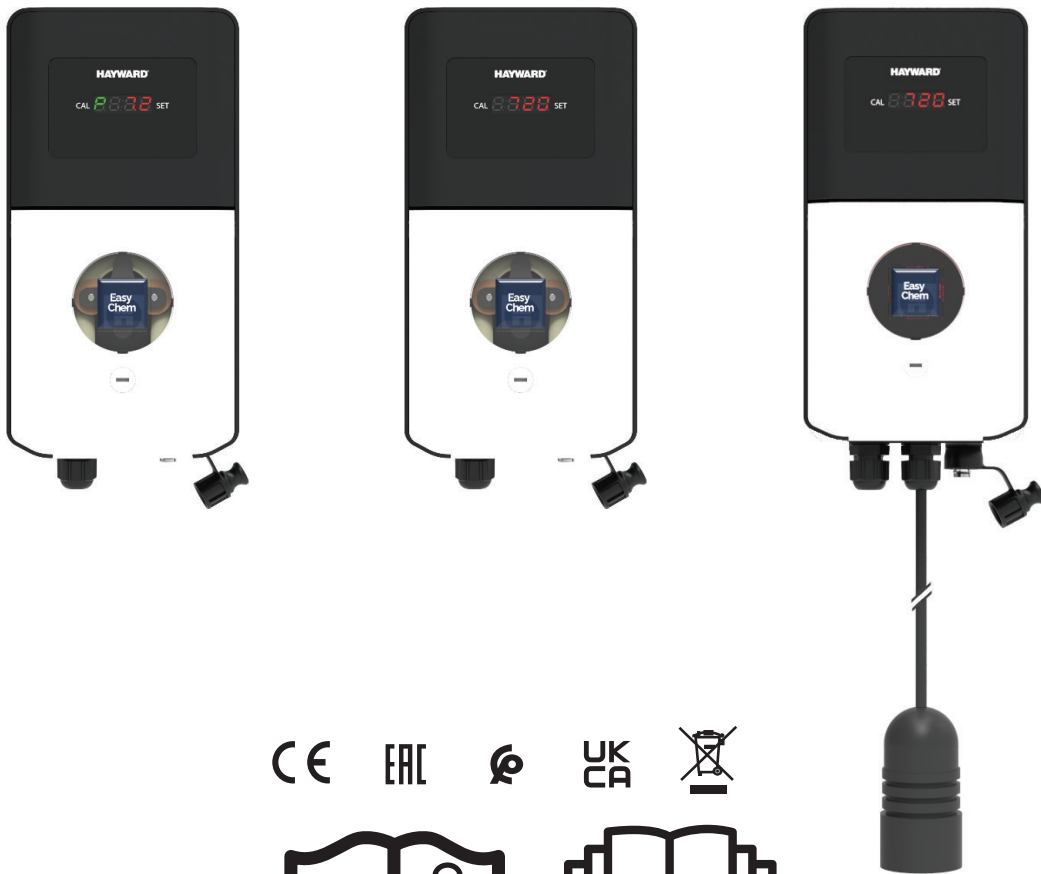
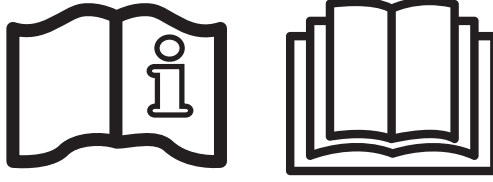




HAYWARD®



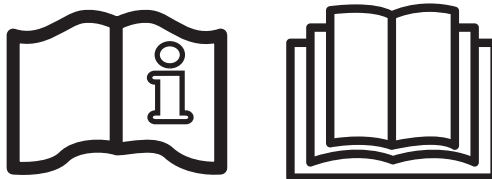
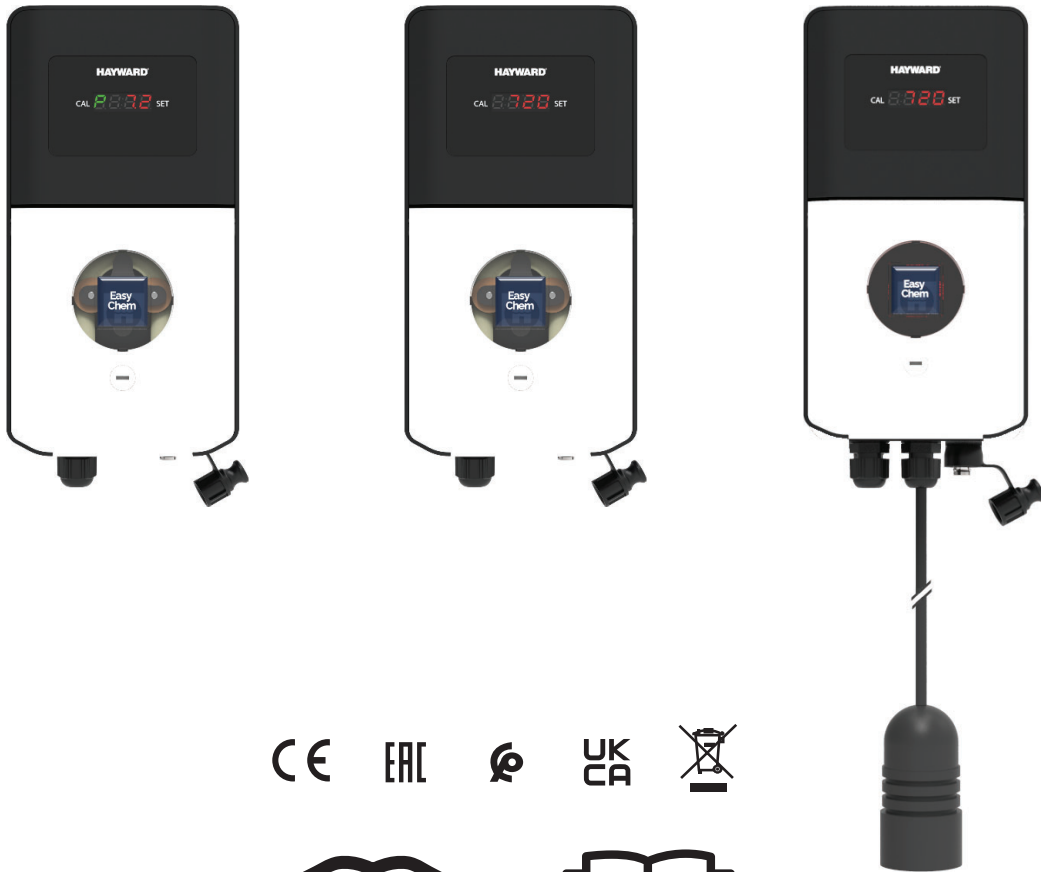
CE EAC  UK CA 



