

AUTOSALT

POOLSQUAD

POOLSQUAD LOW SALT

POOLSQUAD AMPERO

POOLSQUAD PRO

1. FOREWORD.....	4
2. SAFETY GUIDELINES.....	4
3. FUNCTIONS PERFORMED.....	4
4. PACKING LIST	5
5. INSTALLATION DIAGRAM.....	6
6. INSTALLATION.....	8
6.1. Important preliminary precautions	8
6.2. Mounting the electronics unit onto a wall	9
6.3. Installing the cell	10
6.4. Installing the accessories holder	11
6.5. Installing the salt/temperature/low-water sensor.....	11
6.6. Connecting the Pool Ground	11
6.7. Installation of the pH injection circuit (all models except AUTOSALT)	12
6.8. Installation of the POOLSQUAD / POOLSQUAD LOW SALT measuring equipment	13
6.9. Installation of POOLSQUAD AMPERO measuring equipment	14
6.10. Installation of the POOLSQUAD PRO measuring equipment	18
6.11. Electrical connections.....	20
7. START UP	21
8. DETAILED INFORMATION ON THE ORP OPERATING MODE	22
9. ELECTRONICS UNIT INTERFACE.....	23
10. WHEN CONNECTING THE ELECTRONICS UNIT TO A POWER SUPPLY	24
11. PROGRAMMING THE FIRST COMMISSIONING	25
12. MENU STRUCTURE 1.....	27
12.1. Display / Navigation	27
12.2. Menus A to H.....	27
12.3. "Temp. ADJUSTMENT" menu	28
12.4. "SALT ADJUSTMENT" menu.....	28
13. MENU STRUCTURE 2.....	29
13.1. Display / Navigation	29
13.2. "PARAMETERS" menu	30
13.3. "START UP" menu.....	30
13.4. "LANGUAGE" menu.....	37
13.5. "Screen standby" menu.....	37
13.6. "POOL VOLUME" menu	37
13.7. "SETTING THE TIME" menu	37
13.8. "CHLORINATION" menu	37
13.9. "MODE" menu	38
13.10. "FREE Cl GAIN" menu	38
13.11. "FREE Cl SETPOINT" menu.....	38
13.12. "GEL Cl PROBE" menu	39
13.13. "ORP PROBE CALIBRAT." menu	40
13.14. "ORP SETPOINT" menu.....	40
13.15. "TIME INVERSION" menu	41
13.16. "CHLORINATION TEST" menu.....	42
13.17. "pH REGUL." menu	43
13.18. "MODE" menu.....	43
13.19. "MANUAL INJECTION" menu.....	43
13.20. "pH ADJUSTMENT" menu.....	43
13.21. "pH CALIBRATION" menu	43
13.22. "pH SETPOINT" menu.....	45
13.23. "pH CORRECTOR TYPE" menu	45
14. BOOST mode.....	45
15. DOSING MODE.....	45
16. SWITCHING OFF FOR EXTENDED PERIODS / FOR WINTER.....	46
17. MAINTENANCE	47
17.1. Regular checks.....	47
17.2. Cell.....	47
17.3. pH injection circuit	48
17.4. Measuring chamber	48
17.5. pH probe and ORP probe	49
17.6. Amperometric probe.....	49
18. ALARMS	50
19. GUARANTEE	55

1. FOREWORD

READ, UNDERSTAND AND CAREFULLY FOLLOW ALL OF THE INSTRUCTIONS IN THIS MANUAL BEFORE INSTALLING AND USING THIS EQUIPMENT.



- In this manual, the pictograms opposite indicate a **WARNING**, or a **NOTE OF CAUTION**, accompanied by instructions to be followed to the letter.
- Failure to comply with these instructions may result in significant risk of damage to the equipment and/or serious injury to people. THESE INSTRUCTIONS MUST BE FOLLOWED AND COMPLIED WITH.

2. SAFETY GUIDELINES



ELECTRICAL SHOCK HAZARD

To avoid the risk of injury or accident, install the equipment out of reach of children and anyone not authorised to operate and handle the equipment.

Ensure that the equipment room in which the equipment is installed complies with the standards in force in the country of installation, at the time of commissioning the equipment. If in doubt, contact a qualified electrician. This equipment must also be installed by an authorised, qualified person in accordance with the electrical codes in force in the country of installation at the time of installation. The installation must also comply in all respects with the technical specifications given in this manual and in any document supplied with the appliance.

The equipment's electrical cables must be protected against any accidental damage.
A damaged cable must be replaced immediately, using only a cable identical to the original.
Never cut or extend the electrical cables.

Only authorised, qualified people may work on the equipment in case of failure or to perform maintenance.
Always disconnect the power supply before carrying out any technical work on the equipment.

Do not modify the equipment. Any modification of the equipment can lead to risks to people as well as the environment, and result in the deterioration of the equipment.

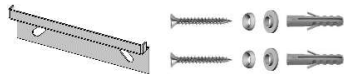


The detailed safety instructions in this manual are not exhaustive. They detail the most common risks encountered when installing and using this equipment. Caution and common sense must accompany all installation and use of this equipment.

3. FUNCTIONS PERFORMED

	Chlorination	pH regulation	Amperometric check	ORP check
AUTOSALT	✓			
POOLSQUAD POOLSQUAD LOW SALT	✓	✓		
POOLSQUAD AMPERO	✓	✓	✓	
POOLSQUAD PRO	✓	✓		✓

4. PACKING LIST

AUTOSALT						
						
Electronics unit x1	Controller mounting kit t for electronics unit (wall mount, screws, washers, plastic anchors) x1		Nut x2	Reducer x2	Collar x2	Seal x2
						
Cell x1	Power cable of the cell x1	Accessories holder (equipped with a Pool Ground, 2 reducers and 4 stoppers) x1	Salt/temperature/ low water sensor x1	Teflon tape x1	Analysis kit (test strips, reference card) x1	

POOLSQUAD / POOLSQUAD LOW SALT						
This packing list also includes the AUTOSALT packing list.						
						
pH probe x1	Semi-flexible tubing x1	Filter with ballast x1	Injection connector x1	Pump pump pipe x1	Calibration solution pH 7 x1	Calibration solution pH 10 x1

POOLSQUAD AMPERO						
This packing list also includes the POOLSQUAD packing list.						
						
Measuring chamber x1	Semi-flexible tubing x2	Saddle (in kit) x2	Fitting x2	Amperometric measurement kit (amperometric probe, screwdriver, electrolyte bottle, sanding tablet) x1		Valve x2

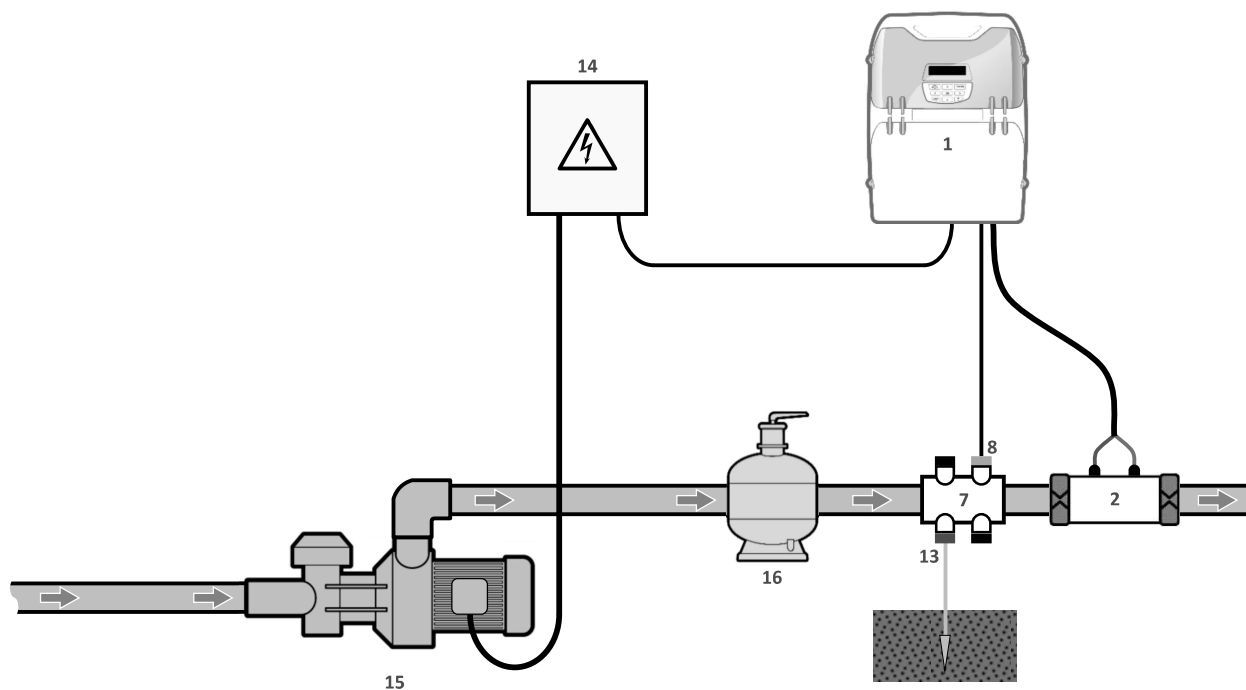
POOLSQUAD PRO						
This packing list also includes the POOLSQUAD packing list.						
						
Measuring chamber x1	Semi-flexible tubing x1	Saddle (in kit) x2	Fitting x2	ORP probe x1	ORP calibration bottle x1	Valve x2

5. INSTALLATION DIAGRAM

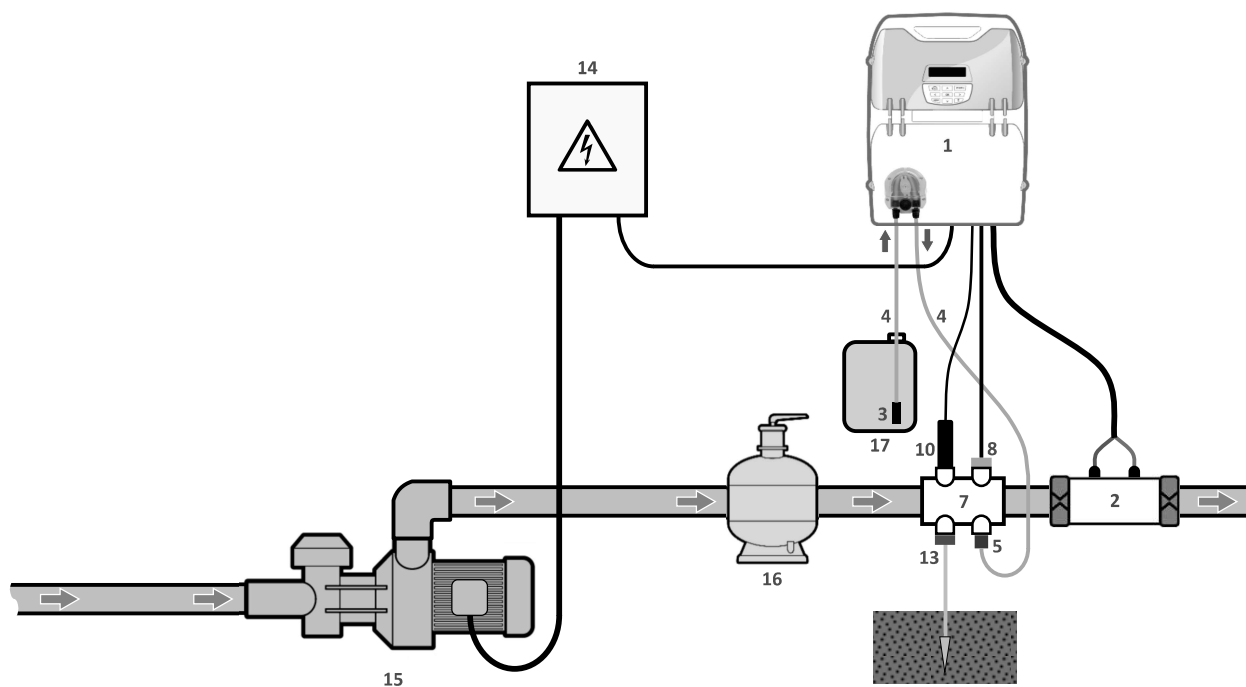


The pH corrector container must be installed a safe distance away from any electrical device or any other chemicals.

