

DBI400 / DBI425 / DBLI400 / DBLI400 /

# DOLPHIN PANEL MOUNTED INFRARED TAP

---

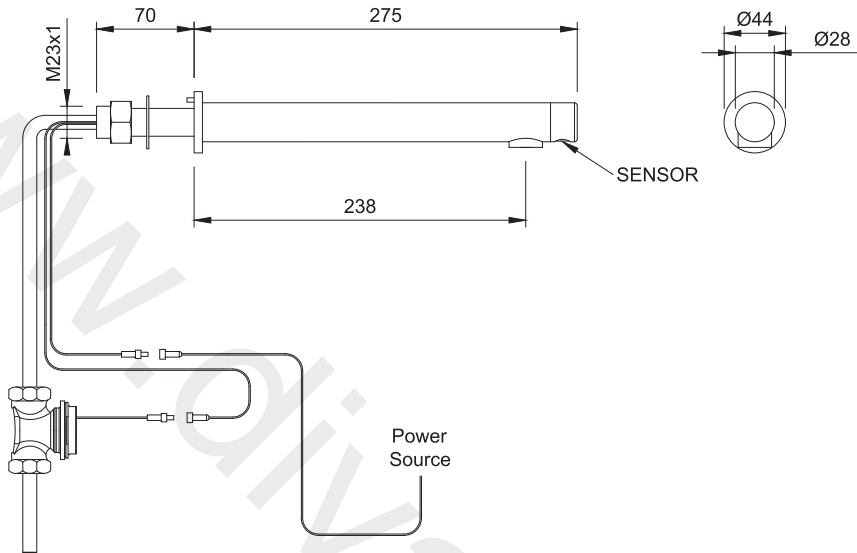
INSTALLATION AND MAINTENANCE GUIDE



# CONTENTS

3	Technical Data
4	Pack Contents
5	Pre-Installation
8-9	Tap Installation
10-11	Settings Adjustment
12	Battery Replacement
13	Maintenance Filters Cleaning Instructions Care And Cleaning of Chrome and Special Finishes
14	Spare Parts List
15	Trouble Shooting

## TECHNICAL DATA



**Power supply for DB 1400 model:**

6 × 1.5V AA battery

**Power supply for DB 1425 models:**

9V transformer

**Min Operating Water Pressure:**

0.5 bar (7 PSI)

**Max Operating Water Pressure:**

8.0 bar (116 PSI)

