INSTALLATION AND MAINTENANCE GUIDE

PERFECT TIME SH



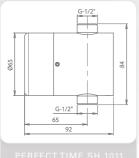
PERFECT TIME SH 1011 PERFECT TIME SH 1032 PERFECT TIME SH 1032E

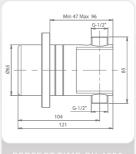


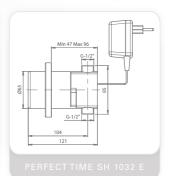
INDEX

1	TECHNICAL DATA
2	OPERATION & PRE-INSTALLATION INFORMATION
3-5	PACK CONTENTS Perfect Time SH1011 Perfect Time SH1032 Perfect Time SH1032 E
6-7	INSTALLATION
8-10	FLOW TIME ADJUSTMENT
11	HOW TO ENABLE THE 24 HS DUTY FLUSH OPTION
12-13	LOW BATTERY INDICATOR AND BATTERY REPLACEMENT INSTRUCTIONS
14	MAINTENANCE Filter cleaning instructions Care and cleaning of chrome and special finishes
15	SPARE PARTS LIST
16	SERVICE CHECK LIST
17	LIMITED WARRANTY

TECHNICAL DATA







Product control: Touch using Piezo technology

0.5-8.0 bar (7-116 PSI) **Operating water pressure:**

> With water pressure of more than 8 Bars, use a pressure reducing

valve

Hot water supply: Max 70° C

Power specification: 9V low voltage system

Power source for Perfect Time SH 1032 9V battery or 9V transformer

Power source for Perfect Time SH 1011 9V battery

Default flow time: 2 minutes

Programmable flow time: 5 to 2600 seconds

24 hs. hygiene / anti freeze flush: Optional. Programmable on site

OPERATION



To operate the Perfect Time Shower controls, simply touch the designated area at the Piezo shower control cap. Default flow time is 2 minutes.

If you do not need more water, just touch the designated area again to stop the shower water flow before the default time has passed.

PRE-INSTALLATION INFORMATION

Check contents

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

Make sure all parts are accounted for before discarding any packaging material. If any parts are missing, do not attempt to install your Perfect Time shower control until you obtain the missing parts.

Preparation for Installation:

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

Shut off water supply.

Important:

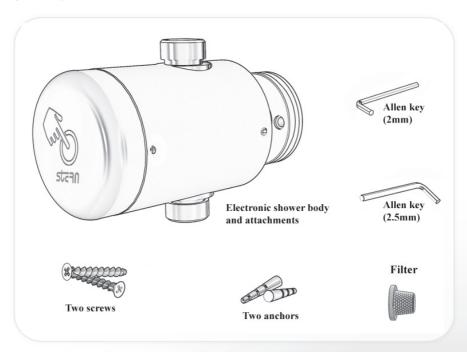
All plumbing is to be installed in accordance with applicable codes and regulations.

PACK CONTENTS

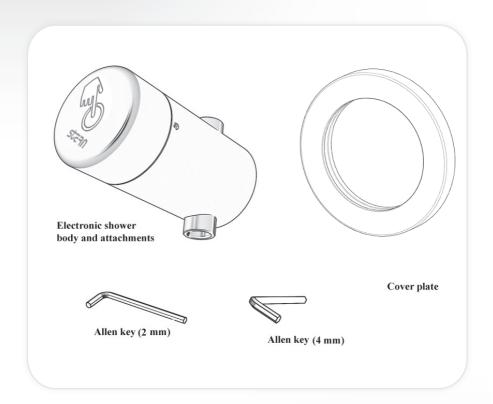
Familiarize yourself with the part names and confirm that the parts are included.

Perfect Time SH 1011

- 1. 1x Piezo shower control body and attachments
- 2. 2x Allen keys 2 mm and 2.5 mm
- 3. 2 x Screws
- 4. 2 x Anchors
- 5. 1 x Filter



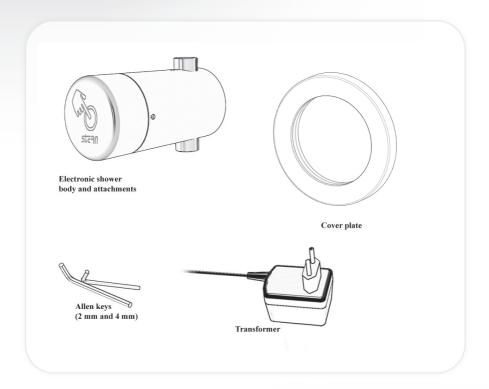
PACK CONTENTS



Perfect Time SH 1032

- 1. 1x Cover plate
- 2. 1x Piezo shower control body and attachments
- 3. 2x Allen keys 2 mm and 4 mm

