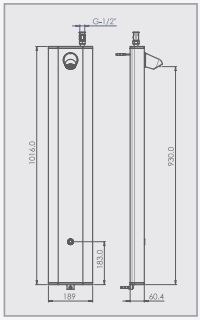
STERN ENGINEERING LTD.

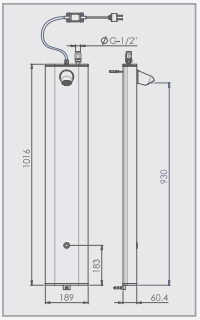
NEPTUNE SHOWER PANEL B / E
1000 TB / 1000 TE

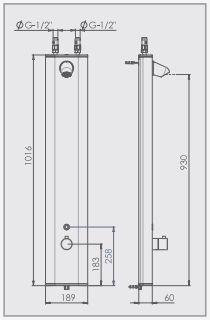
INSTALLATION AND MAINTENANCE GUIDE

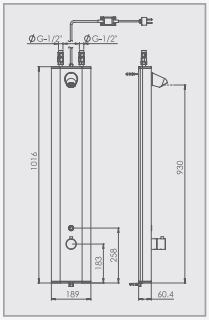
INDEX

TECHNICAL DATA









NEPTUNE SHOWER PANEL B	601410	**NEPTUNE SHOWER PANEL 1000 B**	602410
NEPTUNE SHOWER PANEL E	603410	**NEPTUNE SHOWER PANEL 1000 E**	604410

Power Supply B versions	Internally mounted IP67 battery box with 6 X 1.5V batteries
Power Supply E versions	IP68 Encapsulated transformer
Recommended water pressure for B\E models	0.5-8.0 bar (7-116 PSI)
Recommended water pressure for 1000 B\E models	0.5-5.0 bar (7-72.5PSI)
Maximum hot and cold pressure difference	2.0 bar
Preset sensor range	450 +/- 20 mm
Security time	10 minutes
Max. Hot water supply	65°C
Short term thermal disinfection temperature	70°C WARNING: danger of scalding!
Flow rate	9 LPM. Flow restrictor located at the shower panel

PRE-INSTALLATION INFO

CHECK CONTENTS

Separate all parts from the packaging and check each part with the “Pack contents” section.

Pay attention to the different models variations.

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

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

WARNINGS

Do not install facing a mirror or any other electronic system operated by an infrared sensor.

To prevent reflection problems, it is recommended to keep a minimum distance of 1.50 meters between the faucet and any other objects.

PREPARATION FOR INSTALLATION

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

Shut off water supply.

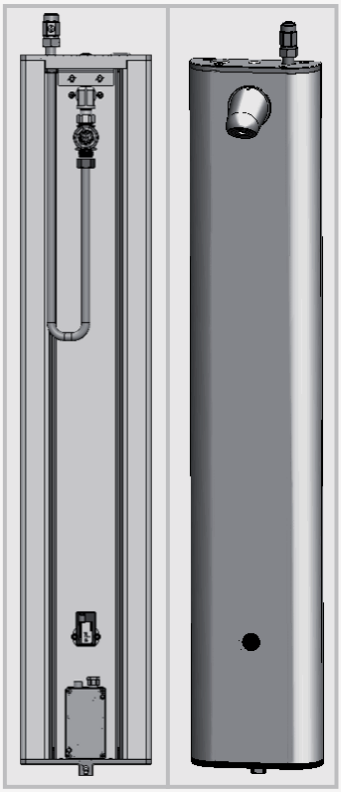
IMPORTANT

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

PACK CONTENTS

Familiarize yourself with the part names and confirm that the parts are included.

1 x Shower panel with Prox sensor and attachments



1 x Shower head 9000 (9 LPM)

1 x Cut off valve 1/2”

3 x Screws (#10X1 1/2”)