With water pressure of more than 8

Bars, use a pressure reducing valve

**Sensor range:**

Self adjusting sensor. Adjustable with

remote control

**Minimum sensor range:**

40 mm

**Maximum sensor range:**

170 mm

**Security time:**

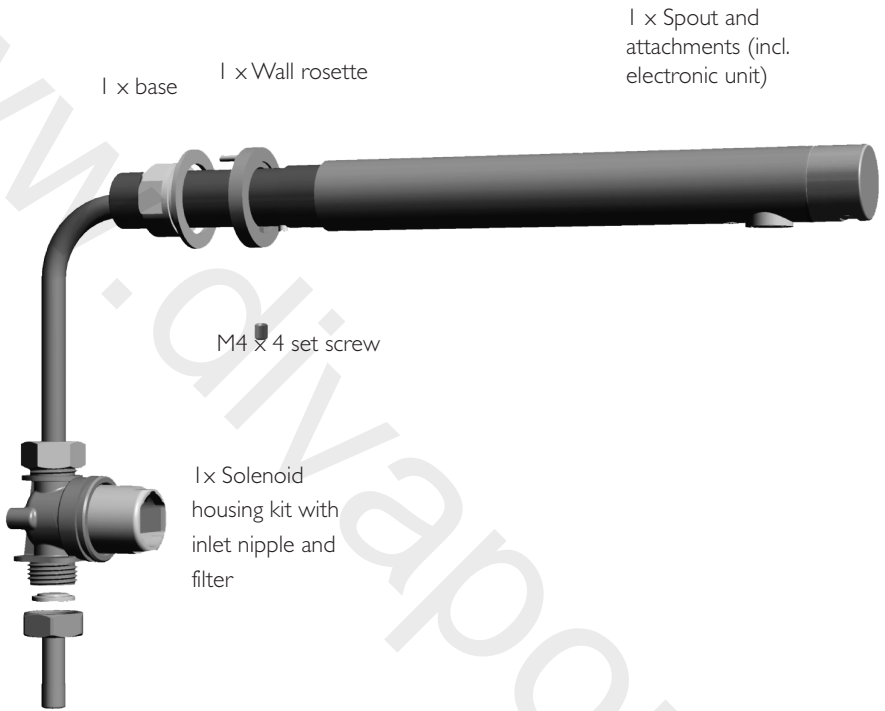
90 seconds. Can be reduced with

remote control

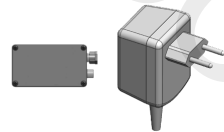
**Hot water temperature:**

Max 70°C

# PACK CONTENTS



1 x Spout and attachments (incl. electronic unit)



DB I400

DB I425

IP67 battery Transformer box

## PRE INSTALLATION

### CHECK CONTENTS

Separate all parts from the packaging and check each part with the pack contents section. Pay attention to the variations of the different models.

Make sure all parts are accounted for before discarding any packaging material.

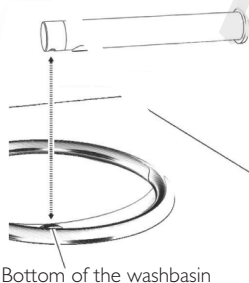
If any parts are missing, do not attempt to install your electronic tap until you obtain the missing parts.

#### To avoid reflection problems

1. Keep a distance of more than 300 mm between the sink and the spout.

2. Do not place a shiny pop up in front of the sensor.

Min 300mm



### PREPARATION FOR INSTALLATION

Flush water supply lines thoroughly before installing the tap. Do not allow dirt, Teflon tape or metal particles to enter the tap. Shut off water supply.

### IMPORTANT

All plumbing is to be installed in accordance with applicable codes and regulations.

## PRE INSTALLATION

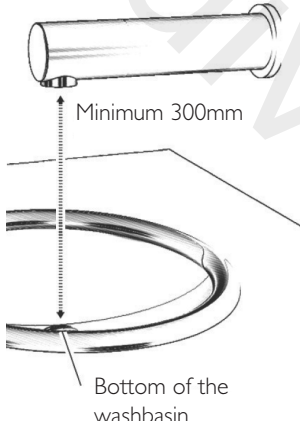
### CHECK CONTENTS

Separate all parts from the packaging and check you have each part according to the pack contents section, pages 4-6. Pay attention to the variations of the different models.

Make sure all parts are accounted for before discarding any packaging material.

If any parts are missing, do not attempt to install your electronic tap.

Please call 0800 0723 404 immediately to notify us.



The diagram illustrates the required clearance between the tap and the washbasin. It shows a side view of a cylindrical tap above a curved washbasin. A vertical dashed line with arrows at both ends indicates the distance from the bottom of the tap to the lowest point of the washbasin, labeled 'Minimum 300mm'. A label 'Bottom of the washbasin' points to the lowest part of the basin.

### WARNING

1. To avoid reflection problems keep a distance of more than 300 mm. between the sink and the spout.
2. This tap model, with an infrared sensor pointing down, is not intended to be used together with a sink of a reflective material such as stainless steel.
3. If a sink strainer is straight below the tap sensor; use a strainer with a non reflective finish (do not use a chrome plated one).

### PREPARATION FOR INSTALLATION

- > Flush water supply lines thoroughly before installing the tap.
- > Do not allow dirt, Teflon tape or metal particles to enter the tap.
- > Shut off water supply.

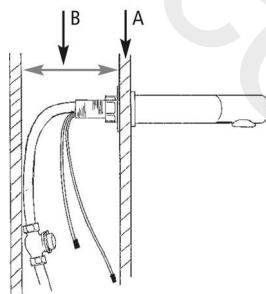
**Important** All plumbing is to be installed in accordance with applicable codes and regulations.