OWNER'S MANUAL



HAYWARD®



EasyChem Single | pH · ORP

OWNER'S MANUAL

PLEASE KEEP THIS MANUAL FOR FUTURE REFERENCE



WARNING: Electrical hazard.
Failure to comply with these instructions can result in serious injuries or death.
THE EQUIPMENT IS INTENDED TO BE USED ONLY IN SWIMMING POOLS

⚠ WARNING – Carefully read the instructions that appear in this manual and on the device. Failure to comply with the instructions can cause injuries. This document must be given to every pool user, who should keep it in a safe place.

⚠ WARNING – Disconnect the equipment from the mains supply before any intervention.

⚠ WARNING – All electrical connections must be carried out by a qualified approved electrician in accordance with the standards currently in force in the country of installation or, failing this, in accordance with the international standard IEC 60334-7-702.

F	NF C 15-100	GB	BS7671:1992
D	DIN VDE 0100-702	EW	SIST HD 384-7-702.S2
A	ÖVE 8001-4-702	H	MSZ 2364-702:1994 / MSZ 10-533 1/1990
E	UNE 20460-7-702 1993, REBT ITC-BT-31 2002	M	MSA HD 384-7-702.S2
IRL	IS HD 384-7-702	PL	TS IEC 60364-7-702
I	CEI 64-8/7	CZ	CSN 33 2000 7-702
LUX	384-7.702 S2	SK	STN 33 2000-7-702
NL	NEN 1010-7-702	SLO	SIST HD 384-7-702.S2
P	RSIUEE	TR	TS IEC 60364-7-702

⚠ WARNING – Check that the device is plugged into a power outlet that is protected against short-circuits. The device must also be powered via an isolating transformer or a residual current device (RCD) with a nominal operating residual current not exceeding 30 mA.

⚠ WARNING – Ensure that children cannot play with the device. Keep your hands and any foreign object away from openings and moving parts.

⚠ WARNING – Check that the supply voltage required by the product corresponds to the voltage of the distribution network and that the power supply cables are suitable for the product power supply.

⚠ WARNING – Chemicals can cause internal and external burns. To avoid death, serious injury and/or damage to equipment, wear personal protective equipment (gloves, goggles, mask, etc.) when servicing or maintaining this device. This device must be installed in an adequately ventilated place.

⚠ WARNING – The unit shall not be operated when there is no water flow in the cell.

⚠ WARNING – To reduce the risk of electric shock, do not use an extension cable to connect the device to the mains. Use a wall socket.

⚠ WARNING – Use, cleaning or maintenance of the device by children over 8 years of age or by people with impaired physical, sensory or mental capacities, or a lack of experience or expertise, should only take place once they have received appropriate instruction and under adequate supervision of an adult who is responsible for them, to ensure the device is handled safely and avoid all risk of danger.

⚠ WARNING – Use only original Hayward® parts.

⚠ WARNING – If the power supply cable is damaged, it must be replaced by the manufacturer, the after-sales service or similarly qualified persons to avoid danger.

⚠ WARNING – The device must not be used if the power cord is damaged. An electric shock could occur. A damaged power cord must be replaced by the after-sales service or similarly qualified persons to avoid danger.

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- 1. General**
- 2. Pack contents**
- 3. Installation**
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- 4. Electrical connections**
- 5. Technical specifications**
- 6. Setup and Operation**
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- 7. Alarms**
- 8. Servicing**
- 9. Troubleshooting**
- 10. Environmental information**

1. GENERAL

Before carrying out ANY work inside control panel of the EasyChem Single device, make sure you disconnect it from the power supply.

Failure to comply with the instructions contained in this manual could cause injury to people and/or damage to the appliance and the system.