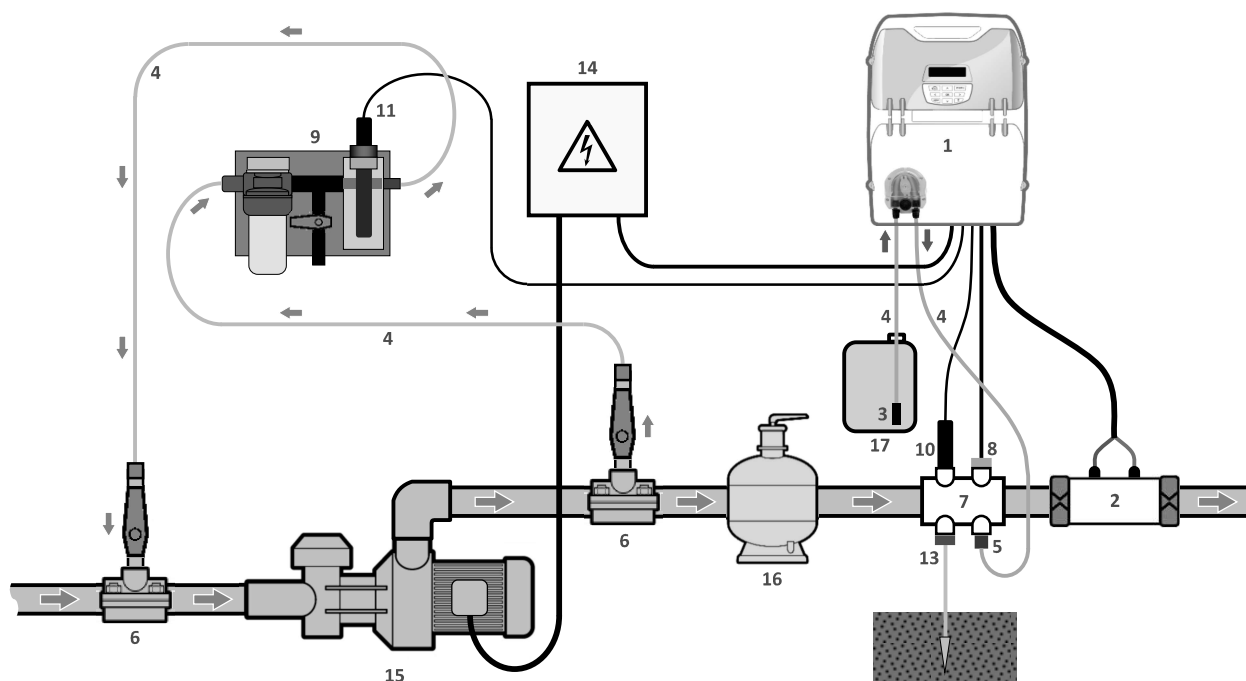
AUTOSALT



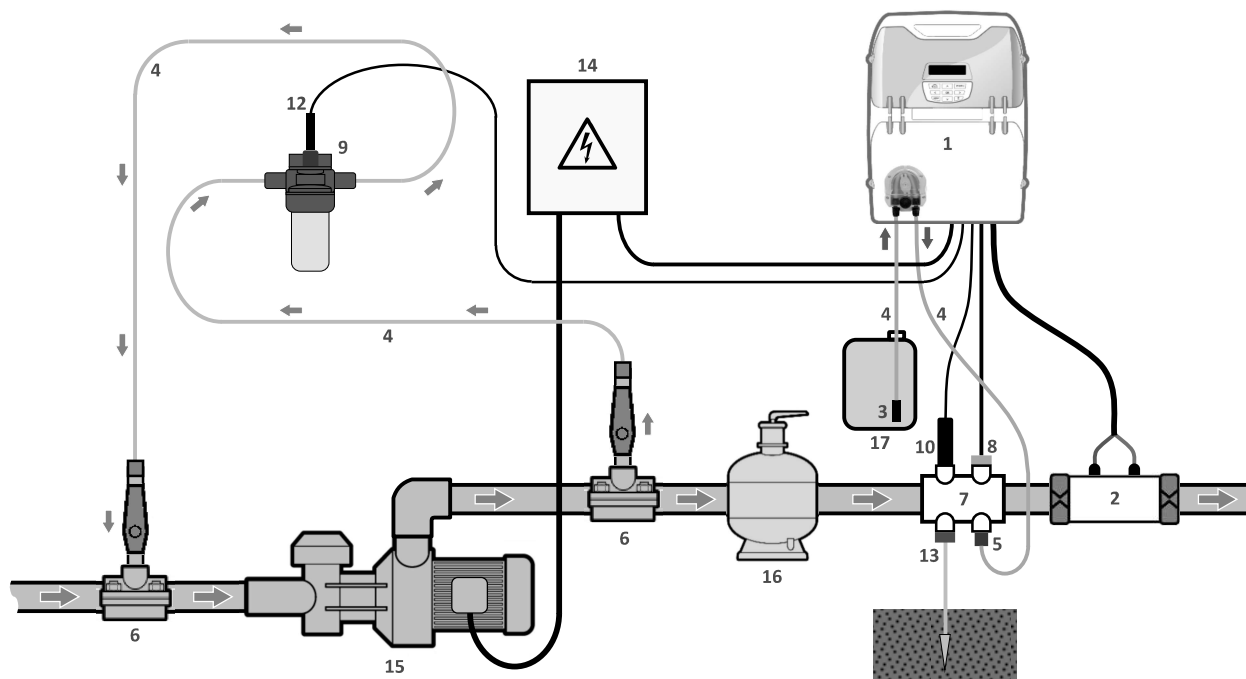
POOLSQUAD / POOLSQUAD LOW SALT



POOLSQUAD AMPERO



POOLSQUAD PRO



- | | |
|--|---|
| 1: Electronics unit | 10: pH probe |
| 2: Cell | 11: Amperometric probe |
| 3: Filter with ballast | 12: ORP probe |
| 4: Semi-flexible tubing | 13: Pool Ground (<i>connected to a copper wire and a ground rod that is not supplied</i>) |
| 5: Injection connector | 14: Electrical power supply (<i>not supplied</i>) |
| 6: Assembly [saddle / valve / connector] | 15: Filtration pump (<i>not supplied</i>) |
| 7: Accessories holder | 16: Filter (<i>not supplied</i>) |
| 8: Salt/temperature/low water sensor | 17: pH corrector container (<i>not supplied</i>) |
| 9: Measuring chamber | |

6. INSTALLATION

6.1. Important preliminary precautions



Before installing the equipment, the following instructions must be followed:

- The treatment capacity of the equipment must be appropriate for the volume of the pool to be treated, the number of people using the pool, the presence of nearby equipment (overflow, reflecting pool, slide, etc.) and the weather conditions where the equipment is installed.
- Use water from the mains water supply. Do not use water of natural origin (rainwater, run-off, ponds, lakes or boreholes), as this may cause premature deterioration of the electrolytic cell.
- Do not use any anti-algae products containing copper or other metals, as this may cause premature deterioration of the chlorinator cell.
- Check that the filtration pump and filter are in good condition and working correctly. Also check the flow rate of the filtration pump, the filter capacity and the outer pipework diameter.
- The equipment must be installed in a closed, dry and sufficiently ventilated room which is protected from water sprays and UV rays. The temperature inside this room must not exceed 40°C.
 - If these premises are located in a country with a hot and humid climate, they must be air conditioned.
 - If these premises are located in a country with a temperate climate, they must be equipped with forced ventilation.
- Determine where exactly each component will be positioned, taking into account its size and the length of its power cables. Also anticipate extra space around the equipment, in order to facilitate access for maintenance.
- The pH corrector container must be installed a safe distance away from any electrical device or any other chemicals. Failure to follow these instructions may lead to abnormal oxidation of the metal parts, possibly resulting in complete device failure.
- Be very careful to ensure that the various components are correctly positioned in relation to each other, as indicated in the installation diagram.

Install the cell and accessories holder in a horizontal position, followed by all other devices for water treatment, cleaning or heating (just before flow out into the pool).

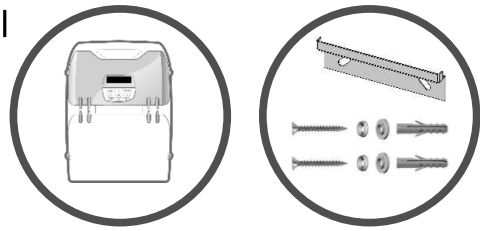
To protect property and people, the cell and accessories holder must be installed in series (and not in parallel), and the cell must be positioned just after the accessories holder.

The measuring chamber must be on the level (not inclined) so that the probe installed there is correctly vertical.

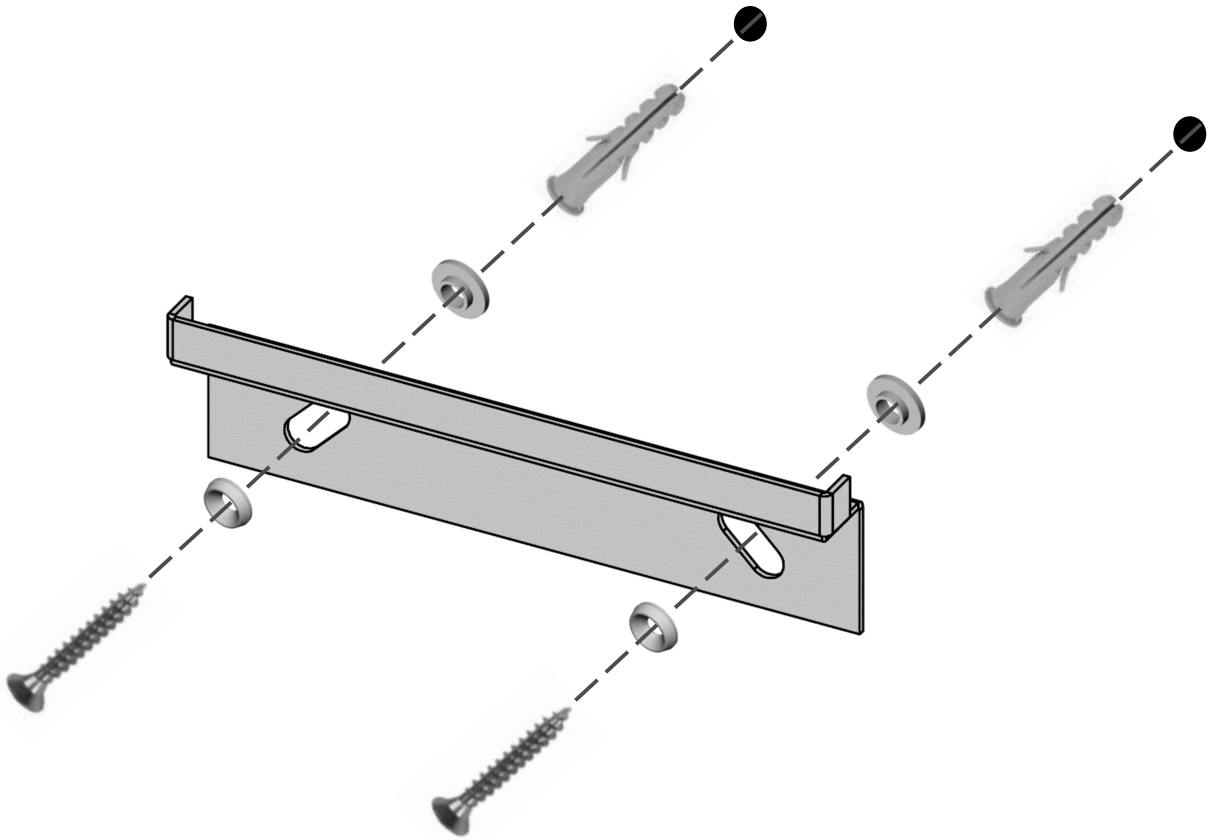
If constraints related to the filtration circuit call for a different installation from that described in the installation diagram, have this installation validated by a professional. The same applies when intentionally deciding to install components in a different way, for example in order to position the cell and accessories holder in a bypass configuration.