PACK CONTENTS



Perfect Time SH 1032 E

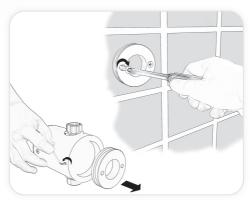
- 1.1x Cover plate
- 2. 1x Piezo shower control body and attachments
- 3. 1x Transformer
- 4. 2x Allen keys 2 mm and 4 mm

INSTALLATION

INSTALLATION INSTRUCTIONS FOR PERFECT TIME 1011:

- 1) Shut off the water supply.
- 2) Drill two holes in the wall and drive the anchors in. The distance between the centers is 44 mm.
- 3) Release the screw using the 2mm. Allen key. Pull out the mounting disk.
- 4) Secure the mounting disk to the wall anchors using the two screws (supplied).
- 5) Mount the shower control body to the mounting disk by tightening the screw. Make sure to install it with the inlet connection downwards.
- 6) Assemble the inlet to the water supply pipe. Confirm that the filter is installed between the water supply pipe and the inlet on the shower body.





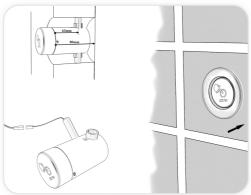
- 7) Connect the outlet to the pipe leading to the shower head.
- 8) Turn on the water supply and check for leaks.

INSTALLATION

INSTALLATION INSTRUCTIONS FOR PERFECT TIME SH 1032 AND 1032E:

- 1) Shut off the water supply.
- 2) Cut an adequate opening in the wall for the dimensions of the product and if your model is Perfect Time SH 1032 E for the electricity wires.
- 3) Insert the product through the wall opening and assemble the inlet to the water supply pipe in the wall.
- 4) Connect the outlet to the pipe leading to the shower head.
- 5) Mount the shower control body to the wall so it will protrude from the wall as shown in the drawing.
- 6) If your model is Perfect Time SH 1032 E place the transformer near
- the electricity plug (up to 3 meters from the shower control body) and connect the transformer wire to the shower control body through the hole.

IMPORTANT: In order to avoid entering the adjusting mode, wait 10 seconds after the connection of the transformer before you will operate the system.



- 7) Turn on the water supply and check for leaks.
- 8) After the ceramic tiles are installed, assemble the cover plate over the shower body at the wall.

FLOW TIME ADJUSTMENT

Adjustment levels

The flow time is programmable on site. If necessary, the default flow time of 30 seconds can be adjusted to any value between 5 to 2600 seconds. The Perfect Time adjustment mechanism is composed by 3 adjustment levels for changing the flow time. An indicator light (LED) will guide you from one level to the other.

The following table shows the number of steps in each level, the duration at each step and how to recognize in what adjusting level you are.

	Level 1	Level 2	Level 3	enables the	Out of adjusting mode
No. of steps	100 steps	100 steps	100 steps		
Seconds to be increased by touching once	1 second	5 seconds	20 seconds		
Adjustment level indicator	After entering into adjusting mode level 1 is reached	Indicator light blinks twice	Indicator light blinks 3 times	Indicator light blinks 4 times	Indicator light blinks 5 times

The following examples show how to manage the adjustment levels:

Example 1: You wish to adjust the flow time to 28 seconds.

At level 1 perform 3 steps of 1 second (you will get 3 seconds). Total: 3 seconds Go to level 2 and perform 1 step of 5 seconds (you will get 5 seconds). Total: 8 seconds)

Go to level 3 and perform 1 step of 20 seconds (you will get 20 seconds). Total: 28 seconds.

FLOW TIME ADJUSTMENT

Example 2: You wish to adjust the flow time to 45 seconds.

At level 1 do not perform any step and wait until you reach level 2 (you will get 0 seconds). Total: 0 seconds

At level 2 perform 1 step of 5 seconds (you will get 5 seconds). Total: 5 seconds)

Go to level 3 and perform 2 steps of 20 seconds (you will get 40 seconds). Total: 45 seconds.

Example 3: You wish to adjust the flow time to 60 seconds.

