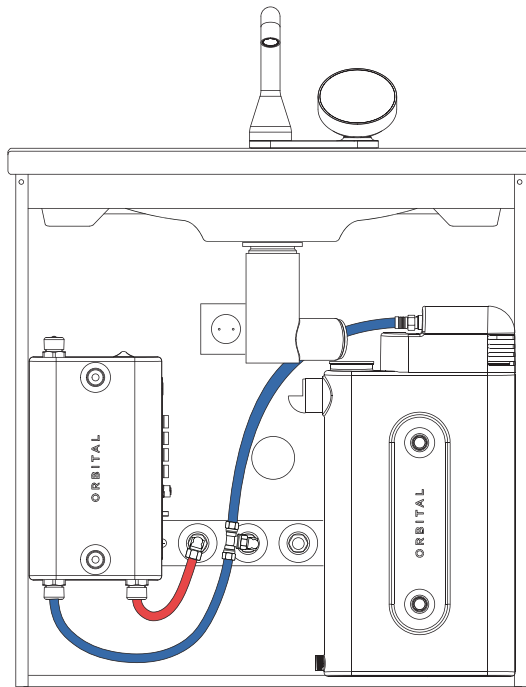


8. Mount the faucet. Use a tubular socket wrench for better access.

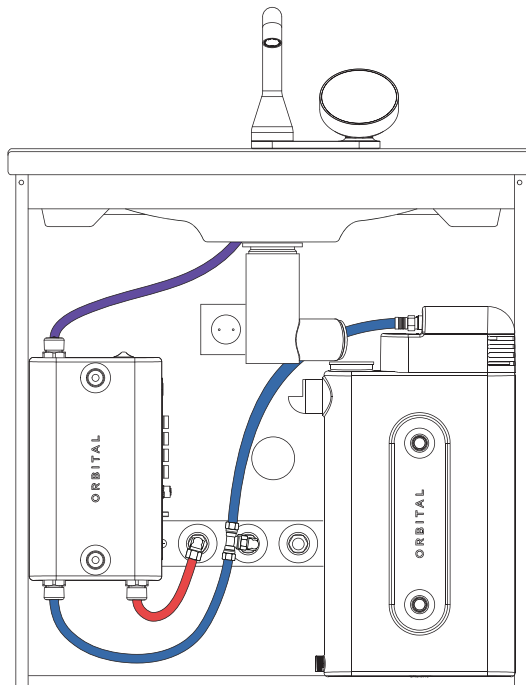


Connect to water and drain

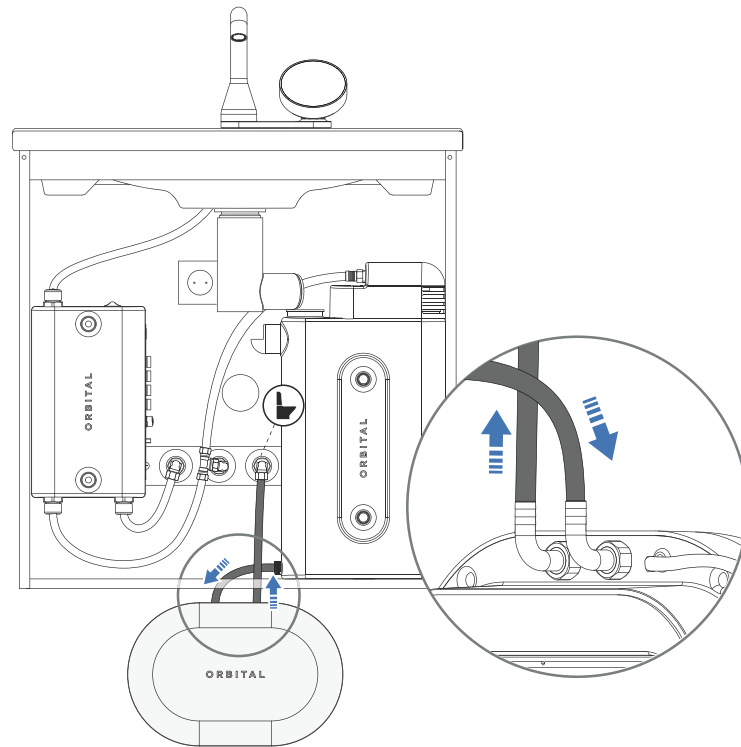
1. Connect incoming hot and cold water to the Mixer (1/2") and incoming cold water to the Tank (3/8").



