CAROMA

LIANO II SENSOR HOB MOUNTED OUTLET (BASIN)

WATER EFFICIENT TAPWARE

INSTALLATION INSTRUCTIONS

Important Information

- **Do not install this unit facing a mirror or any other electronic system operated by an infra-red sensor. To prevent reflection problems, it is recommended to keep a mininum distance of 1.5m between the sensor outlet and any other objects. Wearing high-vis clothing in front of the sensor can also cause accidental sensor activation.**
- **The sensor window height is 25mm from the base and needs a clear space in front to operate properly. If the tap is to be installed behind an inset basin and the sensor window will be blocked, a matching riser piece can be purchased to raise the tap higher by 60mm.**
- **Not suitable for gravity feed systems.**
- **Mixer is fitted with a 4.5L/min flow regulated aerator (29).This low flow rate may not be suitable for connection to some Instantaneous Gas Water Heaters, some Tempering Valves, some Solar Water Heaters& some Thermostatic Mixing Valves. Check with the manufacturers of these products.**
- **Isolating stop taps (not supplied) must be fitted to the hot & cold water supply connections. (Part No. 842018C - Mini cistern 1/4T)**
- **All pipework must be thoroughly flushed prior to installation, as foreign materials may block the flow regulating device or solenoid valve and reduce the flow of water.**
- **The Solenoid control box can be Mains powered, Battery powered or Battery back-up.**

Tap Installation

1) Ensure 'O'ring (1) is fitted into groove in base ring (2).
2) Insert the outlet connection end (10) of flexible tail (9), along with red sensor cable (17) and black sensor cable (18) through the hole in the deck. Insert threaded tube (4) of outlet into deck hole, orientate mixer as required, fit flat seal (5) followed by washer (6) over threaded tube (4) of outlet as shown in **Fig. 1.** Screw clamp ring (7) onto threaded tube (4) until it contacts washer (6) & the flat seal (5) has contacted the underside of the deck. Tighten two screws (8) equally until outlet assembly is clamped firmly to the deck. DO NOT OVERTIGHTEN.

3a) **Solenoid Control box installation (Fixed Mounting):**

For installation into cavity wall: (Plasterboard)

i) Drill two Φ6mm holes horizontally at 104mm apart as shown in **Fig. 5**.
ii) Insert small end of wall plugs (24) into drilled holes and tap until flush with wall/tile face.
iii) Align the slots on fixing plate (32) with the holes on the wall, pass the screws (23) through the slots and insert into the wall plugs (24). Then tighten the screws. DO NOT OVERTIGHTEN.

For installation into solid walls; (brick, concrete etc.)

i) Drill two Φ6mm holes, 40mm deep and 104mm apart horizontally as shown in **Fig. 5**.
ii) Insert small end of wall plugs (24) into drilled holes and tap until flush with wall/tile face.
iii) Align the slots on fixing plate (32) with the holes on the wall, pass the screws (23) through the slots and insert into the wall plugs (24). Then tighten the screws. DO NOT OVERTIGHTEN.

For installation into timber stud:

i) Drill two holes at 104mm apart horizontally to suit the self tapping screws supplied as shown in **Fig. 5**.
ii) Align the slots on fixing plate (32) with the holes on the wall, pass the screws (23) through the slots and insert into the wall plugs (24). Then tighten the screws. DO NOT OVERTIGHTEN.

3b) **Solenoid Control box installation (Removable):**

Optional removable bracket (supplied) allows the control box to be lifted off quickly for easy access to battery compartment and solenoid.

i) Remove the screws (33) using a phillips head screw driver.
ii) Remove the wider fixing plate (32) and put it aside.
iii) Take the narrower fixing plate (31) out, of the bag, fit it at the back of the control box (21) by aligning the holes on the fixing plate (31) with the holes at the back of the control box (21). The cut-outs on the plate should be towards the bottom, as shown in **Fig.3**.
iii) Fit the screws (33) and tighten, DO NOT OVERTIGHTEN.

For installation into cavity wall: (Plasterboard)

iv) Drill two Φ6mm holes horizontally at 52mm apart as shown in **Fig. 4**.
ii) Insert small end of wall plugs (24) into drilled holes and tap until flush with wall/tile face.
iii) Insert screws (23) into wall plugs, screw them until the head is 6mm away from wall/tile face as shown in **Fig. 4**.
iv) Mount the control box (21) onto the screws (23).

For installation into solid walls; (brick, concrete etc.)

i) Drill two Φ6mm holes, 40mm deep horizontally as shown in **Fig. 4**.
ii) Insert small end of wall plugs (24) into drilled holes and tap until flush with wall/tile face.
iii) Insert screws (23) into wall plugs, screw them until the head is 6mm away from wall/tile face as shown in **Fig. 4**.
iv) Mount the control box (21) onto the screws (23).

For installation into timber stud:

i) Drill two holes at 52mm apart horizontally to suit the self tapping screws supplied as shown in **Fig. 4**.
ii) Insert small end of wall plugs (24) into drilled holes and tap until flush with wall/tile face.
iii) Insert screws (23) into wall plugs, screw them until the head is 6mm away from wall/tile face as shown in **Fig. 4**.
iv) Mount the control box (21) onto the screws (23).