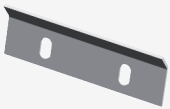
3 x anchors

1 x Allen Key 2 mm

1 x Allen Key 2.5 mm

1 x Allen Key 3 mm

1x Support



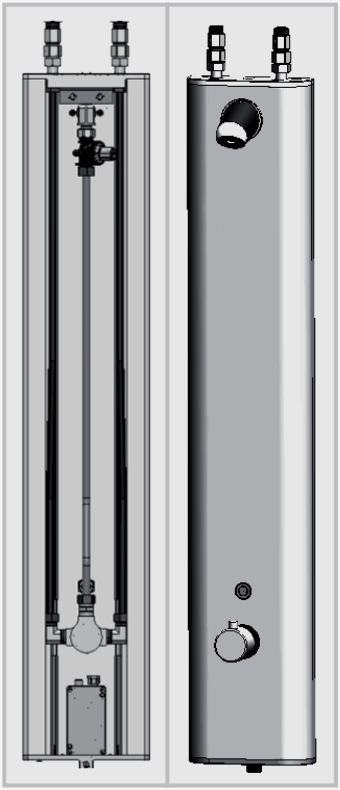
B VERSION	IP 67 BATTERY BOX	
E VERSION	IP 68 ENCAPSULATED TRANSFORMER	

1 x Filter

PACK CONTENTS

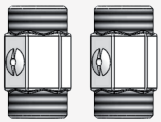
Familiarize yourself with the part names and confirm that the parts are included.

1 x Shower panel with Prox sensor and attachments



1 x Shower head 9000 (9 LPM)

2 x Cut off valves 1/2”



3 x Screws (#10X1 1/2”)

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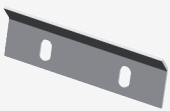
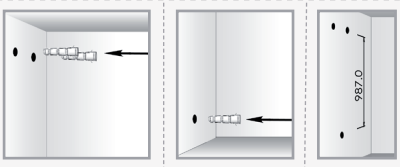
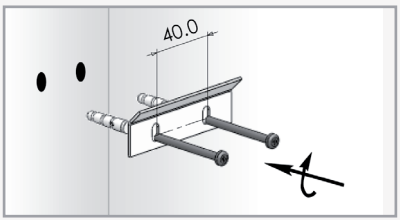
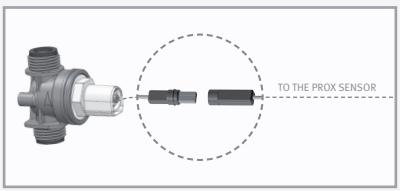
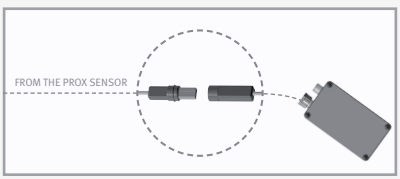
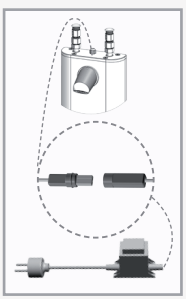
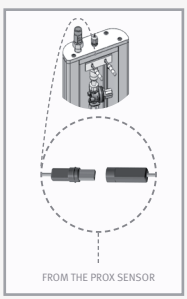


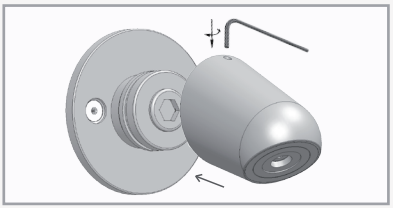
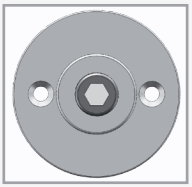
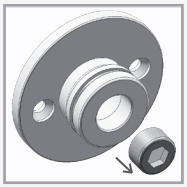
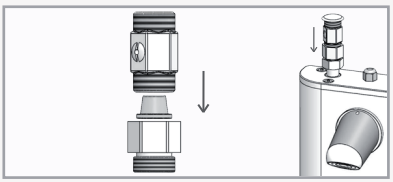
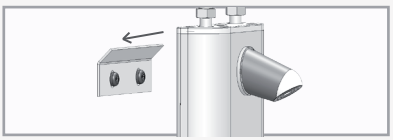
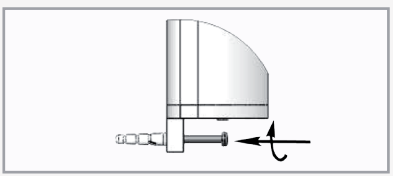
B VERSION	IP 67 BATTERY BOX	
E VERSION	IP 68 ENCAPSULATED TRANSFORMER	