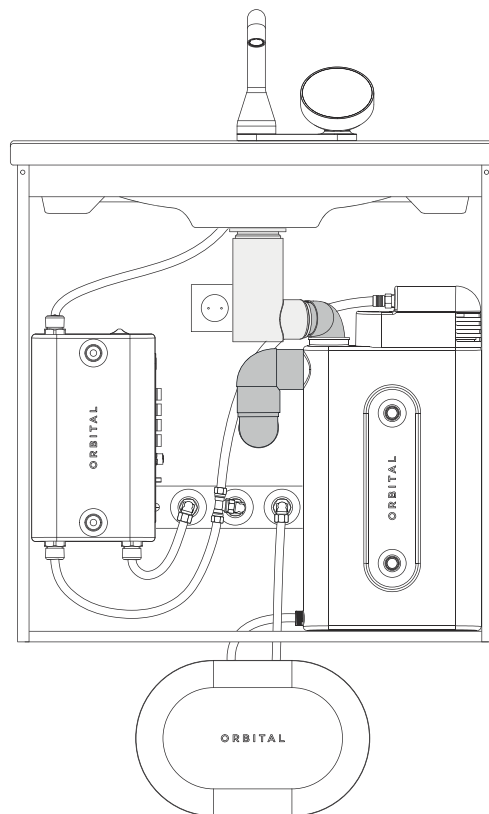
2. Connect the Mixer to the faucet (1/2").



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3. Connect the Tank to the Pump, and the Pump to the toilet.



-
4. Connect the sink's bottom valve outlet to the Tank. Proceed by connecting the outlet of the Tank to the drain.