2. PACK CONTENTS



A: Reducer for injection valve (1/2" M to 3/8" F)



B: PVC Crystal 4x6 suction hose (2 m)



C: Polyethylene delivery hose (2 m)



D: Tapping saddle (ø=50mm)



E: Foot filter (PP riser)



F: FPM Lip valve (3/8" GAS)



G: PSS3 probe-holder (1/2" GAS)



H: Mounting bracket kit (ø=6 mm screws)



I: pH probe



J: ORP probe



K: pH 7 Buffer solution



L: 465 mv Calibration solution



M: Yellow cup



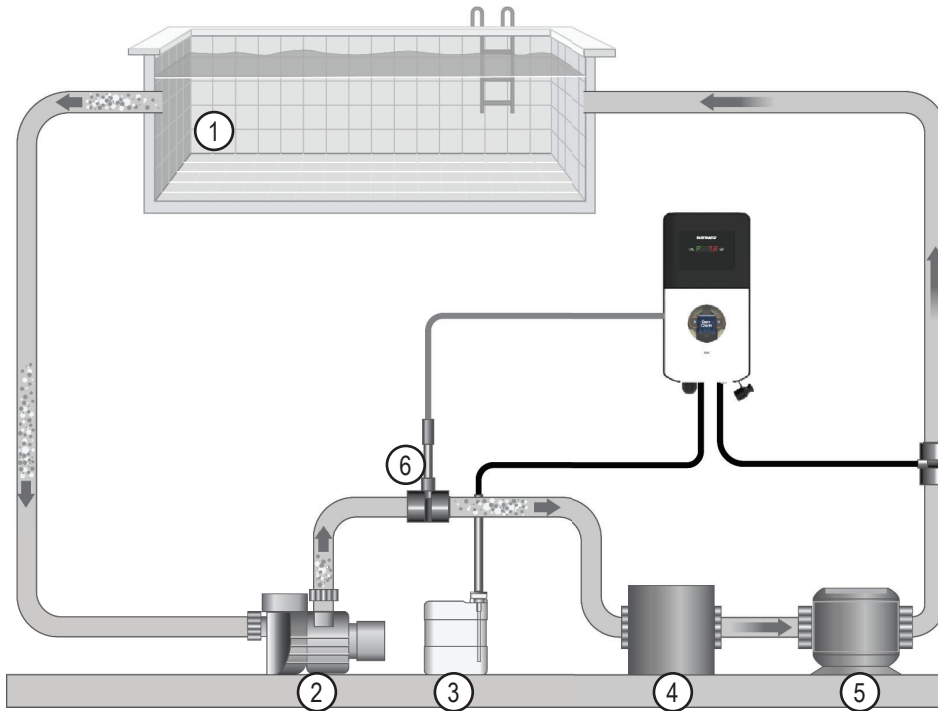
N: Nuts for peristaltic tube

Model	EASY-CHEM-SPH	EASY-CHEM-SRXG	EASY-CHEM-SRXGS
A	1	1	---
B	1	1	---
C	1	1	---
D	2	2	1
E	1	1	---
F	1	1	---
G	1	1	1
H	1	1	1
I	1	---	---
J	---	1	1
K	1	---	---
L	---	1	1
M	1	1	1
N	1	1	---

*NOTE: The values from the table represent the number of items inside the package.

3. INSTALLATION

3a. View of overall installation



- 1. Pool
- 2. Circulation pump
- 3. Acid / Chlorine
- 4. Filter
- 5. Heat exchanger
- 6. pH / ORP probe

Warning!

Use with salt chlorinator:

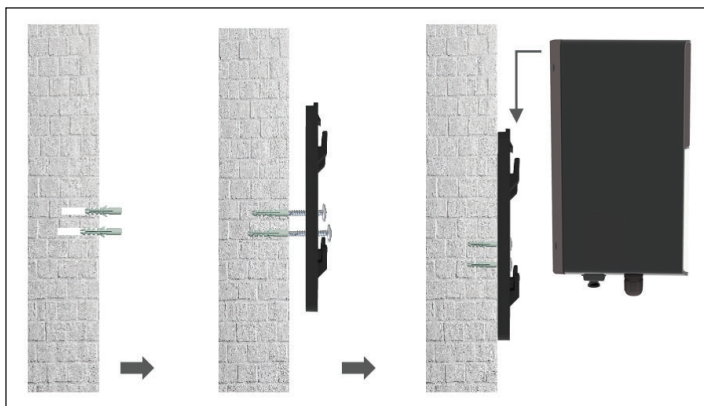
For the pH systems, to prevent the risk of system malfunctioning or damage, observe the following instructions:

1. Position the pH measuring probe prior to the chlorinator cell.
2. To eliminate eddy currents, connect the pool water to an electrical ground point
3. Position the product injection point after the chlorinator cell.

3b. Wall-mounted installation

Mount the control box on the wall. The box must be installed in the equipment room (dry, temperate, ventilated). Caution, acid vapours can cause irreversible damage to your device. Position the treatment product tanks accordingly.

Unplug the pool filter pump before you begin the installation. The installation must be performed in compliance with the regulations in effect in the country of installation.



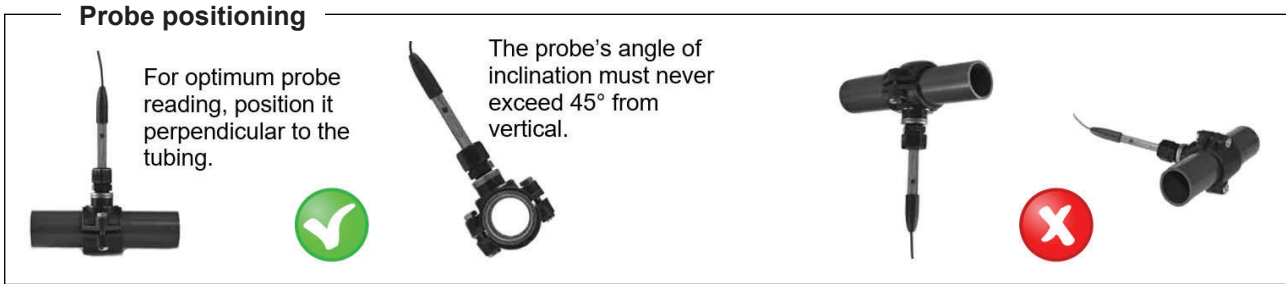
Warning!