Do not perform any step at levels 1 and 2 and wait until you reach level 3 (you will get 0 seconds). Total: 0 seconds

At level 3 and perform 3 steps of 20 seconds (you will get 60 seconds). Total: 60 seconds.

How to adjust the flow time

- 1) Disconnect the power supply (batteries or transformer).
- 2) To disconnect the power supply at battery models, open the piezo cup at the shower control body using the provided 2.5 mm Allen key.
- 3) Wait ten seconds.
- 4) Reconnect the power supply.
- 5) The indicator light (LED) on the back of the piezo cap will start blinking. After a few blinks the LED will give a steady red light. Touch the designated area at the Piezo cap when the steady red light is still on to enter into adjusting mode. When done correctly, the light will stop blinking.

Note: If you will not press at the indicated area, the previous adjustment will remain.

6) By touching the Piezo cap the new flow time will be programmed. In adjusting mode level 1, each touch increases the flow time by 1 second with a maximum of 100 seconds. You will see the LED blinking every time that a new step is performed.

FLOW TIME ADJUSTMENT

- 7) If you have reached your desired flow time at this level, stop pressing the Piezo button. The LED will blink 2 times, 3 times, 4 times and after the 5th time you will leave the adjusting mode. The Perfect Time is now adjusted to the desired flow time.
- 8) If you need to perform steps at the adjusting level 2, wait after you see the indicator light blinking twice and then, perform the needed quantity of steps (with a maximum of 100 steps of 5 seconds)
- 9) If you do not need more levels, stop pressing. The indicator light will blink 3 times, 4 times and after 5 times you will leave the adjusting mode. The Perfect Time is now adjusted to the desired flow time.
- 10) If you need to perform steps at the adjusting level 3, wait after you see the indicator light blinking 3 times and then, perform the needed quantity of steps.(with a maximum of 2 steps of 15 seconds)
- 11) To leave the adjusting mode wait until the LED blinks 4 times and then 5 times. The Perfect Time is now adjusted to the desired flow time.

Warning: In order to avoid enabling the 24 hs. hygiene flush option without intention, do not touch the piezo cap after the LED blinks 4 times.

24 HOURS DUTY FLUSH OPTION

24 HS ANTI-LEGIONELLA / ANTI FREEZE DUTY FLUSH CYCLE OPTION

This anti-Legionella / anti freeze feature provides an automatic duty flush cycle for 30 seconds if the shower has not been used in the previous 24 hours.

This feature is optional and is ideal for buildings such as schools where the shower installations are often vacant for long periods. The duty flush cycle maximizes hygiene, and prevents frozen pipes during the cold Winter months.

In order to activate this option proceed as follows:

- 1) Disconnect the power supply (batteries or transformer).
- 2) To disconnect the power supply at battery models, open the piezo cup at the shower control body using the provided 2.5 mm Allen key.
- 3) Wait ten seconds.
- 4) Reconnect the power supply.
- 5) The indicator light (LED) on the back of the piezo cap will start blinking. After a few blinks the LED will give a steady red light. Touch the designated area at the Piezo cap when the steady red light is still on to enter into adjusting mode. When done correctly, the light will stop blinking.

Note: If you will not press at the indicated area, the previous settings will remain.

6) To enable the automatic duty flush option you need to arrive directly to the adjustment level 4 (please see the adjustment levels table at page 9).

Once you have entered the adjusting mode following the steps 1 to 5, wait until the LED blinks 2 times, then 3 times and 4 times. Immediately after the LED blinks 4 times touch the piezo cup once. This will enable the hygiene flush option. To leave the adjusting mode wait until the LED blinks 5 times. Now this option is activated. If the shower controls will not be used for 24 hours, a single 30 seconds hygiene flush will take place.

WARNING! A safe hot water temperature control is needed

This anti-Legionella / anti freeze feature is automatic and is intended to be used with cold or premixed water only. A thermostatic mixing valve (TMV) must be used to provide safe hot water temperatures and prevent scalding.

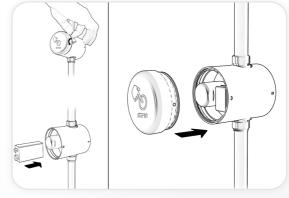
BATTERY REPLACEMENT

LOW BATTERY INDICATOR

The Perfect Time shower controls have 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. The battery level management system allows the solenoid valve to be open, but will activate the LED warning indicator at the back of the Perfect Time SH Piezo cap. The LED will blink twice when the battery level management system has activated step 1. At this point the battery might not have enough power to open and close the solenoid valve. 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. The LED warning indicator will blink three times when the battery level management system has activated step 2.