If the cell is mounted in bypass, make sure that it is not connected to power when the bypass valves are closed, at the risk of the destruction of the cell.
- A sufficient flow of water must be maintained in the cell when connected to a power supply. If the filtration pump has a variable flow, you must install a flow sensor so that electrolysis automatically stops when flow is insufficient. The flow sensor must be installed between the accessories holder and the cell. The electronics unit is designed to connect a flow sensor.
- The water pressure in the cell must not exceed 3 bar. All hydraulic components installed must be able to tolerate water pressures likely to be encountered as part of normal use. There should be no leakage from any part, including pipework.
- The water flow in the measuring chamber must not exceed 80 L/h. If necessary, provide an additional location to install equipment for this purpose.

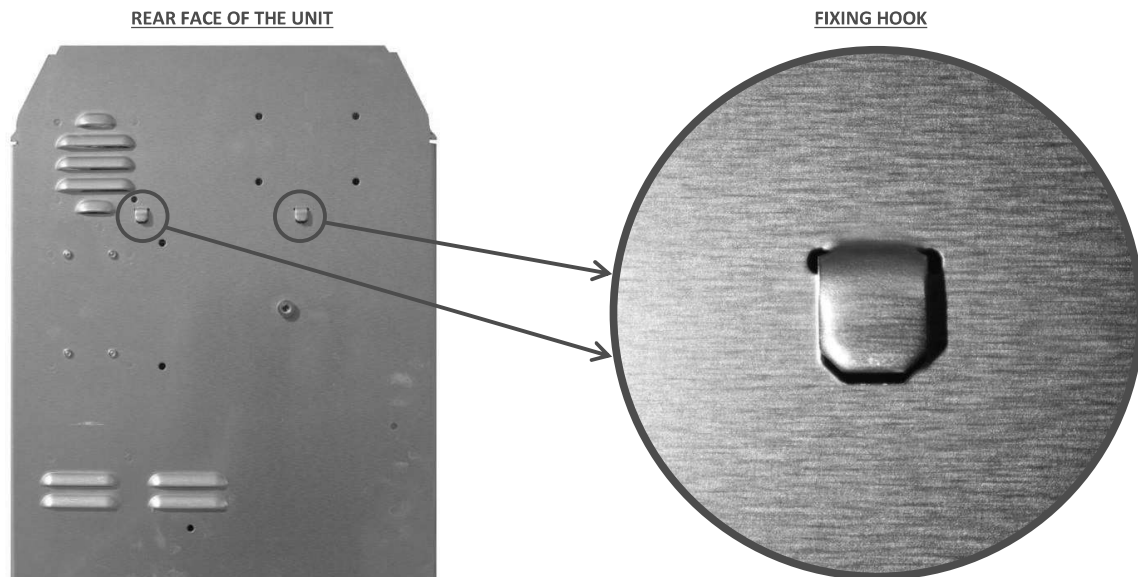
6.2. Mounting the electronics unit onto a wall



1) Attach the wall mount to the wall using the screws, washers and plastic anchors supplied, following the diagram below.



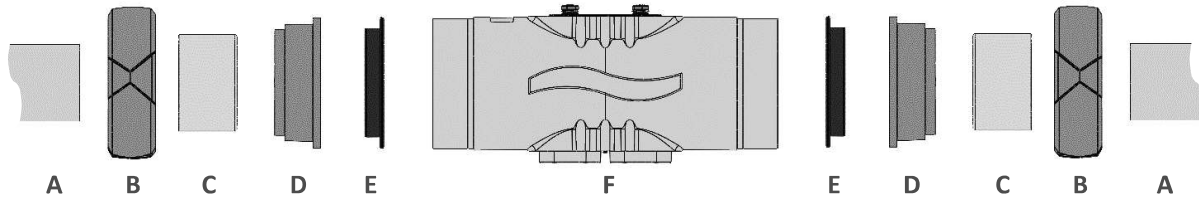
2) Hook the electronics unit onto the bracket.



6.3. Installing the cell



Exploded diagram of assembly:



A: Pipe

B: Nut

C: Reducer (only to be fitted if pipe A has an outer diameter of 50 mm)

D: Collar

E: Seal

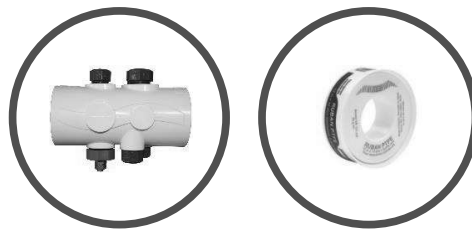
F: Cell

- 1) If pipe A has an outer diameter of **50 mm**, cut the pipe to a length of **248 mm**.
If pipe A has an outer diameter of **63 mm**, cut the pipe to a length of **232 mm**.
- 2) Rub down all bonding surfaces with sand paper: pipes A, reducers C, collars D.
- 3) Slide each nut B onto each pipe A.
- 4) Glue together each unit comprising [pipe A - reducer C - collar D].
- 5) Wait for the glue to dry completely.
- 6) Place each seal E inside each collar D.
- 7) Attach cell F with the 2 nuts B.



Screw on and tighten nuts B by hand.

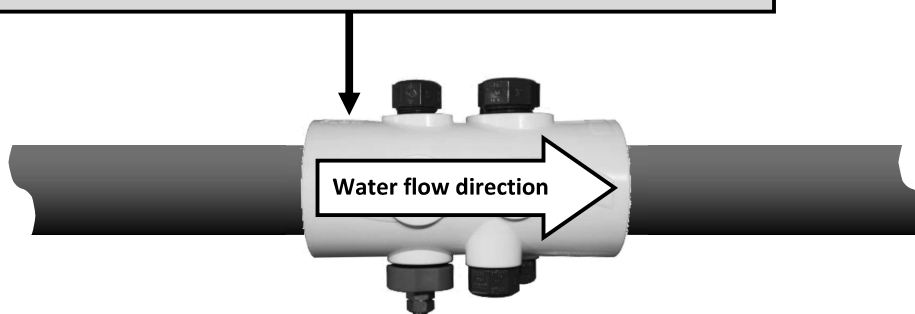
6.4. Installing the accessories holder



- 1) Remove the 4 stoppers and 2 reducers from the accessories holder.
- 2) Depending on the elements to be connected to the accessories holder (see the installation diagram), screw the stopper(s) required in the accessory holder back in, using Teflon tape, and tighten by hand.
- 3) Install the accessories holder following the installation diagram, with or without the 2 reducers (depending on the diameter of the pipes).

→ The accessories holder must be positioned as shown below:

"FLOW" marking with arrow (*showing the flow direction of the water*):
on the top left of the accessories holder.



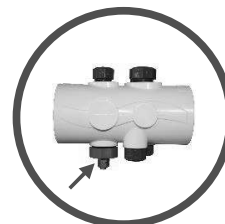
6.5. Installing the salt/temperature/low-water sensor

Without applying Teflon tape, screw the sensor into the accessories holder and tighten by hand.



6.6. Connecting the Pool Ground

The Pool Ground is intended for functional and not safety purposes. It enables static electricity, whatever its source may be, to be transferred from the pool water to the ground. In some cases, static electricity can stimulate the oxidation of metal parts in contact with pool water. Static electricity can also disturb the working of probes, which can lead to the equipment as a whole not working correctly.

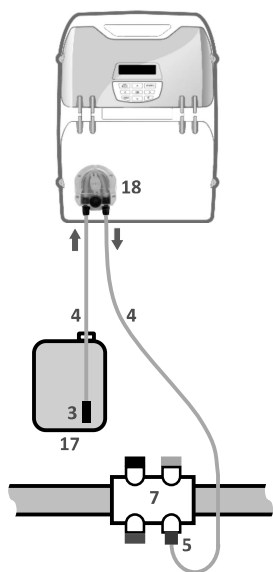
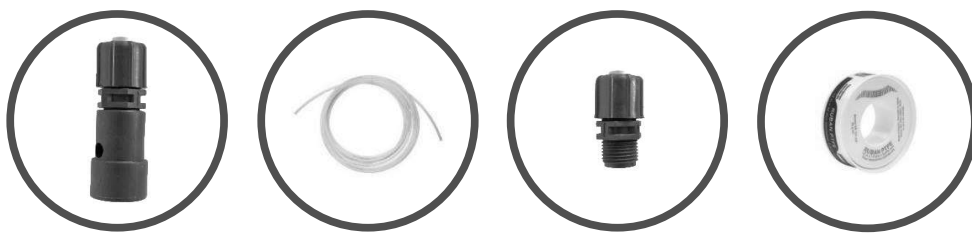


- 1) Connect the Pool Ground to a ground rod (not supplied) using a copper cable without isolating sleeve (not supplied).
- 2) Insert the whole ground rod into the ground.



- You must comply with the specifications of installation standards in the country and at the time of the installation.
- The ground rod should be sited at a distance and unaffected by any other electrical ground rod/device.
- The ground rod must be at least 1.5 m long.
- The ground into which the ground rod is inserted should be as wet as possible, and have a resistance of less than 20 Ω .

6.7. Installation of the pH injection circuit (all models except **AUTOSALT**)



1) Place the pH corrector container 17 as close as possible to the equipment room's internal ventilation and as far away as possible from any electrical device.

2) Connect the filter with ballast 3 to the peristaltic pump 18, with the semi-flexible tubing 4 to be cut to the right size (see photos **A** and **B**).

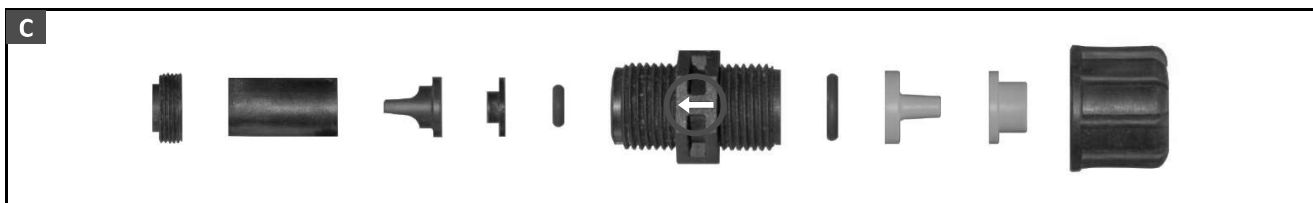
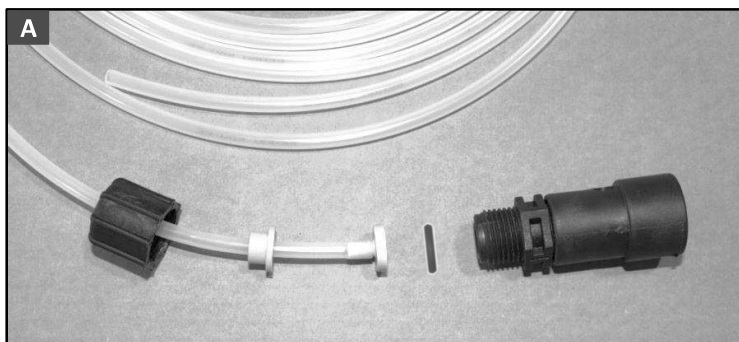
3) Insert the filter with ballast 3 at the bottom of the container 17.

4) Screw the injection connector 5 into the accessories holder 7, using Teflon tape.



Following image **C** (exploded view of the injection connector 5), respect the direction of assembly of the parts, and in particular the direction of the arrow engraved on the connector. Failure to follow these instructions can lead to the peristaltic pump being damaged.

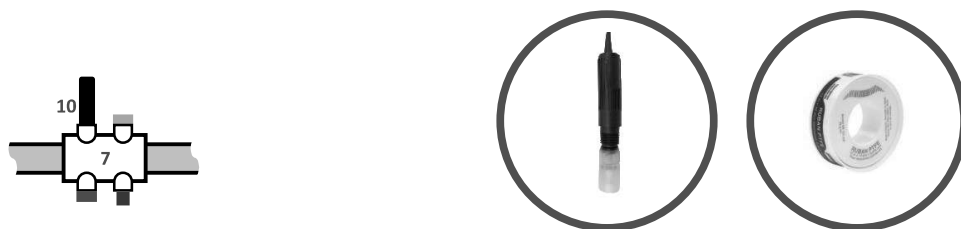
5) Connect the injection connector 5 to the peristaltic pump 18, with the semi-flexible tubing, 4 to be cut as needed.