Make sure that the injection pressure is below 1.5 bar

3c. Installation of pH and ORP probes, and acid dosing pump

The pH and ORP probes are «wet» packed and protected by a plastic cap. The probes must always remain wet. If the probes are allowed to dry, they will be permanently unusable (not covered by the warranty) and the pH-ORP test kit will be ineffective. Remove the pH and ORP probes from their plastic protective caps and set the caps aside for later use (wintering). Insert the probes into the double probe holder and tighten to ensure they are watertight. Connect the probe holder to the valves screwed onto the saddle clamps and tighten by hand only. Check that the probes are watertight at startup. Seal with Teflon, if required.

After installation, check that the probes are constantly in contact with the water in the pool. When the filtration pump is not running (even for long periods), the water remaining in the chamber may be sufficient to protect the probes.



4. ELECTRICAL CONNECTIONS

Wiring diagram

1. Switch with three positions: ON (O); OFF (I); MOM (II)
2. Power Supply cord cable
3. pH or ORP probe input, with BNC connector

Connect the power supply pre-wired cable to the mains (100 ÷ 240 Vac).



5. TECHNICAL SPECIFICATIONS

Specifications	EASY-CHEM-SPH	EASY-CHEM-SRXG	EASY-CHEM-SRXGS
Range	3.8 ÷ 8.2 pH (*1)	400÷999 mV (*1)	400÷999 mV (*1)
Accuracy	± 0.02 pH	± 2 mV	± 2 mV
Device precision	± 0.1 pH	± 10 mV	± 10 mV
Pump flow rate	1.5 l/h	1.5 l/h	---
Power supply	230 Vac 50-60Hz	230 Vac 50-60Hz	230 Vac 50-60Hz
Consumption	13.5 Watt	13.5 Watt	9 Watt
Dosage method	Proportional Set Point adjustable		Constant dosing Set Point adjustable
Display	4 digits with 7 segments		
Probe calibration	Automatic		
Max. back-pressure	1.5 Bar	1.5 Bar	
Weight	1.3 Kg	1.3 Kg	1.0 Kg
Dimensions (WxHxD)	120 x 260 x 136 mm	120 x 260 x 136 mm	120 x 260 x 136 mm

(*1) The pump has galvanised electrical insulation and measure insulation.

Product label

1. Code and serial number / QR Code to download full instruction manual.



Default parameters table

Item	Easy Chem SPH	Easy Chem SRXG	Easy Chem SRXGS
Set point	7.4 pH	750 mV	750 mV
Alr min	6.2 pH	450 mV	450 mV
Alr Max	8.2 pH	900 mV	900 mv
Over feed alarm	OFF	OFF	OFF
Power On Delay	OFF	OFF	OFF

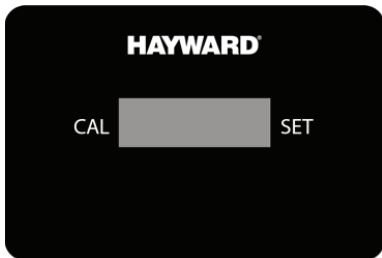
6. SETUP AND OPERATION

The device is designed to be connected to a protected outlet at all times. The EasyChem Single must not be disconnected unless the pool equipment is undergoing maintenance or the pool is to be closed (wintering).

Assuming that the chemical balance of the water is within the recommended ranges, the device can be started up.

6a. EasyChem pH (EASY-CHEM-SPH)

Proportional dosing with pH controller instrument built in, the pump has galvanised electrical insulation and measure insulation.



Switch position:

- MOM (II):** Priming position. The pump is running.
- ON (O):** Normal position. The unit measures the pH and doses.
- OFF (I):** Stand by position. The pump is stopped.

Setup

- Set the switch to **OFF (I)** position.
- Keep pressed **CAL** for 3 seconds to enter the SETUP menu.
- pH setup menu:
 - Adjust the dosage method for pH: **Acid** or **Alka**
 - Temperature: **25°C (10-50°C)**
 - Over feed alarm (OFA): Off (0') to 60'
 - Power On delay (POD): Off (0') to 60'
 - Save (yes/no)