2 x Filters

INSTALLATION

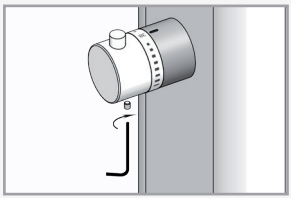
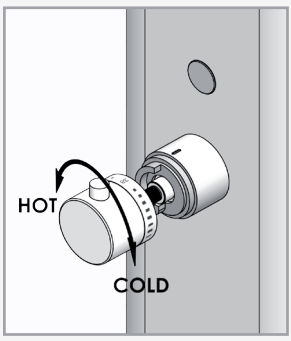
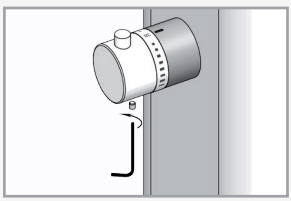
1	Shut off the water supply. Drill two top holes for the support and one bottom hole in the wall according to the panel dimensions and drive the anchors in.	
2	Secure the support to the two top holes using 2 screws.	
3	Assure that the cable coming from the prox sensor to the solenoid valve is connected.	
4	**For battery operated versions:** Connect the other cable coming from the prox sensor to the battery box connector.	
	For transformer operated versions: a. Connect the extension cable coming out of the waterproof power cable pass, through to the encapsulated transformer connector. b. Assure that the power supply cable and the prox sensor cable are connected.	 

INSTALLATION

5	Assemble the shower head 9000 on the shower head basis already installed on the shower panel and secure it into place using the 2mm Allen key.	
NOTE: The shower head 9000 is provided with a 9LPM flow restrictor, combined in the shower head basis that is already installed on the shower head panel. If you do not wish to restrict the flow, remove the flow restrictor with an 8mm Allen key.		 
6	Connect the shut off valve\s to the water inlet\s at the top cover of the shower panel. IMPORTANT: Make sure that the filter\s is\are installed between the shut off valve\s and the water inlet\s.	
7	Mount the shower panel on the support.	
8	Secure the shower panel bottom cover to the wall using a screw.	
9	Connect the shut off valve\s to the water supply pipe\s. Turn on the water supply and check for leaks.	

ADJUSTING THE WATER TEMPERATURE

The shower has been factory calibrated to 38°C under ideal installation conditions.
Due to variations in site conditions, the mixed water temperature may need adjustments to match the site conditions and make sure that it is safe.

1	Unscrew the regulation knob screw and remove the regulation knob.	
2	Process to the 38°Csettings by turning the spindle and measure the water temperature with a thermometer. The setting is correct when a temperature of mixed water of 38°C is achieved. Assemble the regulation knob to 38°C position. The anti scalding knob must correspond to the 38°C stop in the stop ring, without moving the spindle. NOTE: Make sure always to use a thermometer with proven accuracy. 	
3	Screw the regulation knob screw and tighten it.	

THE MIXER IS NOW CALIBRATED ACCORDING TO THE SITE SPECIFIC CONDITIONS.

SETTINGS ADJUSTMENT

ADJUSTING THE SETTINGS WITH THE REMOTE CONTROL

If necessary, the sensor settings can be adjusted as following:
Shut off the water supply. In order to adjust the sensor with the remote control, hold the remote control straight in front of the sensor in a distance of about 6-8" (15-20cm). Choose the function you want to adjust by pressing once on one of the function buttons. After pressing once on a specific function button, a quick flashing of the red light at the front of the sensor will occur. At this stage, you can change the setting by pressing the (**+**) or the (**-**) buttons, every push will increase or decrease one level. After finishing the adjustment, turn the water supply back on.

SETTINGS ADJUSTMENT

DETECTION RANGE: The sensor range is the greatest distance that an object can be away from the sensor to activate the faucet. The sensor is factory preset.
To adjust the sensor range press **+** to increase detection range and **–** to decrease the detection range of the sensor.

SECURITY TIME: The Security time, prevents continuous flushing of water due to reflections or vandalism. By default, if the sensor is covered for more than 10 minutes 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.

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 be modified also in faucets 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 faucet. A delay out time close to o will save more water. An increased delay out time will make the user experience more comfortable.

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.

SETTINGS ADJUSTMENT

	**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.
	**LOCK OUT TIME**: It is possible to program a lock out time in Stern products upon request. This lock out time allows a user to activate the faucet, only after a specific amount of time has passed. If a specific lock out time was preset in a Stern product as default, and you would like to deactivate it, press the lock button. Wait until a quick flashing of the red light of the sensor eye is perceived. Then press **+** to activate the lock out time or **–** to deactivate it. To activate it again, press the lock button and without releasing it, press the **+** button once.
	**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 shower will remain shut for 2 minutes 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.