6.8. Installation of the **POOLSQUAD / POOLSQUAD LOW SALT** measuring equipment



The life of the pH probe depends primarily on the strict observance of all the instructions provided in this manual.

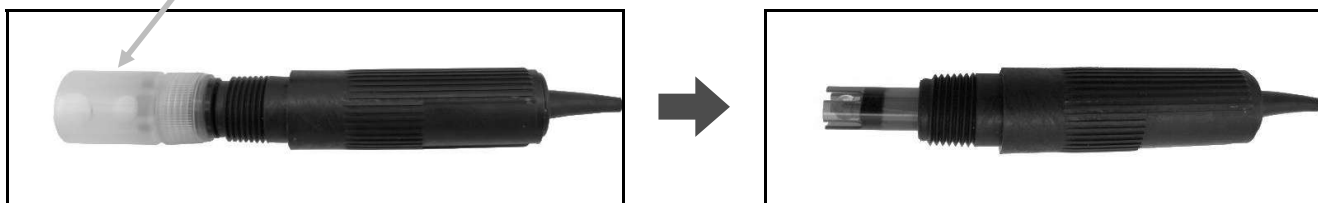


1) Check that the pH probe bulb is properly immersed in the solution inside the storage vial.

If this is not the case:

- Remove the storage vial from the probe (*see photo below*), and keep it for wintering.
- Rinse the bulb with tap water.
- Soak the probe for 30 minutes in tap water or in a suitable KCl solution (saturated potassium chloride).
- Move directly to stage 3).

2) Remove the storage vial from the probe, and keep it for wintering.



Never touch the bulb of the probe.

3) Check that there are no air bubbles inside the bulb. If this is not the case, shake the probe by holding the bulb downwards until the air bubble has risen into the body of the probe.

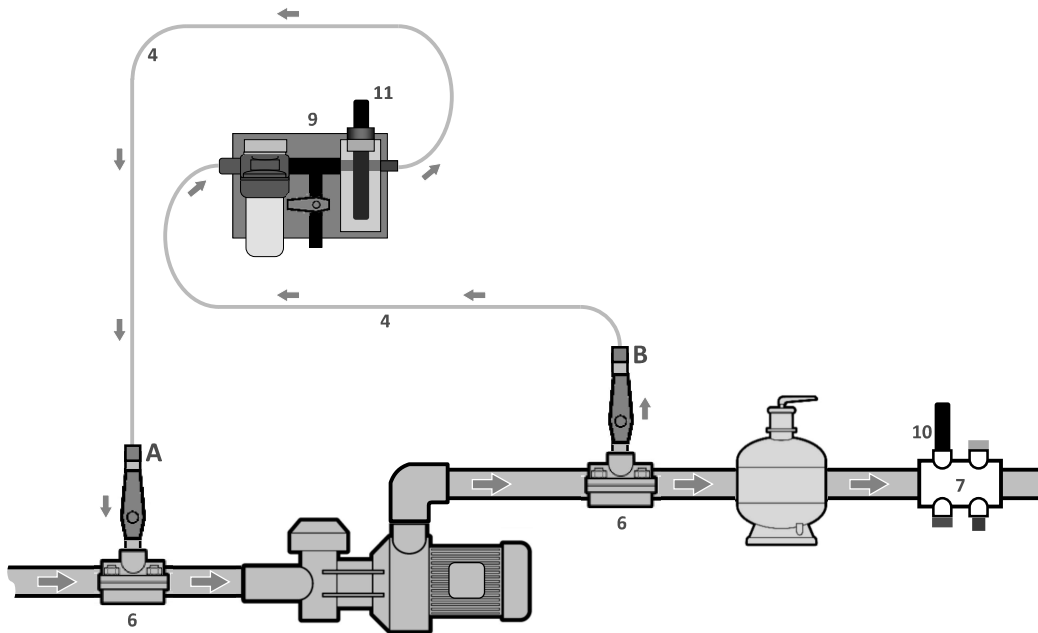
4) Screw the pH probe (10) into the accessories holder (7) using Teflon tape.



The probe must be installed:

- **after the filter and before any treatment device,**
- **on the top of the pipe,**
- **vertically.**

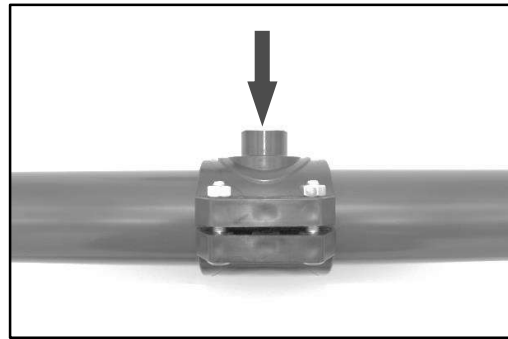
6.9. Installation of **POOLSQUAD AMPERO** measuring equipment



1) **INSTALLING THE 2 SETS 6 (saddle / valve / connector)**

a) Mount the saddle on the pipe, as shown in the image opposite.

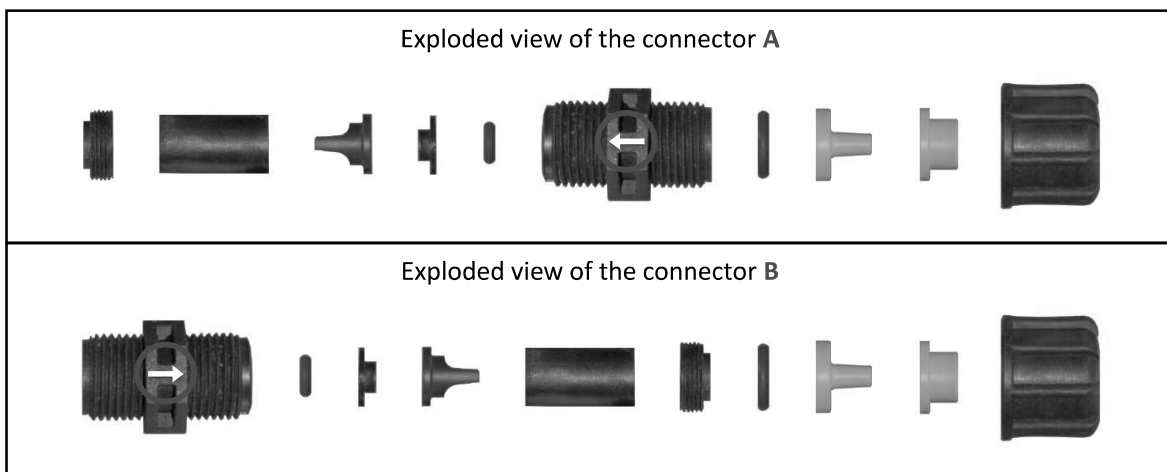
b) Drill the top of the pipe through the hole of the saddle (see arrow opposite), taking care not to damage the tapping.



c) Prepare the 2 connectors A and B following the direction of assembly of the parts shown below.



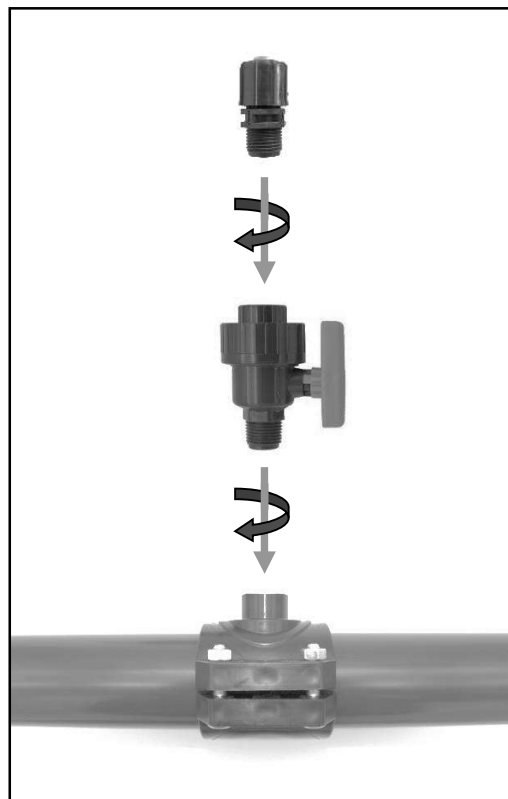
Respect the direction of the arrow engraved on each connector.



c) Assemble the connector and the valve according to the photo opposite, using Teflon tape.



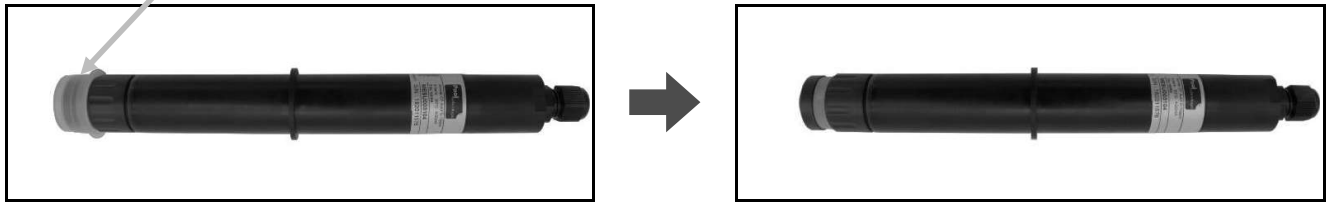
Do not invert the connectors A and B during the assembly: observe the installation diagram shown on the previous page, following the water flow direction.



2) Fix the measuring chamber 9 to the wall.

3) Connect the 2 semi-flexible tubes 4 (to be cut to the appropriate size).

4) Remove the cap from the amperometric probe 11:



5) Half unscrew the tank of the amperometric probe, and fill it with electrolyte:



6) Screw the tank of the amperometric probe back in as far as it will go and tighten, then wipe off the excess electrolyte coming out of the tank.

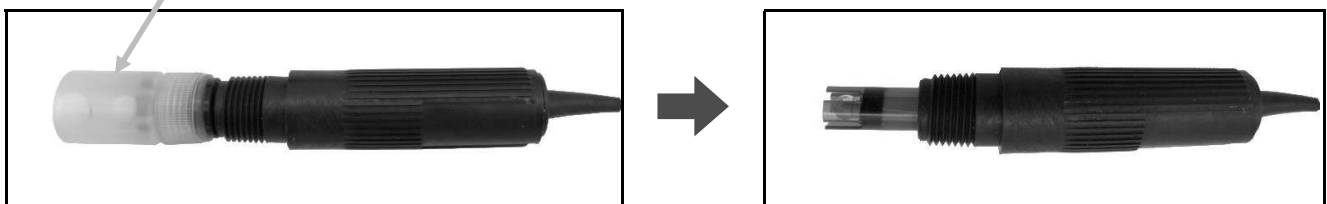
7) Insert the amperometric probe 11 in the measuring chamber 9, like the diagram on the following page.

8) Check that the pH probe bulb is properly immersed in the solution inside the storage vial.

If this is not the case:

- Remove the storage vial from the probe (see photo below), and keep it for wintering.
- Rinse the bulb with tap water.
- Soak the probe for 30 minutes in tap water or in a suitable KCl solution (saturated potassium chloride).
- Move directly to stage 10).

9) Remove the storage vial from the pH probe, and keep it for wintering.



Never touch the bulb of the probe.

10) Check that there are no air bubbles inside the bulb. If this is not the case, shake the probe by holding the bulb downwards until the air bubble has risen into the body of the probe.