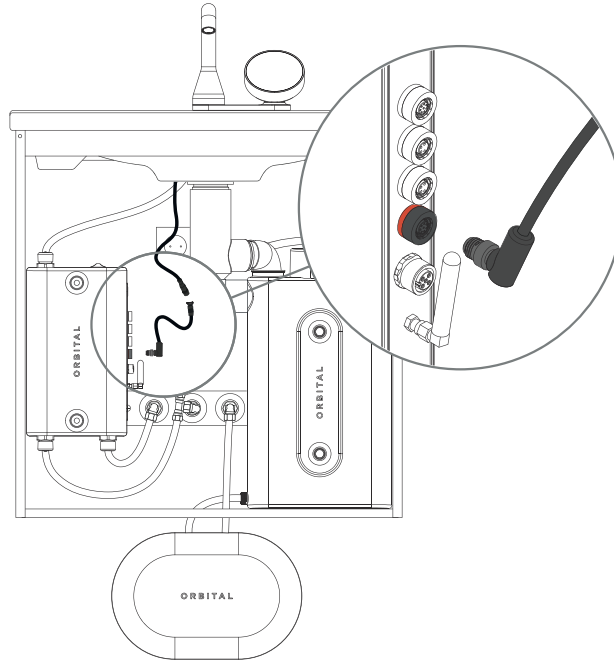
Connect all components

1. Connect the cable from the Control Dial to the Mixer.

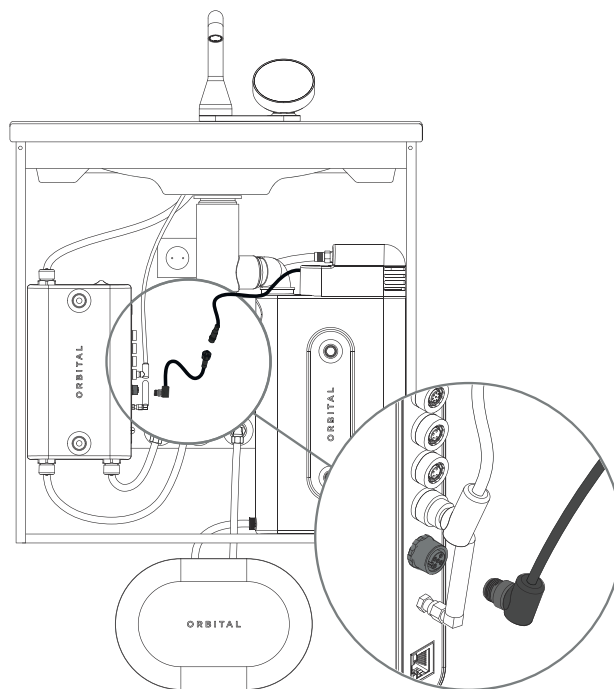


CAUTION

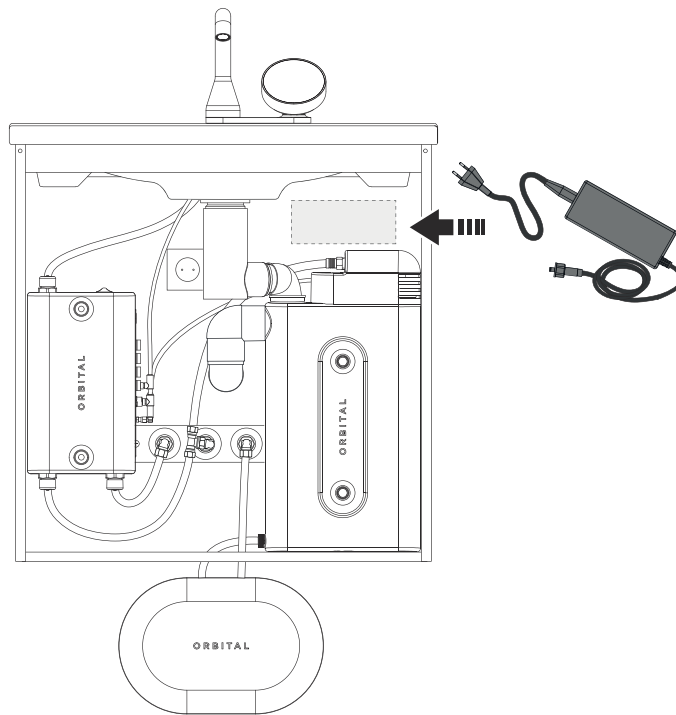
To prevent damage to the contact, be careful and make sure to have the correct alignment between the key and slot. The contact should be angled 45° to the right.



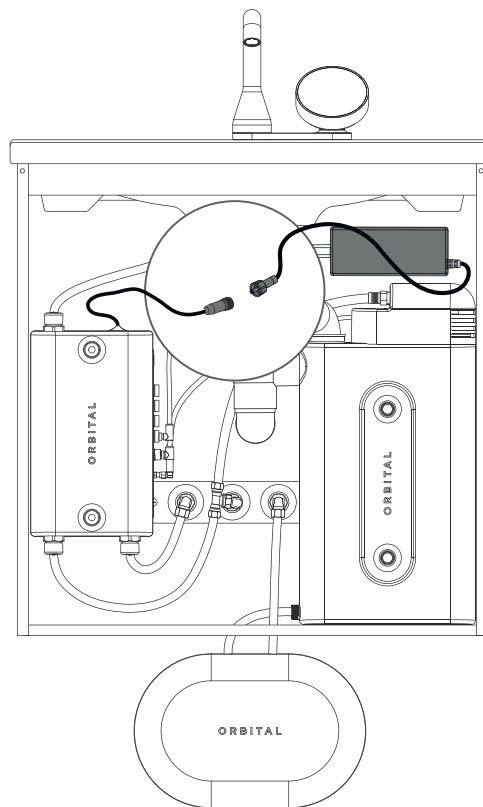
2. Connect the Tank to the Mixer.



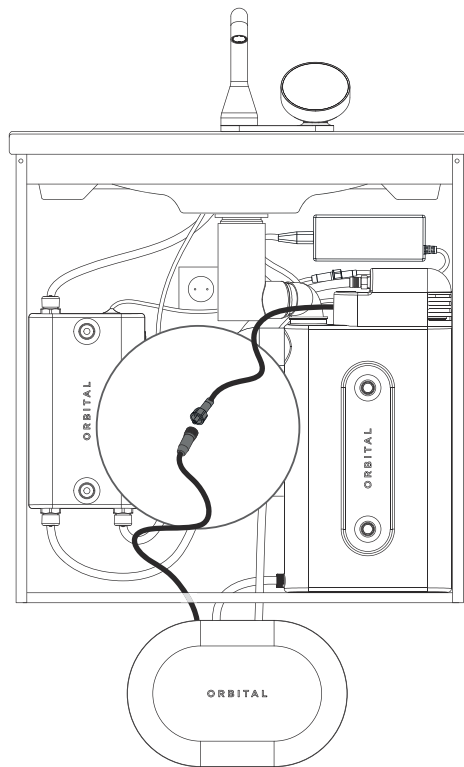
3. Attach the AC/DC power adapter in an available space using two screws.