## PRE INSTALLATION

### WARNING

- › To avoid reflection problems it is recommended to keep a distance of more than 300mm between the sink and the spout. If the distance is below 300mm a simple mock-up should be effected to confirm the tap functions as desired in your application before final installation. You may require a Dolphin Blue remote control to adjust the range.
- › Do not connect water or power supplies or remove the black label covering the infra-red sensor until you have read and understood these instructions. Please see page 13.
- › It is not recommended to use DB400 series with a polished stainless steel sink. For this type of application a separate panel-mounted sensor should be used – please speak to our technical sales team.
- › Please observe the guide to minimum cavity depths as shown in the table. This is important because the water supply hose must not be kinked due to lack of space. Please note we have provided this information as a guide and cannot be held responsible for fundamental design errors. If your situation differs to those shown below please call us on 0800 0723 404, and we will provide you with a solution.

Panel thickness (A)	Minimum void (B)
10-15mm	90mm
16-25mm	80mm
26-35mm	70mm



# TAP INSTALLATION

## STEP 1 – INSTALLING THE TAP

1. Shut off the water supply
2. Drill a hole (23 to 24 mm) at the place where you want to install the spout of the tap.
3. Your model includes an optional anti-rotation pin. Drill a small hole just above the previous one for the anti-rotation pin.
4. Insert the DB I400 / DB I425 and its attachments through the wall. The aerator in the tap spout must face the washbasin.



5. Insert the anti-rotation pin into the small hole (if needed)
6. Fix the base behind the wall with the hexagonal nut and the disk.

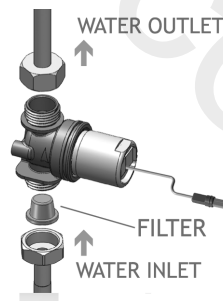
## STEP 2 - CONNECTING THE WATER SUPPLY

1. Fit the flexible pipe coming from the tap to the solenoid valve housing.
2. Fit the water supply inlet to the inlet nipple at the solenoid valve housing.

Note: Make sure the filter is located at the solenoid inlet.

3. Connect the cable coming from the electronic unit to the solenoid valve.

**Important:** DB I400 / DB I425 was supplied with a Self Adjusting Sensor. The ideal sensor range for the specific location will be set automatically.

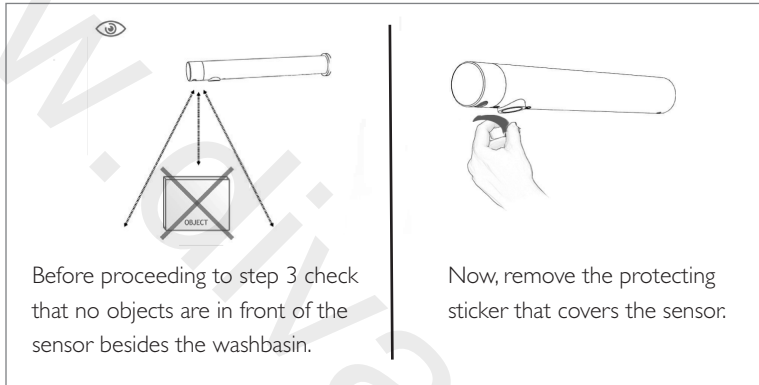




# TAP INSTALLATION

## STEP 3 – CONNECTING THE POWER SOURCE

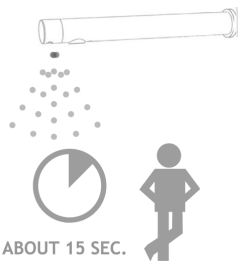
1. For DB I400: Connect the other cable coming from the electronic unit at the tap to the battery box.



2. For DB I425: Connect the other cable coming from the electronic unit at the tap base to the transformer. Plug the transformer into the electricity socket.
3. After you have connected the power source (Battery or Transformer) wait 15 seconds in order to allow the system to set the ideal sensor range.

As an indication that the self adjusting is taking place, a red light in the sensor eye will flash continuously.

**The solenoid valve will be opened and closed for 1 second as an indication that the ideal sensor range was set and the product is ready for use.**



4. Turn on the central water supply. Check for leaks.
5. If the automatically adjusted sensor range is not satisfactory, please refer to the section entitled "Settings adjustment".