4) Note: The isolation stop taps (13) & (26), tempering valve (25), connection hoses (27), (28) are not supplied.
Flexible Tail Connections:

a) **Sensor activated 'Cold' water (Fig.1)**-
Connect the flexible tail (9) from the outlet (3) to the outlet end (21b) of solenoid control box (21). Connect one end of the additional flexible tail (11) to the inlet connection (21a) of control box (21), then connect other end of flexible tail (11) to the connection end of cold isolating stop tap (13). Hand tighten all connecting nuts until seal contacts the sealing face of the stop taps, then tighten a further one turn to provide a watertight joint.

b) **Sensor activated 'Tempered' water bypass (Fig.2)-**
Connect one end of flexible tail (28) to cold isolating stop tap (13), connect other end of flexible tail (28) to the cold inlet of tempering valve (25). Connect one end of flexible hose (27) to hot isolating stop tap (26), connect other end of flexible tail (27) to the hot inlet end of tempering valve (25). Connect mixed water flexible tail (11) to mixed outlet connection end of tempering valve (25) and other end to inlet connector of control box (21).
Important: Flexible tails must not be kinked, twisted or in tension when installed. (Minimum Bend Radius:- 50mm)
Do not install flexible tails where subject to ultra violet light.

5) **Sensor cable connections:** While aligning the 'D' profile of male and female connectors, connect red cable male connector (17) to red cable female connector (14), connect black cable female connector (18) to black male connector (15), connect power supply cable connector(19) to the black female connector (16). Ensure all cable connectors are pushed in fully.
6) Plug in power supply (20) to standard power outlet, turn on.
7) Turn on Hot and Cold stop taps. Check the connection ends to ensure there is no leakage. Tighten further if required.
8) Bring your hand under the spout to activate the handsfree waterflow, when hands are moved away, the water flow will turn off automatically.

Adding/Replacing batteries

1) Remove screws (22) using a phillips head screw driver then put the screws aside, Insert a flat blade screw driver in to the cover slot and pry it out to remove it.
2) Insert/replace 4 x 1.5V AA batteries following the "-" & "+" markings.
3) Fit the cover back on ensuring the seal is in place and compressed.

Removing Aerator Insert

1) Aerator insert (29) can be removed with the key (30) provided.
2) Deposits of lime can be removed by washing in a vinegar solution.
3) When replacing aerator insert (29), be careful that thread is engaged correctly and 'O'ring is not damaged as it enters the bore. Tighten securely (to prevent removal by hand) using key (30).

IMPORTANT

Pressure & Temperature Requirements.

- Hot and cold water inlet pressures should be equal.
- Static inlet pressure range : 150-800 kPa
  New Regulation:- 500 kPa maximum static pressure at any outlet within a building. (Ref. AS/NZS 3500.1)
- Maximum hot water temperature : 80°C.

Deck Requirements

- Deck thickness : 42mm maximum
- Tap body hole (in deck) : Φ34-36mm

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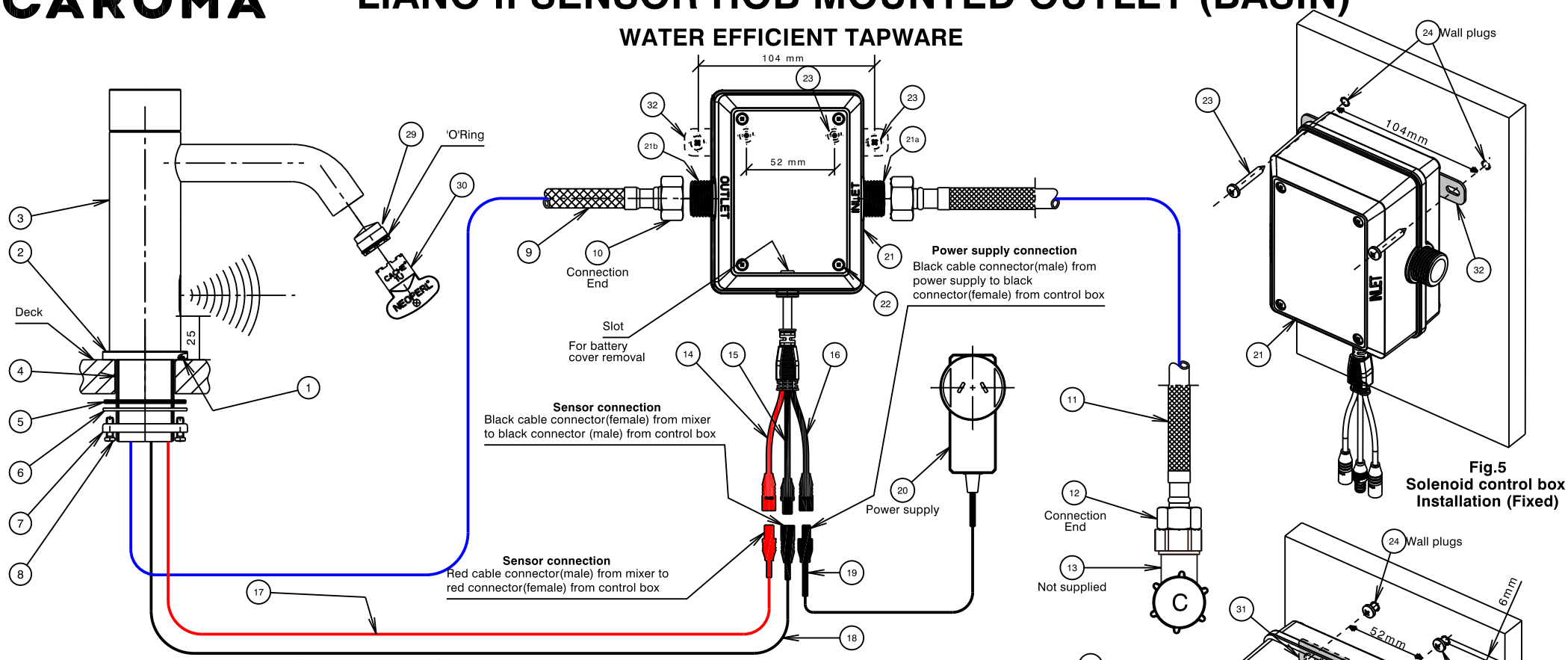