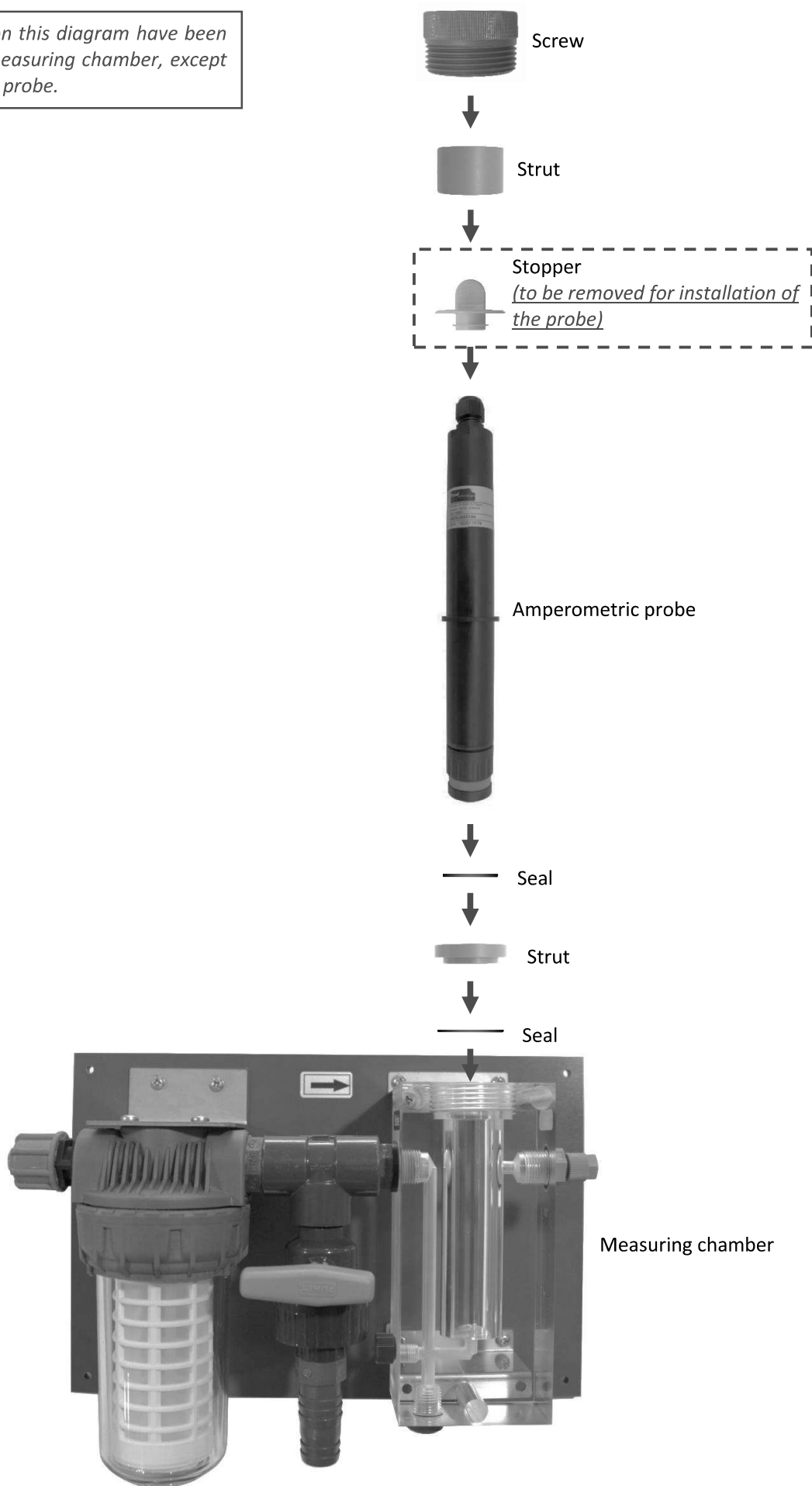
11) Screw the pH probe (10) into the accessories holder (7) using Teflon tape.



The probe must be installed:

- **after the filter and before any treatment device,**
- **on the top of the pipe,**
- **vertically.**

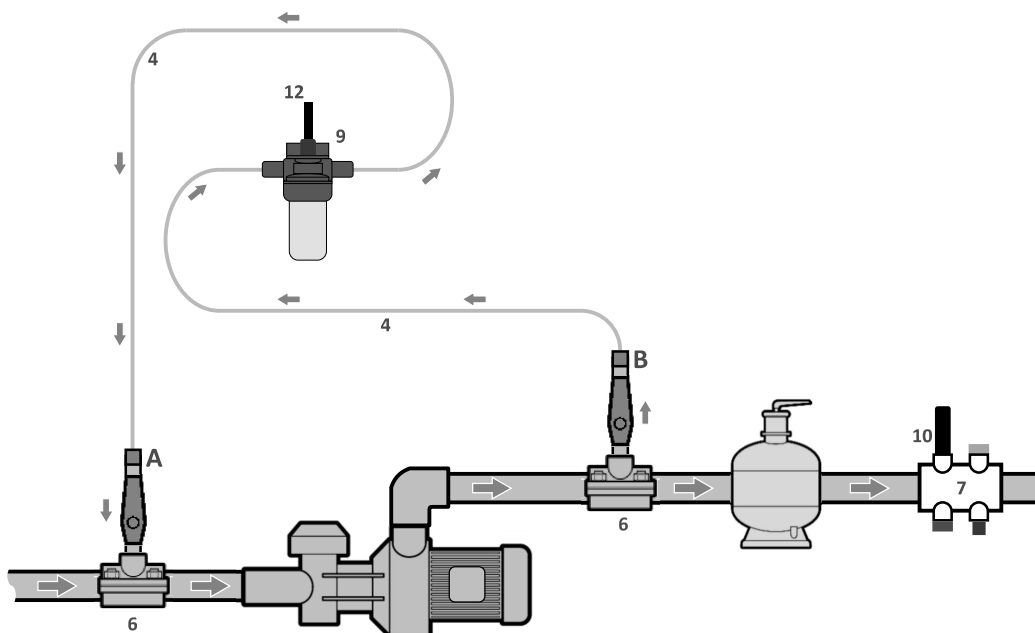
All the parts shown on this diagram have been pre-installed in the measuring chamber, except for the amperometric probe.



6.10. Installation of the **POOLSQUAD PRO** measuring equipment



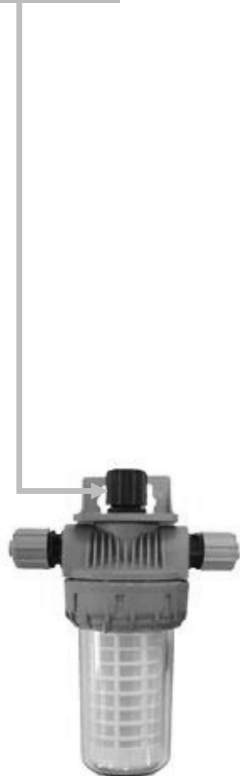
The life of the pH probe depends primarily on the strict observance of all the instructions provided in this manual.



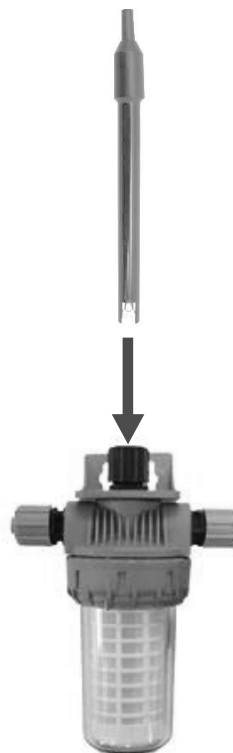
- 1) Install the 2 sets 6 (saddle / valve / connector): see detail on page 15.
- 2) Fix the measuring chamber 9 to the wall.
- 3) Connect the 2 semi-flexible tubes 4 (to be cut to the appropriate size).
- 4) Remove the storage vial from the ORP probe 12:



5) Release the **probe holder** from the measuring chamber 9.



6) Insert the ORP probe into the probe holder:



7) Tighten the probe holder by hand.

8) Check that the pH probe bulb is properly immersed in the solution inside the storage vial.

If this is not the case:

- Remove the storage vial from the probe (*see photo below*), and keep it for wintering.
- Rinse the bulb with tap water.
- Soak the probe for 30 minutes in tap water or in a suitable KCl solution (saturated potassium chloride).
- Move directly to stage 10).

9) Remove the **storage vial** from the pH probe, and keep it for wintering.



Never touch the bulb of the probe.

10) Check that there are no air bubbles inside the bulb. If this is not the case, shake the probe by holding the bulb downwards until the air bubble has risen into the body of the probe.

11) Screw the pH probe (10) into the accessories holder (7) using Teflon tape.

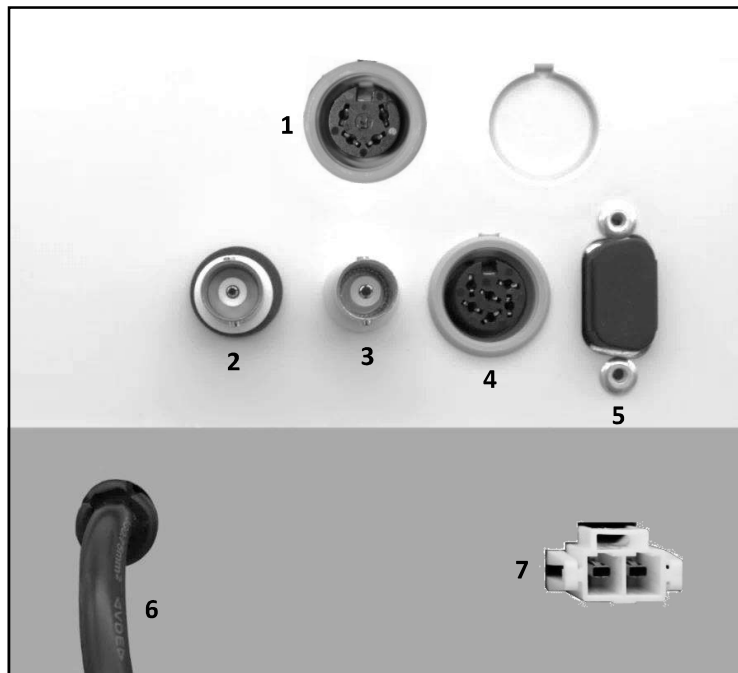


The probe must be installed:

- **after the filter and before any treatment device,**
- **on the top of the pipe,**
- **vertically.**

6.11. Electrical connections

Electronics unit connectors:



- 1 (4-pin connector) : amperometric probe connection.
- 2 (connector with a red collar) : ORP probe connection.
- 3 : pH probe connection.
- 4 (6-pin connector) : connection for salt/temperature/low-water sensor.
- 5 : connection for computer troubleshooting.
- 6 : power cable of the electronics unit (230 V - 50/60 Hz).
- 7 : connecting the cell.



- Before connecting the power cable to the electronics unit, make sure that the electrical installation complies with the standards and regulations in force in the country of installation.
- The connection must be carried out by a qualified electrician.
- Do not use an extension cord.
- Do not connect the electronics unit to an electrical outlet.
- Disconnect the power supply at the circuit breaker beforehand and make sure that the power supply is switched off using suitable tools.



- The power cable of the electronics unit must be connected :
 - permanently to a power supply board.
 - by slaving the electronics unit to the filtration pump contactor. (*Remember: a sufficient flow of water must be maintained in the cell when connected to a power supply.*)
- Do not disconnect the electrical accessories (sensors, probes, ...) from the electronic box when it is powered.

7. START UP

- 1) Make sure that the electronics unit is turned off (*see chapter 9 for how to do this*).
- 2) Spread 5 kg of salt* per m³ around the inner edges of the pool (depending on the volume of the pool).
* High purity salt tablets conforming to the EN 16401 standard, quality A (free from flow agents and anti-caking agents).

At the start of a new season, top up the salt, if necessary, so as to achieve a salt rate of 5 kg/m³.

- 3) Run the filtration pump until the salt poured into the pool is completely dissolved.



All of the following steps must also be regularly carried out once the pool is in use.

- 4) Check the water quality parameters and if necessary calibrate these manually, following the below table:

General visual state	clear, free from algae or sediment
Temperature	above 15 °C
Potential of hydrogen (pH)	between 7.0 and 7.4
Stabilizer levels (cyanuric acid)	below 30 ppm (mg/l)  <u>Do not pour stabilizer into the filtration circuit if an amperometric probe is installed: any stabilizer prevents the measurement of chlorine.</u>
Alkali content (AC)	between 80 ppm and 120 ppm
Water hardness (WH)	less than 60°f
Salt rate	5 kg/m ³
 <u>Any maintenance additive must be prohibited:</u> • <u>This type of product may distort the measurements of the probes.</u> • <u>Any clogging product destroys the probes irreversibly.</u>	

- 5) Program and switch on the filtration pump using the table below:

Water temperature (°C)	16	18	20	22	24	26	28	30	> 30
Hours of filtration per day (h)	8	9	10	11	12	14	17	20	24

→ These figures should only be used as a guide. They should be adjusted if necessary in order to optimise filtration.