# SETTING ADJUSTMENT

## ADJUSTING THE SENSOR WITH THE REMOTE CONTROL

This tap was supplied with a Self Adjusting Sensor. The ideal detection range for the specific location will be set automatically.



**DETECTION RANGE:** Only if necessary, use the remote control to adjust the sensor range as follows: Shut off the water supply. Hold the remote control straight in front of the sensor in a distance of about 6 - 8" (15 - 20cm). Choose the function RANGE

by pressing once at the range function button. After pressing this function button, a quick flashing of the red light at the front of the sensor will occur. At this stage, you can increase or decrease the sensor range by pressing the (+) or the (-) buttons, every push will increase or decrease one level. Note: Once you have changed the detection range with the remote control, this distance will be remembered by the sensor, even if the power source is disconnected. To get back to the self adjustment mode, use the ADJ button only.



**ENTRANCE TO THE SELF ADJUSTMENT MODE:** Check that no objects are in front of the sensor: Press the ADJ button. Once a quick flashing of the red light of the sensor eye is perceived, remove your hand holding the remote control and move away from the sensor area. The

ideal sensor range for the specific location will be set automatically. Once the self adjustment has taken place the solenoid valve will be opened and closed for 1 second as an indication that the ideal sensor range was set and the product is ready for use.

## ADJUSTING OTHER SETTINGS WITH THE REMOTE CONTROL



**SECURITY TIME:** The Security time, prevents continuous running of water due to reflections or vandalism. By default, if the sensor is covered for more than 90 seconds the water flow will shut automatically. To resume regular operation any obstruction must be removed.

Press the SEC button. Wait until a quick flashing of the red light of the sensor eye is perceived. Then, press + to increase the security time and - to reduce it.

## SETTING ADJUSTMENT



**DELAY IN TIME:** It is recommended to change the delay in time for flush valves for urinals or toilets only. If required, the delay in time can also be modified in taps as follows: Press the IN button. Wait until a quick flashing of the red light of the sensor eye is perceived. Then, press + to increase the delay in time and – to reduce it.



**DELAY OUT TIME:** This button allows modifying the water flow time after the user removes his hands from the tap. A delay out time close to 0 will save more water. An increased delay out time will make the user experience more comfortable. The factory setting for delay out time is one second. If required, the delay out time can be modified as follows: Press the OUT button. Wait until a quick flashing of the red light of the sensor eye is perceived. Then, press + to increase the delay out time and – to reduce it.



**24 HOUR HYGIENE FLUSH:** If you have a compatible model with a 24 hours hygiene flush it is possible to enable and disable it. To activate the hygiene flush, press the clock button. Wait until a quick flashing of the red light of the sensor eye is perceived. Then press + to activate the hygiene flush or – to deactivate it.



**TEMPORARY OFF FUNCTION:** This function is ideal to perform any kind of activity in front of the sensor without operating the system (for example, cleaning). The tap will remain shut for 1 minute when this button is pressed once. To cancel this function and to return to normal operation press the On/Off button again or wait 1 minute.



**RESET BUTTON:** This function restores all the factory settings except for the sensor range. If required, press the Reset button and without releasing it, press the + button once.

**Note:** To enter the self adjusting mode, use the ADJ button. To change the sensor range, use the RANGE button.

# BATTERY REPLACEMENT

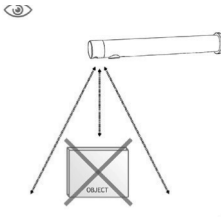
## BATTERY MODELS ONLY

When the battery weakens, the red indicator light will blink at a constant rate when the user's hands are within the sensor range. The battery must be replaced within two weeks.

### To replace the battery (battery models only):

For DB I400: Open the battery box carefully and remove the old batteries. Replace the used batteries with six new 1.5V AA batteries. Close the box.

**Important:** DB I400 / DB I425 was supplied with A Self Adjusting Sensor: The ideal sensor range for the specific location will be set automatically again after changing the battery.



Check that there are no objects in front of the sensor after the battery replacement was completed.