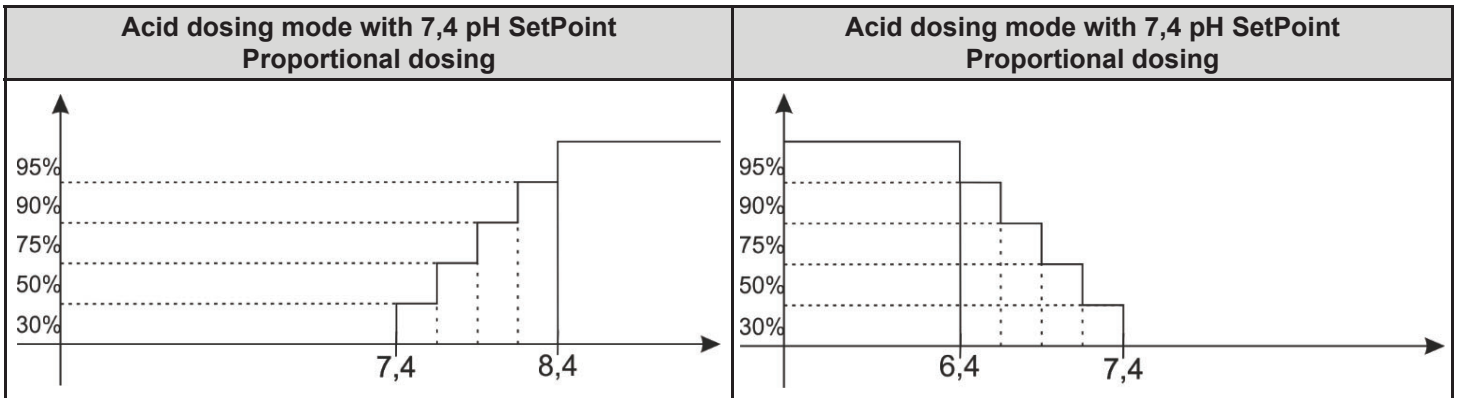
Set Point adjustment

- a. Set the switch to **ON (O)** position.
- b. Keep pressed **SET** until the Setpoint value starts flashing, then press again **SET** to increase the value.
- c. After 3 seconds from releasing the **SET** key, the unit saves the value and displays **mem**.
It is possible to set a value between 6.4 and 8.0 pH, with an increase of 0.1 pH.
- d. When the real measure is lower than 6.2 pH or higher than 8.2 pH, the measure displayed flashes.

Item	Values
Range of Measure	3,8 – 8,2 pH
Range of Alarm	Alarm min: 0 - 6,2 pH Alarm Max: 8,2 -14 pH
Range of setpoint	6,4 – 8,0 pH

Proportional dosing:

Setpoint = 7.4 pH
 Dosing mode = Acid/Alka
 Prop. Band= 1.0 pH (* Fixed value)
 Total period time= 10 minutes



(*the device controller calculates in automatic mode the time dosing between 7,4 and 8,4 pH measure)

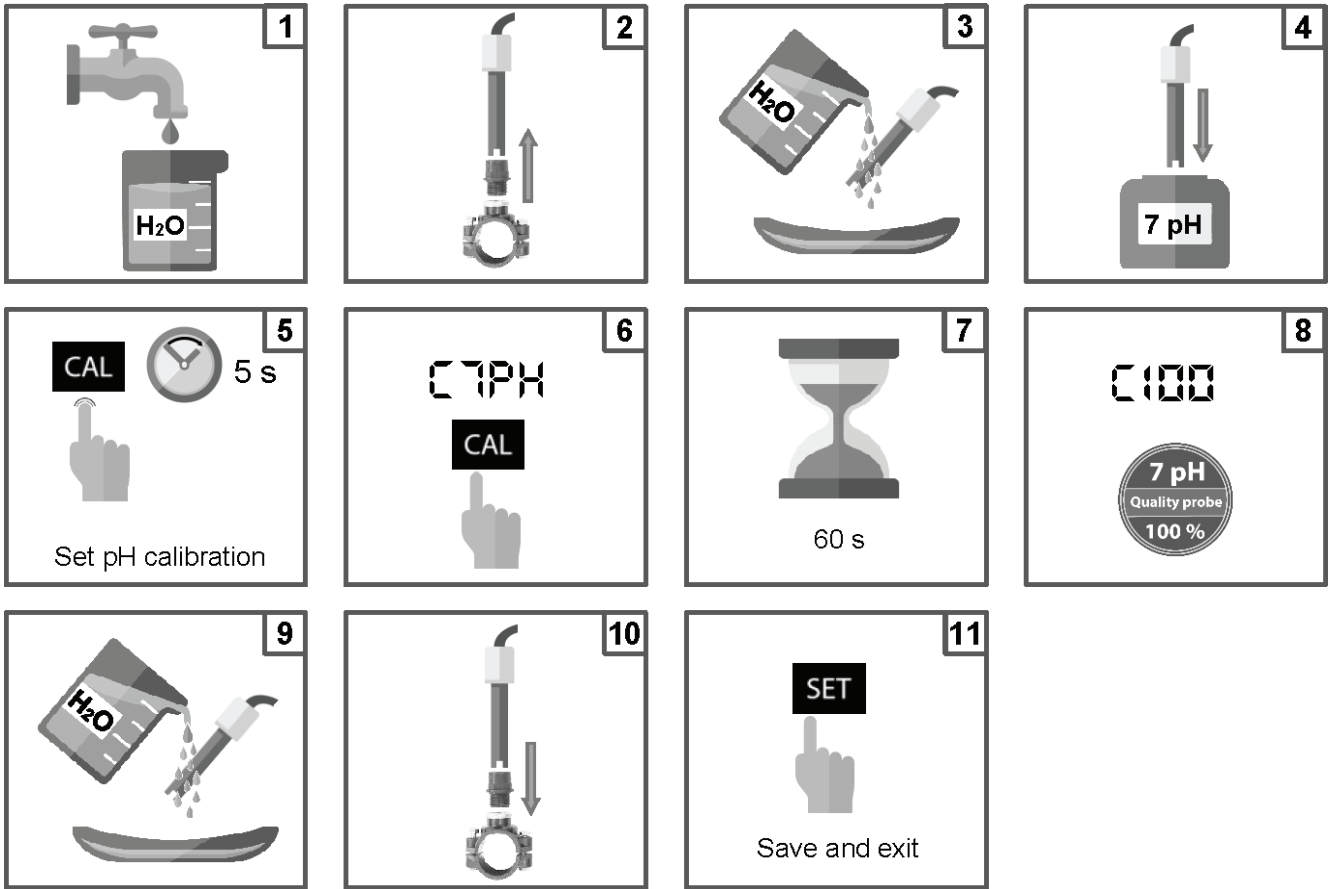
- a) During POD countdown circular running segment is showed in position 1 (green one) – POD timer showed (switching to OFF zeroes the POD timer)
- b) During OFA pre-alarm measure value is alternated by OFA message each 500ms
- c) After OFA alarm e disabled dosage OFA message replace measure value until any key is pressed