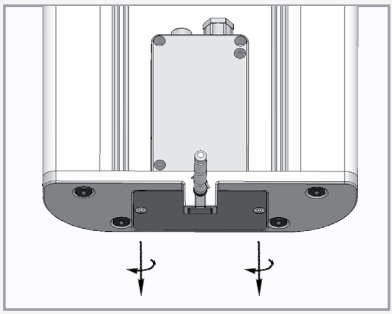
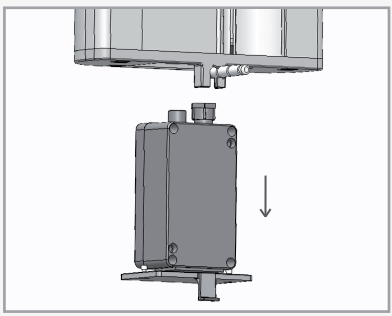
BATTERY REPLACEMENT

Battery models only

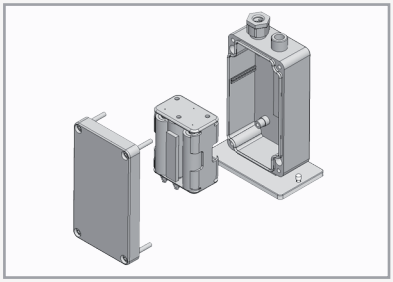
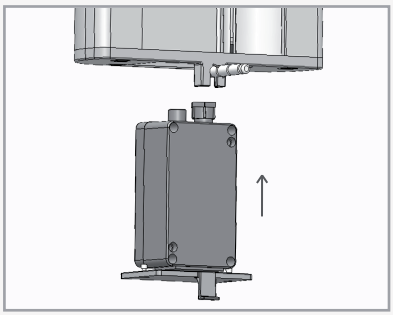
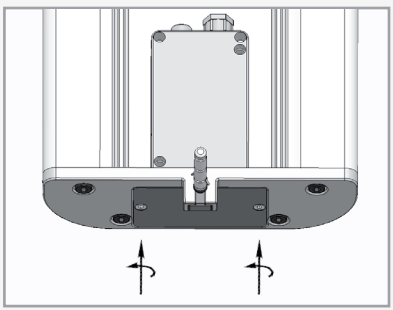
LOW BATTERY INDICATOR

The Neptune Shower Panel has an advanced battery level management system consisting of 2 steps. At the first step, the battery still has enough power to open and close the solenoid valve. And allows the solenoid valve to open. At the second step the battery might not have enough power to open and close the solenoid valve. In this case, the battery level management system does not allow the solenoid valve to open. Instead of providing an opening and closing pulse, the systems provides two closing pulses.

BATTERY REPLACEMENT INSTRUCTIONS

1	Unscrew the 2 screws at the bottom of the battery cover located at the bottom cover.	
2	Pull out the battery cover with the IP67 battery box attached on it.	

BATTERY REPLACEMENT

3	Carefully Open the battery box and remove the old batteries. Replace the used batteries with six new 1.5V AA batteries. Close the box while paying attention that the o-ring is inserted in the right position on its grove (please do not unscrew the plastic nuts on the top of the box).	
4	Put the battery cover with the IP67 battery box attached on it, back into place.	
5	Screw in the 2 screws at the bottom of the battery cover located at the bottom cover. In order to avoid entering the adjusting mode, wait 10 seconds after replacing the battery, before operating the system.	

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

MAINTENANCE

This Neptune Shower Panel is provided with a stainless steel filter\s preventing foreign particles to enter the lines. If the water flow has decreased, this may be because the filter\s is\are clogged. The filter\s can be cleaned as follows:

Filter cleaning instructions:

1. Shut off the water supply to the shower panel by turning off the cut off valve.

2. Disconnect the cut off valve\s from the water inlet\s at the top cover of the shower panel.

3. Remove the filter\s and wash it\them under running water.

4. Reassemble the filter\s.

5. Reconnect the cut off valve\s to the water inlet\s at the top cover of the shower panel.

6. Turn on the water supply. 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 shower control. For surface cleaning use ONLY soap and water, then wipe dry with clean cloth or towel.