After you have replaced the battery, move away from the sensor range. Wait 15 seconds in order to allow the system to set the ideal sensor range. Then after the self adjustment has taken place the solenoid valve will be opened and closed for one second as an indication that the ideal sensor range was set and the product is ready for use.

**Important:** Spent batteries should not be disposed of with normal household waste. Contact your local authority for information on waste disposal and recycling.



# MAINTENANCE

## **FILTER CLEANING INSTRUCTIONS**

This tap is provided with a stainless steel filter preventing foreign particles to enter the lines. If the water flow has decreased, this may be because the filter is clogged.

The filter can be cleaned as follows:

- a. Shut-off the water shut off valve.
- b. Disconnect the water supply pipe from the adaptor and disassemble the filter from it.
- c. Wash the filter under running water.
- d. Reassemble the parts.
- e. Restore the incoming water supply.
- f. Make sure that there is no water leakage.

## **CARE AND CLEANING OF CHROME AND SPECIAL FINISHES**

DO NOT use steel wool or cleansing agents containing alcohol, acid, abrasives, or the like. Use of any prohibited cleaning or maintenance products or substances could damage the surface of the tap. For surface cleaning of tap use ONLY soap and water, then wipe dry with clean cloth or towel. When cleaning bathroom tile, the taps should be protected from any splattering of harsh cleansers.

## SPARE PARTS LIST

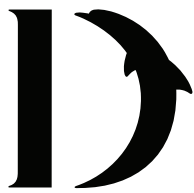
Screws Kit .....	DB07210101
Nano Sensor .....	DB08004001
Solenoid BS-Housing Kit .....	DB07231008
Solenoid BS-Housing Kit for USA .....	DB07231009
Solenoid Valve Kit .....	DB07230017
Diaphragm .....	DB04500001
IP 67 Battery box .....	DB06530020
Battery box .....	DB06530008

## TROUBLE SHOOTING

PROBLEM	INDICATOR	CAUSE	SOLUTION
No water coming out of the tap	1. Sensor flashes continuously when user's hands are within the sensor's range 2. Red light in the sensor does not flash when user's hands are within the sensor's range	Low battery	Replace battery
		1 Range is too short	Increase the range
		2 Range is too long	Decrease the range
		3 Battery is completely used up	Replace the battery
		4 Unit is in 'security mode'*	
	3 Red light in the sensor flashes when user's hands are within the sensor's range	5 Sensor is picking up reflections from the washbasin or other objects	Eliminate cause of reflection
		1 Connectors between the electronic unit and solenoid are disconnected	Connect the electronic unit connectors to the solenoid
		2 Debris or scale in solenoid	Unscrew solenoid, pull out the plunger and the spring from the solenoid and clean them. Use scale remover material if needed. When replacing the plunger, please make sure the spring is in the vertical position.
		3 The central orifice in the diaphragm is plugged or the diaphragm is torn	Clean the orifice or replace diaphragm
		4 The water supply pressure is higher than 8 bar	Reduce the supply water pressure
Water flow from spout does not stop	1 Sensor flashes when user's hands are within the sensor's range	Debris or scale in diaphragm	Clean the orifice or replace diaphragm
	2 Red light in the sensor does not flash when user's hands are within the sensor's range	1 Sensor is dirty or covered	Clean or eliminate cause of interference
		2 Sensor is picking up reflections from the washbasin or another object	Decrease the range or eliminate cause of reflection
Water flow diminished		Filter or aerator clogged	Remove, clean or re-install

\*'Security mode': If the sensor is covered for longer than the specified security time, the tap will automatically shut off water flow. To return to normal operation remove any blockage to re-establish operation

www.divapor.com



**D O L P H I N**

**Dolphin Solutions Ltd**

Southpoint, Compass Park, Bodiam,  
Robertsbridge, TN32 5BS

Tel: +44 (0)1424 20 22 24

Fax: +44 (0)1424 205 200

[info@dolphinsolutions.co.uk](mailto:info@dolphinsolutions.co.uk)

[www.dolphinsolutions.co.uk](http://www.dolphinsolutions.co.uk)