Booster Function:

Press Switch in **mom** position for priming pump and press set/up to activate the booster dosing functions, to skip press any button.

pH probe calibration

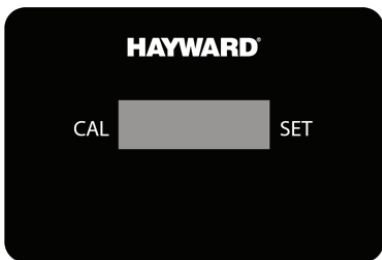
Set the switch to **ON** position then follow the steps below:



Note: If you have selected the EasyCal function, the calibration will be made only in 1 point using the 7 pH buffer solution. During calibration procedure, the **hold (setup)** LED will turn red.

6b. EasyChem ORP (EASY-CHEM-SRXG) and ORP/Schuko (EASY-CHEM-SRXGS)

Proportional dosing with ORP controller instrument built in, the pump has galvanised electrical insulation and measure insulation.



Switch position:

- a. **MOM (II):** Priming position. The pump is running.
- b. **ON (O):** Normal position. The unit measures the ORP and doses.
- c. **OFF (I):** Stand by position. The pump is stopped.

Setup

- a. Set the switch to **OFF (I)** position.
- b. Keep pressed **CAL** for 3 seconds to enter the SETUP menu.
- c. pH setup menu:
 1. Adjust the dosage method for ORP: **Low** o («Lo»)
 2. Over feed alarm (OFA): Off (0') to 60'
 3. Power On delay (POD): Off (0') to 60'
 5. Save (yes/no)



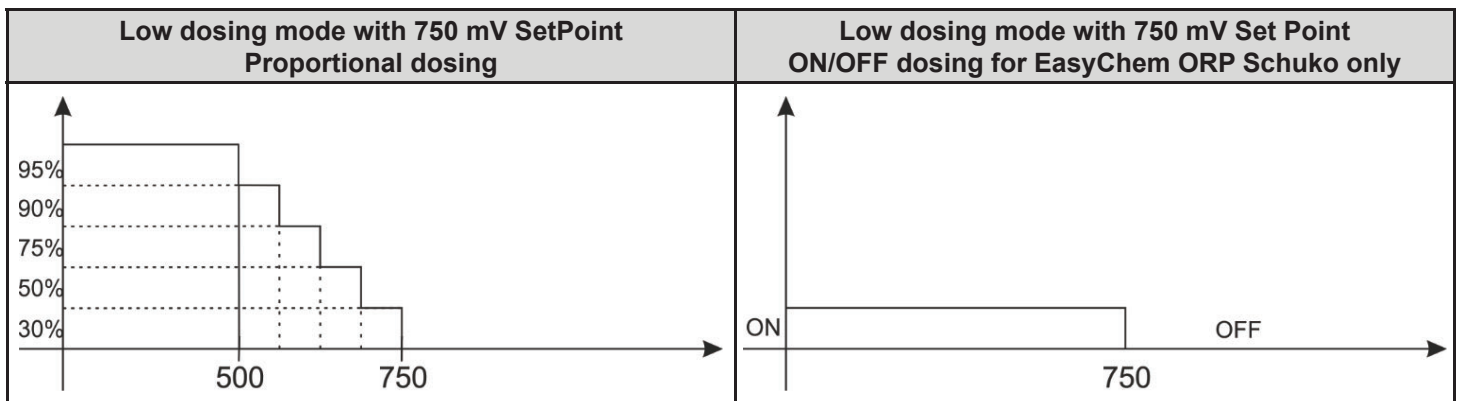
Set Point adjustment

- a. Set the switch to **ON (O)** position.
- b. Keep pressed **SET** until the Setpoint value starts flashing, then press again **SET** to increase the value.
- c. After 3 seconds from releasing the **SET** key, the unit saves the value and displays **mem**.
It is possible to set a value between 450 and +850 mV, with an increase of 10 mV.
- d. When the real measure is lower than 400 mV or higher than 900 mV, the measure displayed flashes.

Item	Values
Range of Measure	400 – 999 mV
Range of Alarm	Alarm min: 0 - 450 mV Alarm Max: 900 - 999 mV
Range of setpoint	450 – 850 mV

Proportional dosing:

Setpoint = 750 mV
 Dosing mode = Low
 Prop. Band= 250mV (* Fixed value)
 Total period time= 10 minutes



(*the device controller calculates in automatic mode the time dosing between 750 and 500 mV measure)