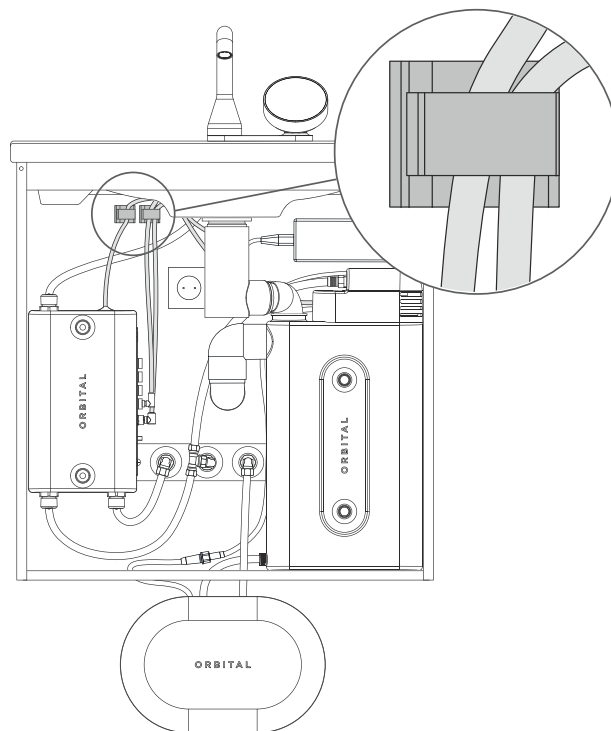
4. Connect the power adapter to the Mixer.



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5. Connect the Tank to the Pump.

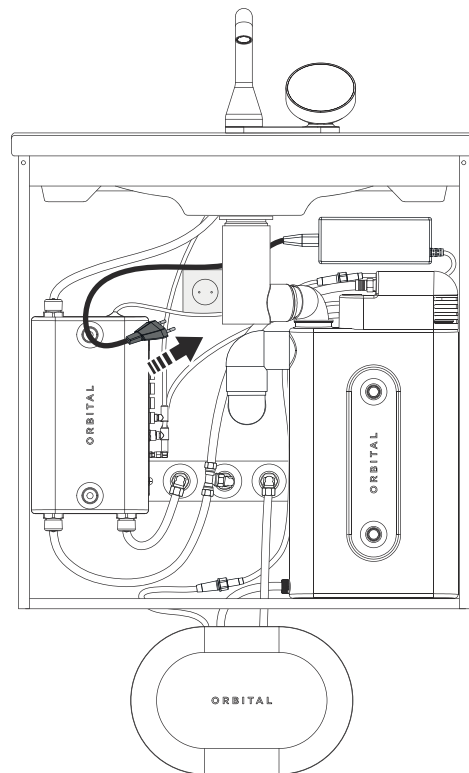


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6. Mount the cable organizer in a suitable place in the commode and attach the cables.



-
- 7.** Connect the power adapter to the socket.

When the system is connected to power, the Tank will fill up about 4 dl of water, to make sure there is water to flush with even if the faucet has not been used.



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- 8.** Flush the toilet twice to ensure the Pump starts and the toilet cistern is refilled. To prevent any leakage, it is recommended to verify the water tightness.

Prerequisites and Approvals

Orbital Tap is designed according to the Swedish requirements in Swedish National Board of Housing and Building & Planning regulations (BBR).



Orbital Tap is CE-marked based on certificate and test reports from third party labs.

If industry regulations and instructions in this manual are followed, Orbital Systems guarantees a functional system.

ORBITAL



CERTIFIED SPACE TECHNOLOGY