Battery replacement instructions for Perfect Time SH 1011

- 1. Open the Piezo cup by releasing the screws at both sides of the shower control body.
- 2. Replace the used battery with a new 9V battery (Lithium battery is recommended).
- 3. Before reassembling the electronic cap, make sure that the external O-ring is not damaged. Replace it if necessary.



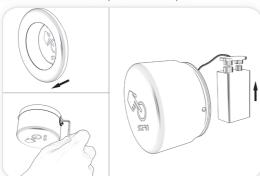
<u>Attention:</u> The interior of the shower control body and the cover plate must be fully dry before reassembling the parts. If it is not fully dry, carefully dry it.

IMPORTANT: In order to avoid entering the adjusting mode, wait 10 seconds after the connection of new battery before you will operate the system.

BATTERY REPLACEMENT

Battery replacement instruction for Perfect Time SH 1032

- 1) Pull out the cover plate. Release the screw and carefully pull it out.
- 2) Replace the used battery with a new 9V battery (Lithium battery is recommended).
- 3) Before reassembling the cap, make sure that the external O-ring is not damaged. Replace it if necessary.
- 4) Reassemble the piezo cover plate.



Attention: The interior of the shower control body and the cover plate must be fully dry before reassembling the parts. If it is not fully dry, carefully dry it.

- 5) Connect the solenoid valve connector to the electronic unit connector.
- 6) Assemble the cap.
- 7) Tighten the screw.

NOTE: In order to avoid entering the adjusting mode, wait 10 seconds after the connection of new battery before you will operate 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 Perfect Time shower controls are 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:

Filter cleaning instructions for Perfect Time SH 1011:

- 1. Shut off the water supply.
- 2. Disassemble the shower faucet inlet from the water supply pipe.
- 3. Remove the filter and wash it under running water.
- 4. Reassemble the filter.
- 5. Reassemble the shower faucet inlet to the water supply pipe.
- 6. Turn on the water supply. Make sure that there is no water leakage.

Filter cleaning instructions for Perfect Time SH 1032 and 1032E:

- 1. Pull out the cover plate. Release the piezo cap's screw and carefully pull it out.
- 2. Shut off the valve using the 4 mm Allen key.
- 3. Unscrew the filter's cover and remove the filter.
- 4. Wash it under running water.
- 5. Reassemble the filter into the filter's cover.
- 6. Reassemble the filter's cover.
- 7. Open the valve and make sure that there is no water leakage.
- 8. Reassemble the piezo cap.
- 9. Reassemble the cover plate.

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

Seals and Screws Kit for Perfect Time SH1011	07210104
Seals and Screws Kit for Perfect Time SH1032/E	07210097
Cover Kit for Perfect Time SH1011	07270146
Cover Kit for Perfect Time SH1032/E	07270022
Filter Stop Valve Kit for Perfect Time SH1032/E	07212002
Solenoid Valve Kit	07230002
Cover plate kit for Perfect Time SH1032/E	07260010
Mounting Kit for Perfect Time SH1011	07280001
Transformer for Perfect Time SH1032E	06522042

SERVICE CHECK LIST

Check the batteries. Low or used up batteries. Replace the batteries. See page 12.

Check the flow time. See page 8.

Check the connection between the piezo cup connector and the solenoid connector.

Check that the battery box is correctly connected.

Check the solenoid valve. If debris or scale is present, unscrew the solenoid valve, pull out the plunger and the spring and clean them.

Use scale remover if needed. When replacing the spring, make sure that it is in vertical position.

Check the diaphragm. If needed, clean the orifice or replace it.

Check the water supply pressure. It must be 0.5-8.0 bar (7-116 PSI). With water pressure of more than 8 Bars, use a pressure reducing valve.

No water is coming out of the shower control

Check the flow time. If it needed adjust it following the instructions at page 9.

Check the solenoid valve. If debris or scale is present, unscrew the solenoid valve, pull out the plunger and the spring and clean them.

Use scale remover if needed. When replacing the spring, make sure that it is in vertical position.

Water flow does not stop

Water flow diminished

Check the filter. If needed, remove it clean it and reinstall it. See page 14.

LIMITED WARRANTY

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.



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