Achieving and maintaining free chlorine levels between 0.5 and 1 ppm:

- 6) Measure free chlorine levels with a testing kit.

- 7) • **If free chlorine levels are below 0.5 ppm:**

- a) Set filtration to "AUTO".
- b) Turn on the electronics unit (*see chapter 9 for how to do this*).
- c) Set the production value to 100% (*see chapter 12.2 for how to do this*).
- d) Wait until free chlorine levels reach between 0.5 and 1 ppm.

- **If free chlorine levels are between 0.5 and 1 ppm:**

Turn on the electronics unit (*see chapter 9 for how to do this*).

- **If free chlorine levels are above 1 ppm:**

- a) Wait until free chlorine levels reach between 0.5 and 1 ppm.
- b) Turn on the electronics unit (*see chapter 9 for how to do this*).

- 8) Adjust the production setpoint (*see chapter 12.2 for how to do this*) so that the free chlorine level stays between 0.5 and 1 ppm. Several adjustment tests may need to be carried out, in order to determine an appropriate value for the production setpoint.

→ Heavy use of the pool, incorrect inclination of the nozzles of the basin (these must be tilted slightly downwards), or a tree-filled environment are decisive factors that strongly influence the free chlorine level. In this case, increase the production setpoint, if necessary, to maintain the free chlorine level between 0.5 and 1 ppm.

8. DETAILED INFORMATION ON THE ORP OPERATING MODE

The amount of chlorine required can vary depending on several conditions:

- Covered pool (by sheeting, cover or panels)
 - *Small amount of chlorine required (due to absence of UV), but risk of excessive chlorine levels due to continual production.*
- Sudden rise in the number of people using the pool
 - *Very large amounts of chlorine needed, but on a temporary basis.*
- Indoor pool or sheltered pool
 - *Reduced need for chlorine (because of low exposure to external pollution), but which tends to increase depending on the frequency of use of the swimming pool.*

Given this range of possible circumstances, it is necessary to manage chlorine production according to requirements. The ORP operating mode allows you to react to each of these situations.

The ORP measurement (in mV), reflecting the oxidation (or reduction) potential of the water, is a major indicator of the pool's water quality.

According to the WHO, an ORP measurement of 650 mV guarantees disinfected water that is itself capable of disinfecting. Despite the use of this value as a reference, this can only be on a theoretical level, because ORP measurements can easily vary depending on the following parameters:

- The pH.
- The type of chlorine (stabilised or non-stabilised).
- The presence of dissolved elements that can affect the water (metals, phosphates, surfactants).
- The cleanliness of the filter.
- The presence of stray currents.
- presence of flocculants (as a deposit on the probes).

- The ORP measurement: - is not a measurement of free chlorine levels.
 - varies according to free chlorine levels and all elements in the water.

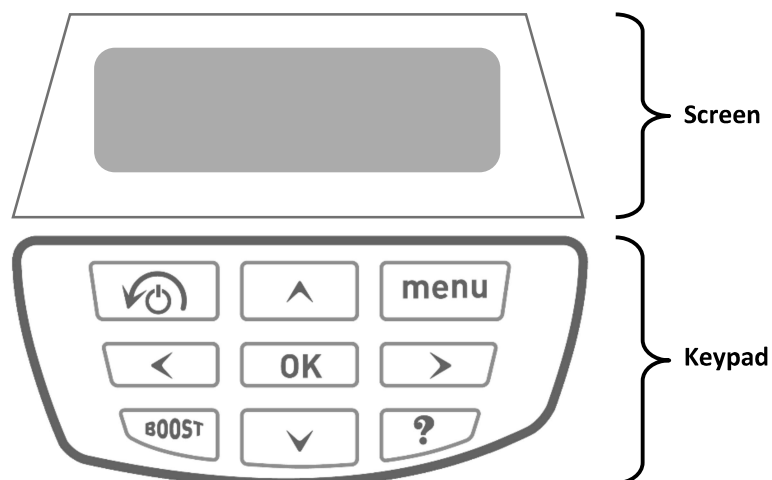
NECESSARY PREREQUISITES FOR THE ORP OPERATING MODE:

- pH regulation.
 - Stabilizer level between 20 and 30 ppm.
 - Grounding of pipework into which the probes are installed (*with the Pool Ground*).
 - No use of water from boreholes.
 - Installation of the ORP probe at least 30 cm before the cell.
 - Balanced water profile (free chlorine levels at 1 ppm, and pH at 7.2).
 - ORP setpoint adjusted according to the ORP measurement displayed (*a value between 500 and 700 mV can be considered as correct*).
- When using a chemical (flocculant, waterline cleaning, sequestrant), check the ORP measurement before and after use of this product. If the ORP measurement drops sharply, stop the ORP check for a few days, until the effects of the product on the ORP measurement disappear.
 - Influence of chloramines on the ORP measurement: as chloramine levels tend to increase, the ORP measurement tends to decrease.
 - The use of sulphates is permitted, provided they remain at levels below 360 ppm.
 - The use of copper sulphates is strictly forbidden.



The ORP check in no case eliminates the need to regularly check free chlorine levels.

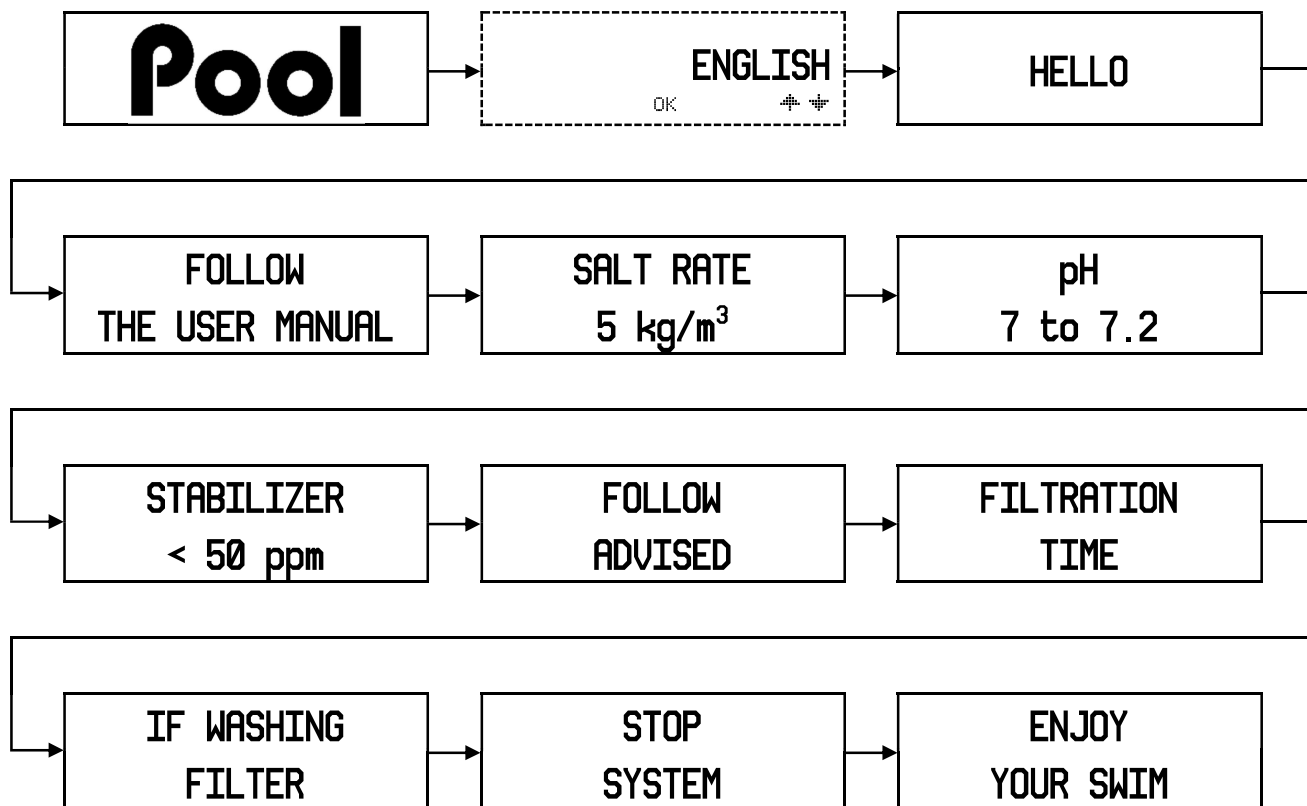
9. ELECTRONICS UNIT INTERFACE



Key(s) on the keypad	Function(s)
	- Switching the electronic box on/off (<i>press and hold</i>) - Return to the previous display or menu - Switching off the boost mode (<i>see chapter 14</i>)
 	Selecting a value or setting
   	Menu navigation
OK	- Confirmation - Entering a menu
BOOST	Activating the Boost Mode (<i>see chapter 14</i>)
menu	Access to the menu structure 2 (<i>see chapter 13</i>)
?	Display of professional contact information (<i>see chapter 11 - step 3</i>)

10. WHEN CONNECTING THE ELECTRONICS UNIT TO A POWER SUPPLY

This display acts as both a friendly hello and a reminder of the basic recommendations to be followed.



→ To speed up this display, press **menu** quickly several times.

→ To stop this display and go directly to the next display, press on .

Display outlined with dotted line:

- appears only when the electronics unit is first commissioned.
- enables selection of the display language (default setting: ENGLISH).

→ Select a display language with the keys ▲▼, then press the **OK** key to confirm.

Available languages:

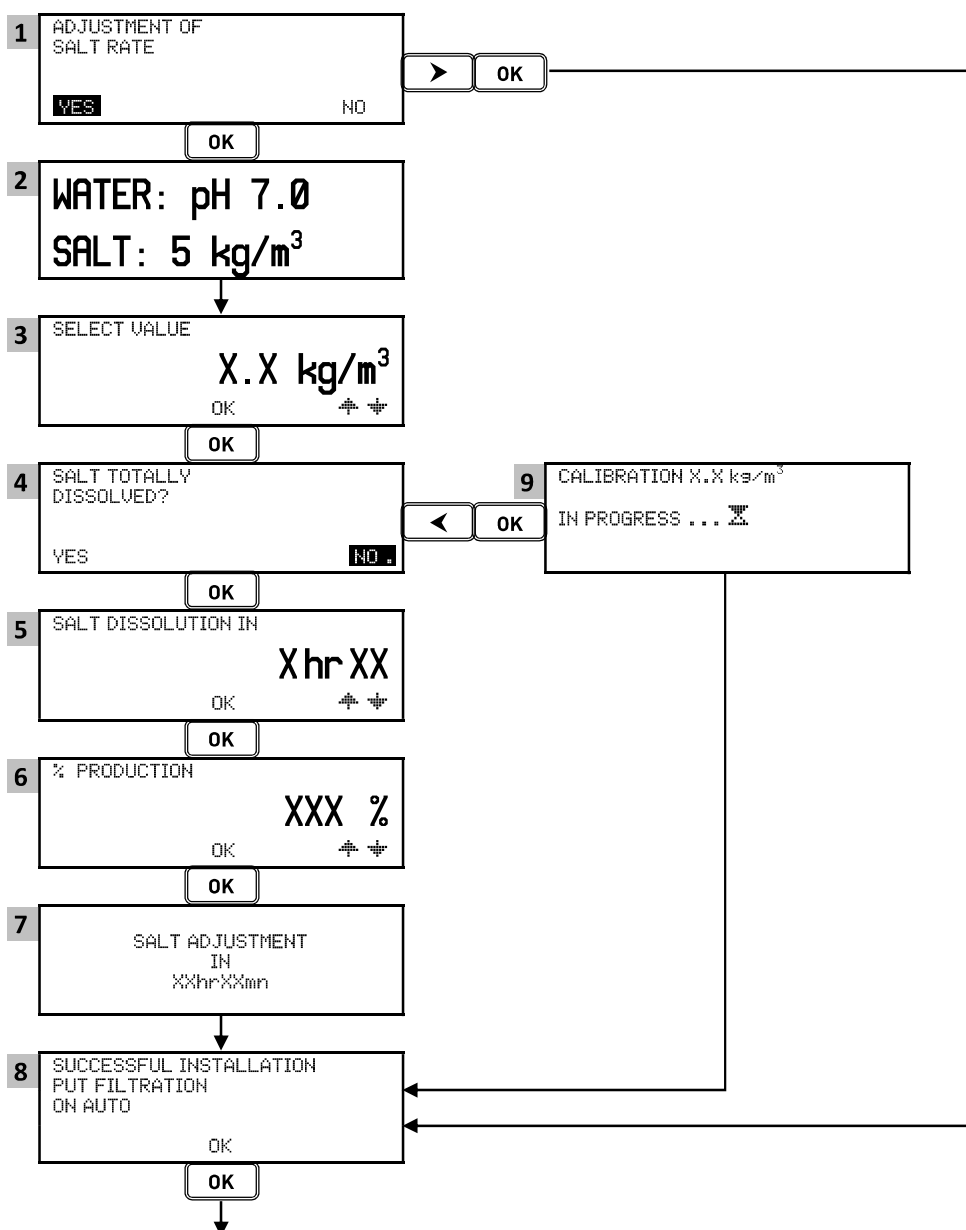
- CZECH
- DEUTSCH
- ENGLISH
- ESPANOL
- FRANCAIS
- ITALIANO
- NEDERLANDER
- POLISH
- PORTUGUES
- TURKISH.