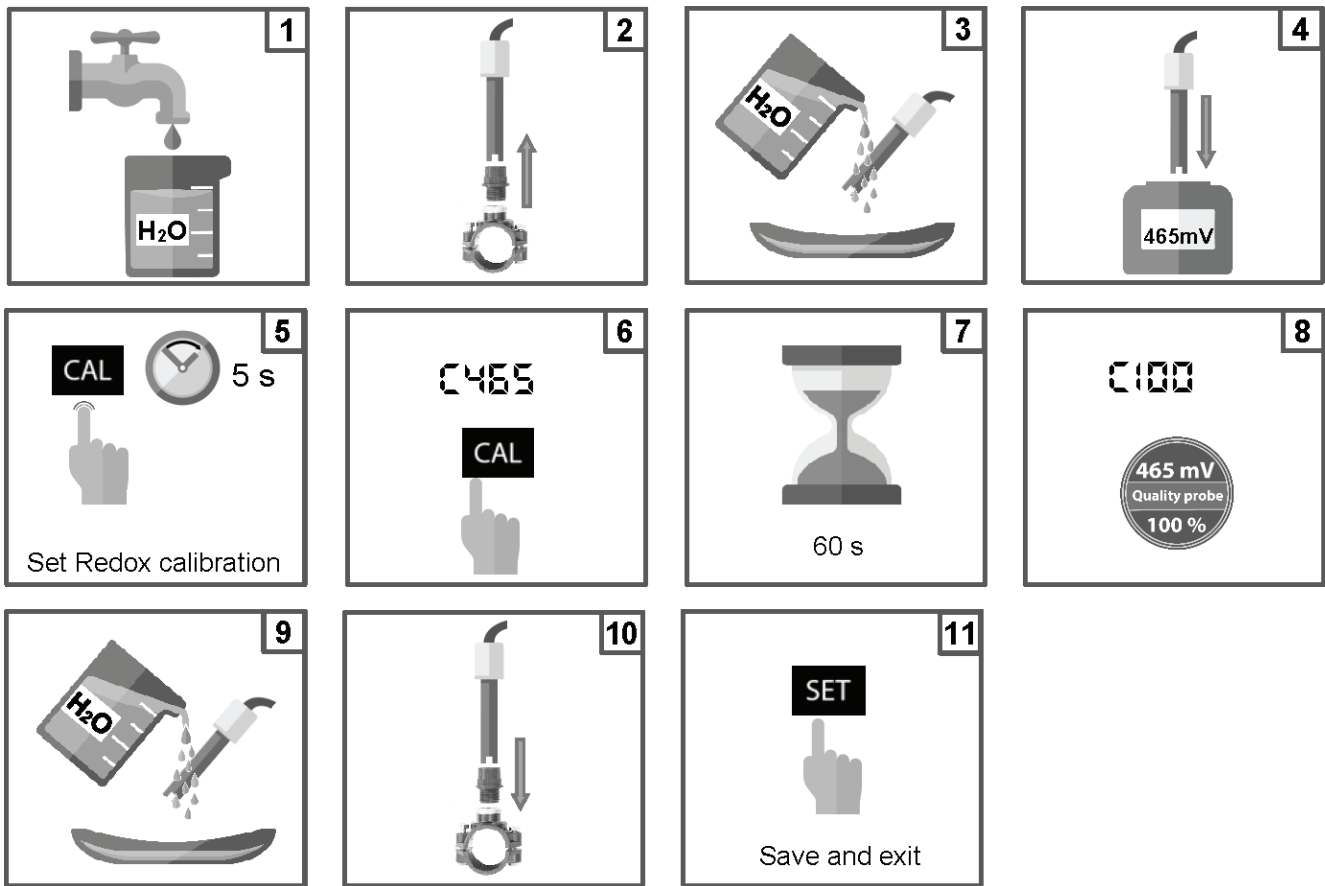
- a) During POD countdown circular running segment is showed in position 1 (green one) – POD timer showed (switching to OFF zeroes the POD timer)
- b) During OFA pre-alarm measure value is alternated by OFA message each 500ms
- c) After OFA alarm e disabled dosage OFA message replace measure value until any key is pressed

Booster Function:

Press Switch in **mom** position for priming pump and press set/up to activate the booster dosing functions, to skip press any button.

ORP probe calibration

Set the switch to **ON** position then follow the steps below:



7. ALARMS

Alarm	EasyChem pH	EasyChem ORP	Actions to do
Out of Range measure	888 (flashing)	888 (flashing)	- Replace or check the measure probe - Press CAL to open Alarm Relay - Restore pH / ORP

8. SERVICING

During the first 10-15 days, your system will require more attention:

- Check that the pH remains at the ideal level (7.2 to 7.4).
 - If the pH is exceptionally unstable and uses a lot of acid, check the alkalinity (see table).
- If the balance is highly unstable, contact your pool installer/builder.

REMEMBER that the system needs a certain amount of time to adapt to your pool and will require additional chemicals during the first 3-5 days.

The pool must be regularly maintained and the skimmer baskets emptied whenever necessary. Also check that your filter is not clogged.

DOSING PUMPS: Regularly check the acid level to ensure that the pump does not run dry. The dosing pump must be checked and serviced at regular intervals. The Santoprene tube of the peristaltic pump has a lifetime of 2 years. We recommend that you change it once a year.

Servicing the probe

The probe must be clean and free from oil, chemical deposits and contamination to function properly. As it is in continuous contact with the water in the pool, the probe may need to be cleaned weekly or monthly, depending on the number of bathers and other specific pool characteristics. A slow response, more frequent pH calibration and inconsistent readings indicate that the probe needs to be cleaned.

To clean the probe, turn off the power to the EasyChem Single.

Unplug the probe connector from the control box, unscrew the probe and carefully remove it from the chamber. Clean the probe bulb with a soft toothbrush and regular toothpaste.

A household washing-up liquid detergent may also be used to remove any oil.