When cleaning bathroom tiles, the shower controls should be protected from any splattering of harsh cleansers.

SPARE PARTS LIST

NEPTUNE SHOWER PANEL B/E	
SEALS AND SCREWS KIT	07210125
INLET NIPPLE KIT	07246014
MOUNTING KIT	07280009
NIPPLE KIT	07246015
PROX SENSOR P FOR SHOWER PANEL	07220164
SOLENOID BS-HOUSING KIT	07231013
SOLENOID VALVE	07500065
BATTERY BOX	06530052
TRANSFORMER	06522053
PIPE NIPPLE KIT	07246016
NEPTUNE SHOWER PANEL 1000B/1000E	
SEALS AND SCREWS KIT	07210124
INLET NIPPLE KIT	07246013
MOUNTING KIT	07280009
THERMOSTATIC CARTRIDGE	07110014
NUT FOR THERMOSTAT	07055137
THERMOSTATIC HANDLE KIT	07110021
ADAPTER FOR HANDLE KIT	07260018
PROX SENSOR P FOR SHOWER PANEL	07220164
SOLENOID BS-HOUSING KIT	07231013
SOLENOID VALVE	07500065
Battery Box	06530052
Transformer	06522053
Pipe Nipple Kit	07246016

WARANTY

Y. Stern Engineering Ltd. warrants that its electronic faucets, flush valves and controls will be free of defects in material and workmanship during normal use for two years from the date the product is purchased.

If a defect is found in normal use, Y. Stern Engineering Ltd. will, at its discretion, repair, provide a replacement part or product, or make appropriate adjustments. Damage caused by accident, misuse, or abuse is not covered by this warranty. Improper care and cleaning will void the warranty. Proof of purchase (original sales receipt) must be provided to Stern Engineering Ltd. with all warranty claims.

Stern Engineering Ltd is not responsible for labor charges, installation, or other incidental or consequential costs other than those noted above. In no event shall the liability of Stern Engineering Ltd. exceed the purchase price of the faucet, valve or control.

If you believe that you have a warranty claim, contact your Stern Distributor, Dealer or Plumbing Contractor. Please be sure to provide all pertinent information regarding your claim, including a complete description of the problem, the product, model number, the date the product was purchased, from whom the product was purchased and the installation date. Also include your original invoice.

Y. STERN ENGINEERING AND/OR SELLER DISCLAIM ANY LIABILITY FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES. This warranty excludes product damage due to installation error, incorrect maintenance, wear and tear, battery, water composition, product abuse, or product misuse, whether performed by a contractor, service company, or the consumer. This warranty does not cover product damage caused by the following:

- Incorrect installation, inversions of supply pipes.

- Pressures or temperatures exceeding recommended limits.

- Improper manipulation, tampering, bad or lapsed maintenance.

- Foreign bodies, dirt or scale introduced by the water supply.

TROUBLESHOOTING

PROBLEM	INDICATOR	CAUSE	SOLUTION
No water coming out of the faucet:	1. Sensor flashes continuously when user's hands are within the sensor's range.	Low battery.	Replace battery
	2. Red light in the sensor does not flash once when user's hands are within the sensor's range.	1. Range is too short.	Increase the range
		2. Range is too long.	Decrease the range
		3. Battery is completely used up	The battery must be replaced.
		4. Unit is in "Security Mode"*	
		5. Sensor is picking up reflections from the washbasin or another object.	Eliminate cause of reflection.
	3. Red light in the sensor flashes once when user's hands are within the sensor's range.	1. Connectors between the electronic unit and solenoid are disconnected.	Connect the electronic unit connectors to the solenoid.
		2. Debris or scale in solenoid.	Check the solenoid valve.
		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.
		5. The water supply pressure is under 8 bars.	Reduce the supply water pressure.
Water flow from spout does not stop:	1. Sensor flashes once 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 once when user's hands are within the sensor's range.	1. Sensor is dirty or covered.**	Clean or eliminate case of interference.
		2. Sensor is picking up reflections from the washbasin or another object.	Decrease the range or eliminate cause of reflection.

* "Security Mode": If the sensor is covered for more than 90 sec. the faucet will automatically shut off water flow. To return to normal operation remove any blockage.

** In this case, the water flow will stop anyway after 90 seconds because of the security time.

STERN ENGINEERING LTD.

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