11. PROGRAMMING THE FIRST COMMISSIONING

This programming is automatically displayed and only when the electronics unit is first commissioned, just after the power-on display (see chapter 10). This programming is carried out by the user.

Displays **6** and **9**: not included in the **AUTOSALT** model .

1 FILTRATION ON MANUAL? YES NO Check that the filtration is in "MANUAL" mode. Press on OK to confirm.	2 USER'S NAME A . ⬅ OK ➡ ⬅ ➡ Enter a user name: select the letters with the keys ▲ ▼, select the digits with the keys ◀ ▶. Press on OK to validate.	3 PROFESSIONAL NAME YES NO To enter business contact details, press on OK. The default coordinates displayed are those of POOL TECHNOLOGIE. 4 successive displays are available (name, internet address, telephone number and Indigo number, for example). For each display, select the letters or numbers with the keys ▲ ▼, select the digits with the keys ◀ ▶, press on OK to validate. Otherwise, go to NO pressing on ➡, then press on OK.
4 UNIT SERIAL NO. 0000-000000-000 ⬅ OK ➡ ⬅ ➡ Enter the serial number of the electronics unit (this number is on the label attached to the box): select the statistics with the keys ▲ ▼, select the digits with the keys ◀ ▶. Press on OK to validate.	5 CELL SERIAL NO. 00 / 0000M ⬅ OK ➡ ⬅ ➡ Enter the serial number of the chlorinator cell (this number is on the cell itself): select the statistics with the keys ▲ ▼, select the digits with the keys ◀ ▶. Press on OK to validate.	6 SERIAL NUM pH PROBE 000000 ⬅ OK ➡ ⬅ ➡ Enter the serial number of the pH probe (this number is on the probe itself): select the statistics with the keys ▲ ▼, select the digits with the keys ◀ ▶. Press on OK to validate.
7 POOL VOLUME XXX m³ OK ⬅ ➡ Enter the value of the volume of the pool, with the keys ▲ ▼. Press on OK to validate.	8 pH WATER 7 to 7.4? YES NO Check that the pH value is between 7 and 7.4. If this is not the case, adjust the pH manually to obtain this value. Press on OK to confirm.	9 START pH REGUL? YES NO To prime the pH pump, press on OK. Press on OK again to stop priming. Otherwise, go to NO pressing on ➡, then press on OK.

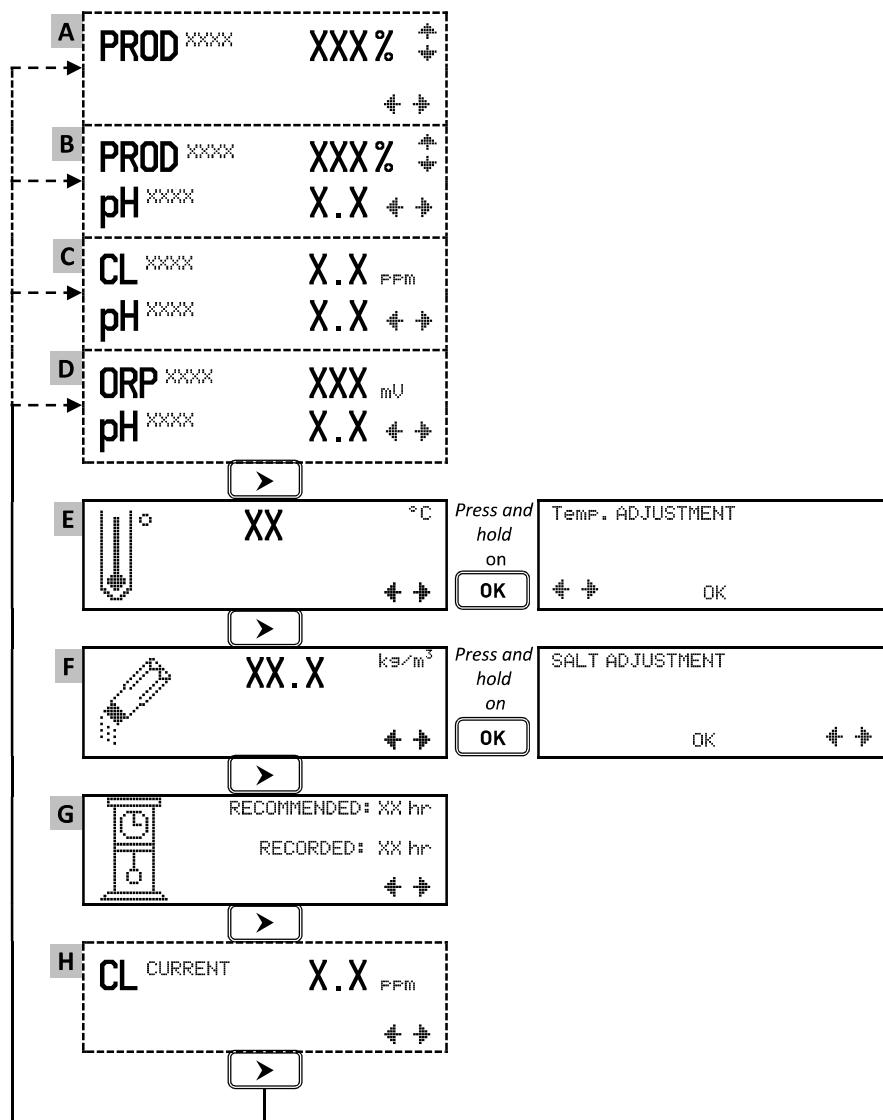


The programming is complete.
The display when the power is
turned on reappears.

- 1: Option to fill in the value of the salt rate poured into the pool.
- 2: Reminder of the recommended values of pH and salt rate.
- 3: Enter the value of the salt rate poured into the pool, with the keys ▲ ▼.
- 4: Enter whether the salt poured into the pool is completely dissolved or not.
- 5: Enter an estimate of the time required for total salt dissolution, with the keys ▲ ▼.
- 6: Enter a chlorine production setpoint, with the keys ▲ ▼.
- 7: Wait for the time displayed.
- 8: Set the filtration system to "AUTO" mode.
- 9: Wait a few seconds.

12. MENU STRUCTURE 1

12.1. Display / Navigation



12.2. Menus A to H

Menu	Description
A	Initial AUTOSALT display
B	Initial POOLSQUAD and POOLSQUAD LOW SALT display Initial POOLSQUAD AMPERO display in % mode* Initial POOLSQUAD PRO display in % mode*
C	Initial POOLSQUAD AMPERO display in Cl mode*
D	Initial POOLSQUAD PRO display in ORP mode*
E	Measures the water temperature
F	Salt rate measurement
G	Daily filtration time RECOMMENDED: recommended value (estimation with respect to the temperature of the water). RECORDED: instantaneous real value (<u>only displayed after 1 hour of filtration</u>).
H	Measurement of free chlorine (POOLSQUAD AMPERO only)

* See chapter 13.9 to select this mode of operation.

Initial displays	Meaning
PROD XXX %	<u>PROD</u> : Chlorination in % mode. <u>XXX%</u> : Setpoint for chlorine production, adjustable with the keys ▲ ▼.
pH X.X	<u>pH</u> : PH regulation. <u>X.X</u> : PH measurement.
CL X.X	<u>CL</u> : Chlorination in Cl mode. <u>X.X ppm</u> : Measurement of free chlorine (average of the last 24 hours).
ORP XXX	<u>ORP</u> : Chlorination in ORP mode. <u>XXX mV</u> : ORP measurement.

Display just at the top right of PROD, pH, CL, ORP	Status of the associated function (PROD, pH, CL, or ORP)
ON	activated and running
OFF	deactivated
STOP	stopped by an alarm
No display	activated but stopped

Other displays possible	Meaning
PROD	Boost mode enabled (<i>see chapter 14</i>) (Display with electrolysis in % mode).
ORP	Boost mode enabled (<i>see chapter 14</i>) (Display with electrolysis in ORP mode).
CL	Boost mode enabled (<i>see chapter 14</i>) (Display with electrolysis in Cl mode).
pH	Dosing mode enabled (<i>see chapter 15</i>).
pH ???	PH probe to be calibrated (<i>see chapter 13.21</i>).
CL ???	Amperometric probe to be calibrated (<i>see chapter 13.10</i>).
ORP ???	ORP probe to calibrate (<i>see chapter 13.13</i>).
???	Salt rate to be filled in. → To fill in the salt rate, go to the "SALT ADJUSTMENT" menu.
	(This pictogram appears at the bottom of the menu screen F) Insufficient salt rate. → Press on key " ? ": The amount of salt to add is displayed.

12.3. "Temp. ADJUSTMENT" menu

Calibrates the water temperature measurement (displayed on the menu **E**).

Setting: From 15 to 35°C, in increments of 1.

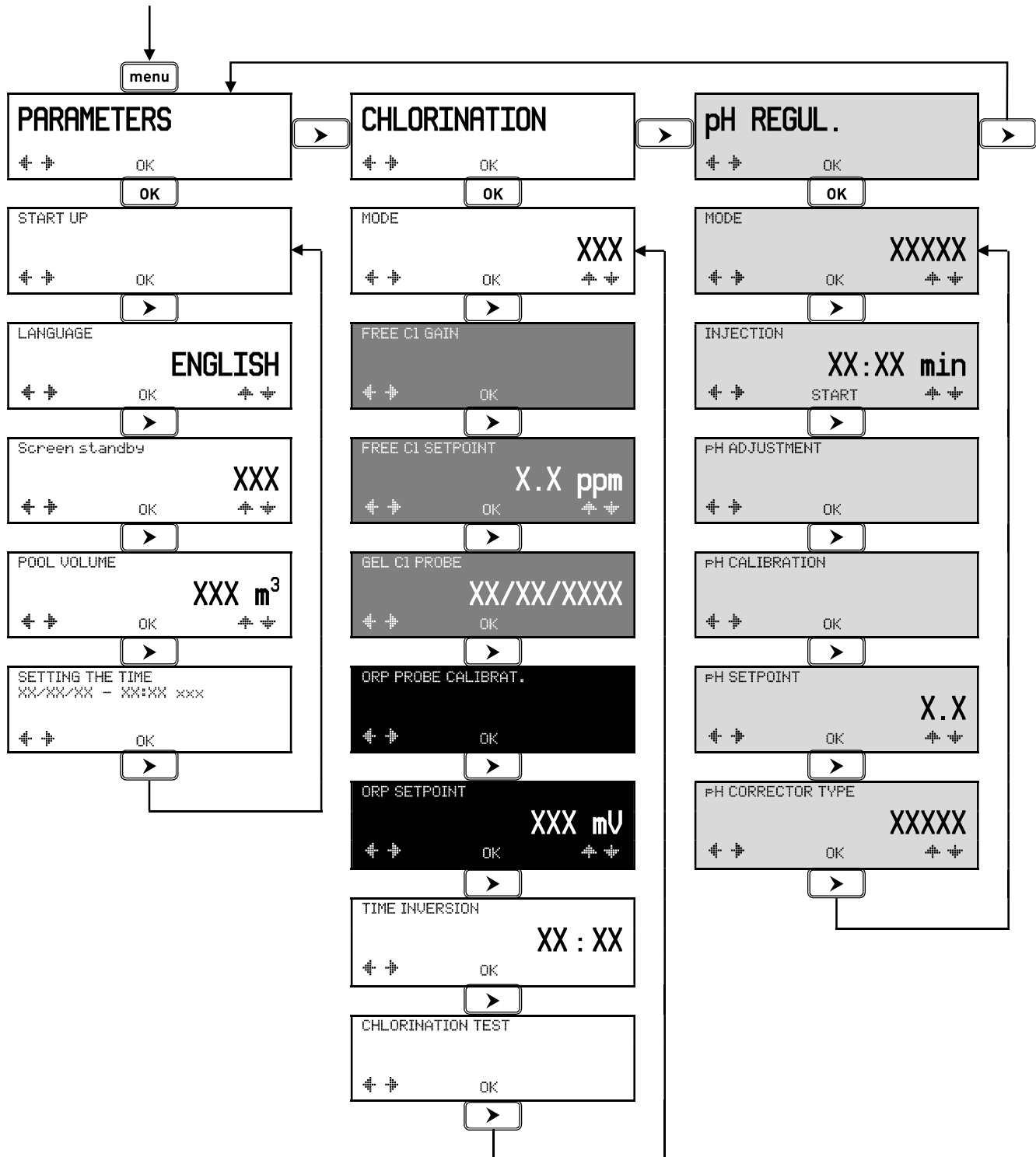
12.4. "SALT ADJUSTMENT" menu

Calibrates the salt rate measurement (displayed on the menu **F**).