Fig.1 - Sensor activated "Cold' water installation

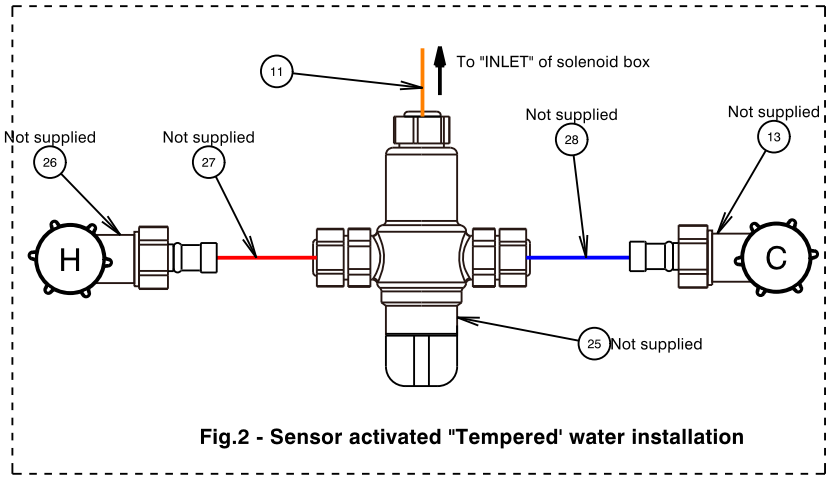


Fig.2 - Sensor activated "Tempered' water installation

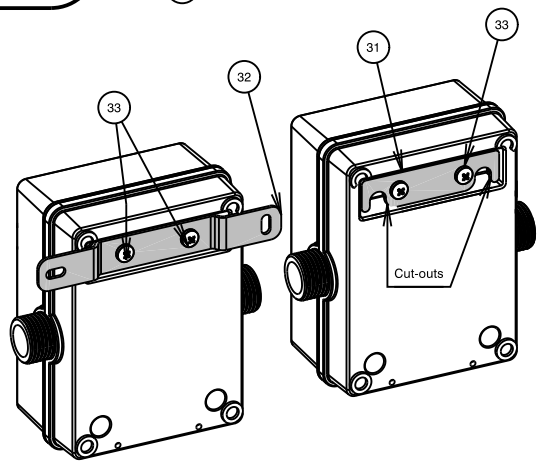


Fig.3
Solenoid control box
Fixing plate removal

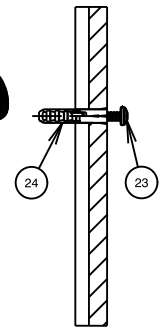
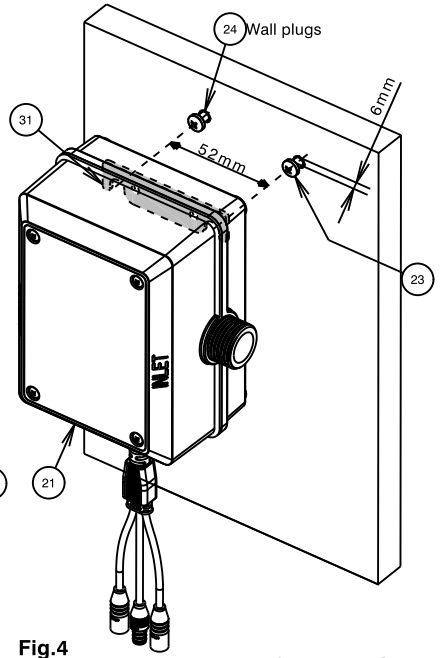


Fig.4
Solenoid control box
Installation (Removable)

Fig.5
Solenoid control box
Installation (Fixed)



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