Rinse with fresh water, replace the Teflon tape on the threads, and reinstall the probe.

If the probe continues to give inconsistent readings or requires excessive calibration after it has been cleaned, it should be replaced. The lifetime of the probes is 1 year. We recommend that you calibrate them every month during the season the pool is in use.

Wintering

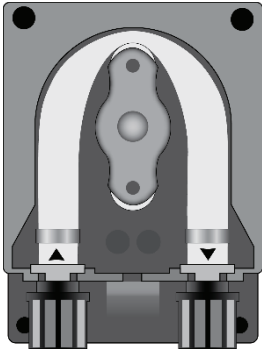
The EasyChem Single, the probe and pool piping run the risk of being damaged if the water freezes. In regions that experience long periods of cold weather, be sure to drain all the water from the pump and filter and from the supply and return pipes before winter. Do not remove the control box.

Probe storage

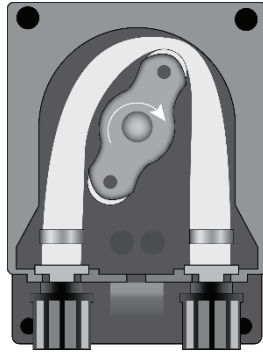
The end of the probe must always be in contact with water or a solution of KCl. If it is removed from the measuring chamber, it should be stored in the plastic cap provided (filled with water). If the storage cap has been mislaid, the probe should be stored separately in a small glass or plastic container with its end immersed in water.

The probe must always be in a frost-free environment.

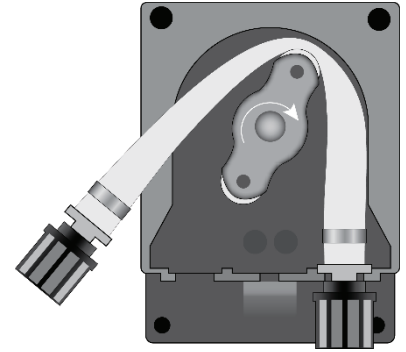
Hose replacement procedure



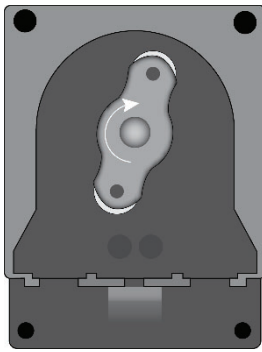
Open the pump's lid and release the hose by pulling the left connector upward.



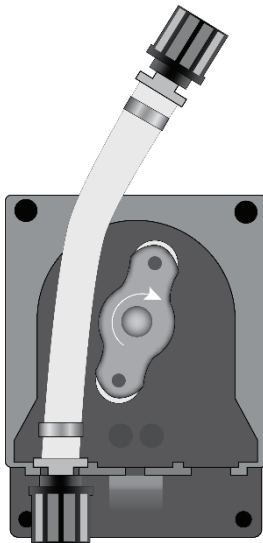
Position the roller at 7h05, turning it in the direction of the circular arrow.



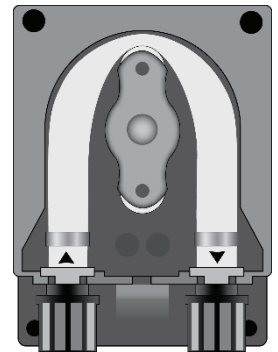
Completely release the left connector, holding it taut towards the outside, and turn the roller in the direction of the circular arrow so that the hose is freed up to the right connector.



Position the roller at 7h05, turning it in the direction of the circular arrow.



Insert the left connector into the relative housing and pass the hose under the roller's guide. Turn the roller in the direction of the circular arrow, simultaneously accompanying the hose into the pump's head, until the right connector is reached.



Close the pump's lid and press its surface hard so that it is properly locked into place.

9. TROUBLESHOOTING GUIDE

No display

Check that the On / Off switch is on.

Check the connection cable between the display and the control box.

Check the power supply: 210-230 V_~ 50 Hz.

If the problem persists, contact your pool installer/builder.

10. ENVIRONMENTAL INFORMATION

Provision regarding professional waste from electrical and electronic equipment (WEEE). In compliance with directive 2012/19/EU regarding the management of waste from electrical and electronic equipment, this pump must be disposed of at a waste sorting site.

==> for more information contact your dealer.

Good management of waste from electrical and electronic equipment contributes to the prevention of damage to the environment and human health.



LIMITED WARRANTY

All HAYWARD products are covered for manufacturing defects or material defects for a warranty period of **3 years** as of date of purchases. Any warranty claim should be accompanied by evidence of purchase, indicating date of purchase. We would therefore advise you to keep your invoice.

The HAYWARD warranty is limited to repair or replacement, as chosen by HAYWARD, of the faulty products, provided that they have been subjected to normal use, in compliance with the guidelines given in their user guides, provided that the products have not been altered in any way, and provided that they have been used exclusively with HAYWARD parts and components. The warranty does not cover damage due to frost and to chemicals. Any other costs (transport, labour, etc.) are excluded from the warranty.

HAYWARD may not be held liable for any direct or indirect damage resulting from incorrect installation, incorrect connection, or incorrect operation of a product.

In order to claim on a warranty and in order to request repair or replacement of an article, please ask your dealer.

No equipment returned to our factory will be accepted without our prior written approval.

Wearing parts are not covered by the warranty.

The wearing parts of the salt water chlorinator listed below must be maintained according to their estimated service life:

Seal set =	2 years
Santoprene tube =	2 years
Roller =	2 years