Setting: from 1 to 8 kg/m³, in increments of 0.5.

13. MENU STRUCTURE 2

13.1. Display / Navigation



Key:

AUTOSALT: white.

POOLSQUAD / POOLSQUAD LOW SALT: white + light grey.

POOLSQUAD AMPERO: white + light grey + dark grey.

POOLSQUAD PRO: white + light grey + black.

13.2. "PARAMETERS" menu

Accesses the menus included within it.

13.3. "START UP" menu

Guides the user through the recommissioning of the equipment after prolonged switching off or wintering.

This program includes various recommendations and automatic settings, depending on the operating mode (% , Cl, ORP)*, and according to the data provided by the user.

* See chapter 13.9 to select a mode of operation.

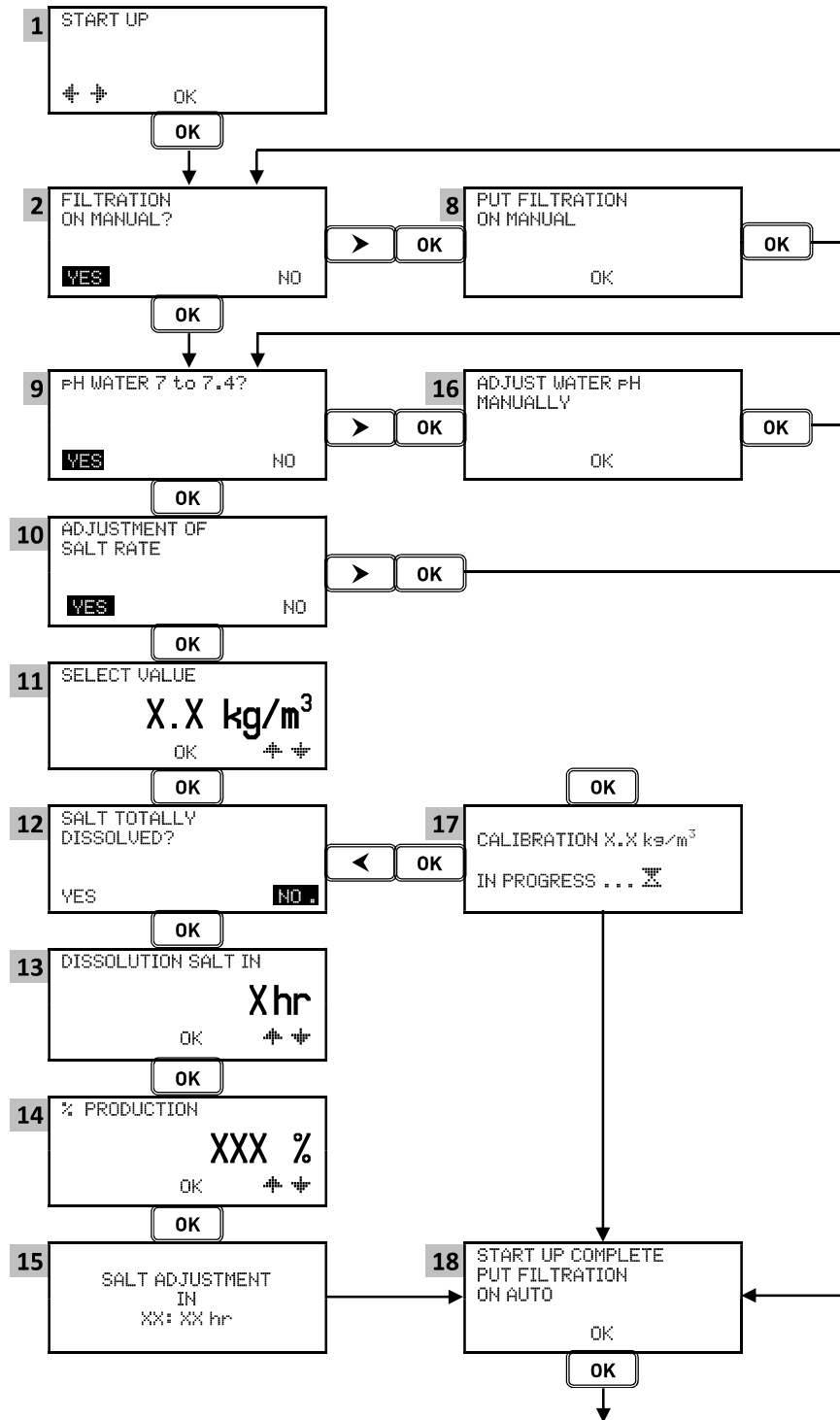
→ The various displays/navigations of this program are detailed on the following pages.

→ All displays are described in the table below.

Display	Meaning
1	Initial display of the menu.
2	Check that the filtration is in "MANUAL" mode".
3	Option to calibrate the pH probe.
4 - 5	Basic recommendations for the pH probe.
6 - 7 - 20 - 21	Operations to carry out with the pH probe.
8	Put the filtration in "MANUAL" mode.
9	Check that the pH is between 7 and 7.4.
10	Option to adjust the salt rate measurement (value displayed on the menu F , chapter 12.1).
11	Enter a value for the salt rate, with the keys ▲▼.
12	Enter whether the salt poured into the pool is completely dissolved or not.
13	Enter an estimate of the time required for total salt dissolution, with the keys ▲▼.
14	Enter a production setpoint, with the keys ▲▼.
15	Time needed to dissolve the salt, in real time.
16	Manually adjust the pH to a value between 7 and 7.4.
17 - 19 - 22 - 39	Wait a few seconds.
18	Put the filtration in "AUTO" mode.
23	The calibration of the pH probe is complete.
24	The pH probe is defective. Change the pH probe.
25	The calibration of the pH probe is complete. Visually check the condition of the probe and then attempt the calibration again by pressing on OK .
26	Option to activate the Dosing mode: The Dosing mode programmes pH corrector injections at regular intervals, to compensate for a probe failure that disables pH regulation.
27	Option to change the electrolyte gel of the amperometric probe.

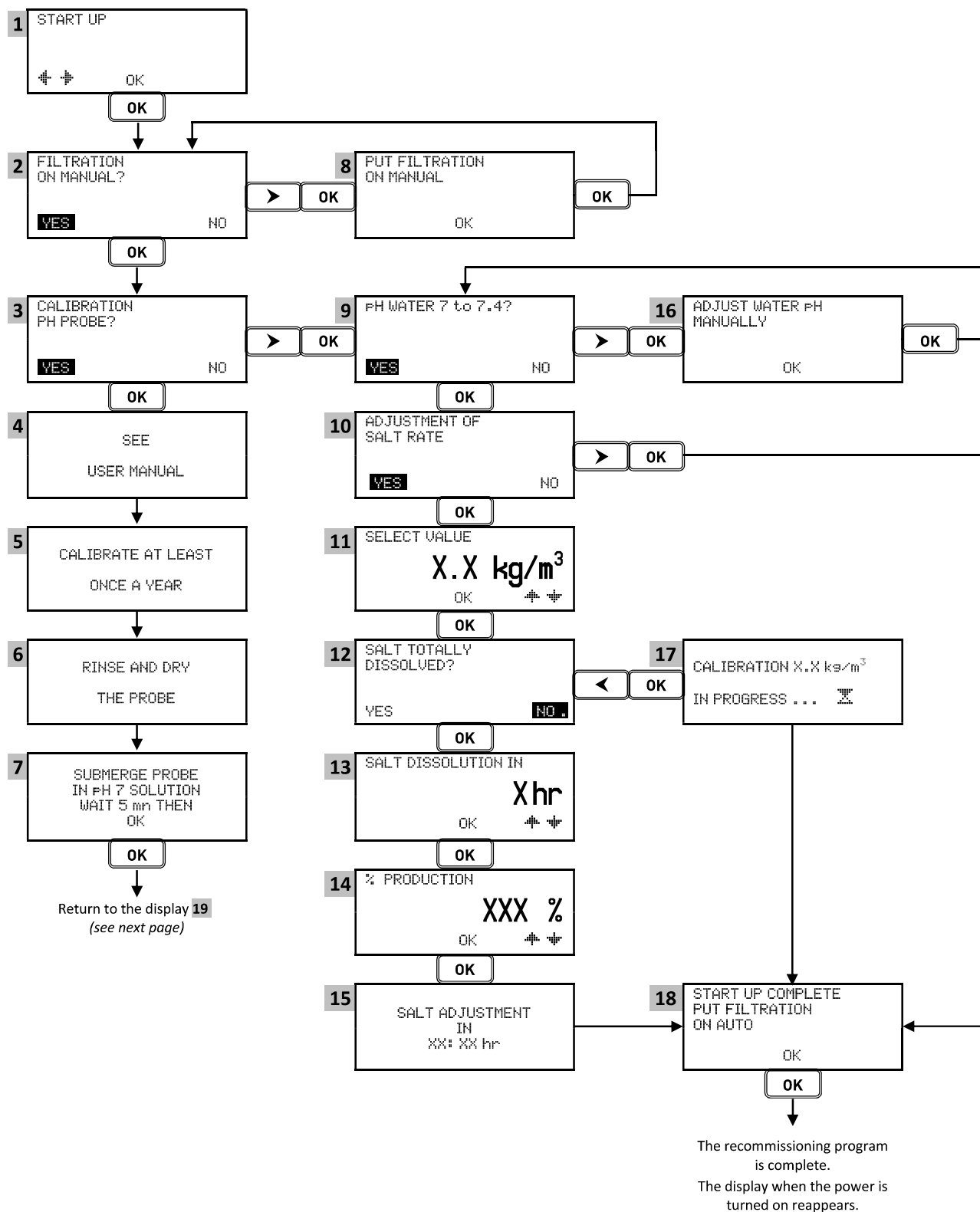
28	Reminder message that the pre-filter of the measuring chamber needs cleaning (<i>circled below</i>) when changing the gel in the amperometric probe. 
29	Request for confirmation of gel change.
30	The date of the gel change is stored.
31	Option to activate or deactivate the alarm giving a reminder of the next gel change. This alarm is intended to be displayed after a certain number of days after the date of the last gel change.
32	Program the number of days mentioned above, with the keys ▲▼.
33	Option to calibrate the ORP probe.
34 - 35	Basic recommendations for the ORP probe.
36 - 37	Operations to carry out with the ORP probe. The "STANDARD SOLUTION" is the ORP calibration bottle supplied.
38	The mV value is the same voltage as the calibration solution. <u>This value must be the one indicated on the ORP calibration bottle.</u> The default display is 470 mV (standard value). If required, correct this value with the keys ▼▲.
40	The calibration of the ORP probe has failed. Visually check the status of the probe and then attempt the calibration again, several times if necessary, by pressing on OK. If the calibration still fails, change the ORP probe and recalibrate.
41	The calibration of the ORP probe has been successful.

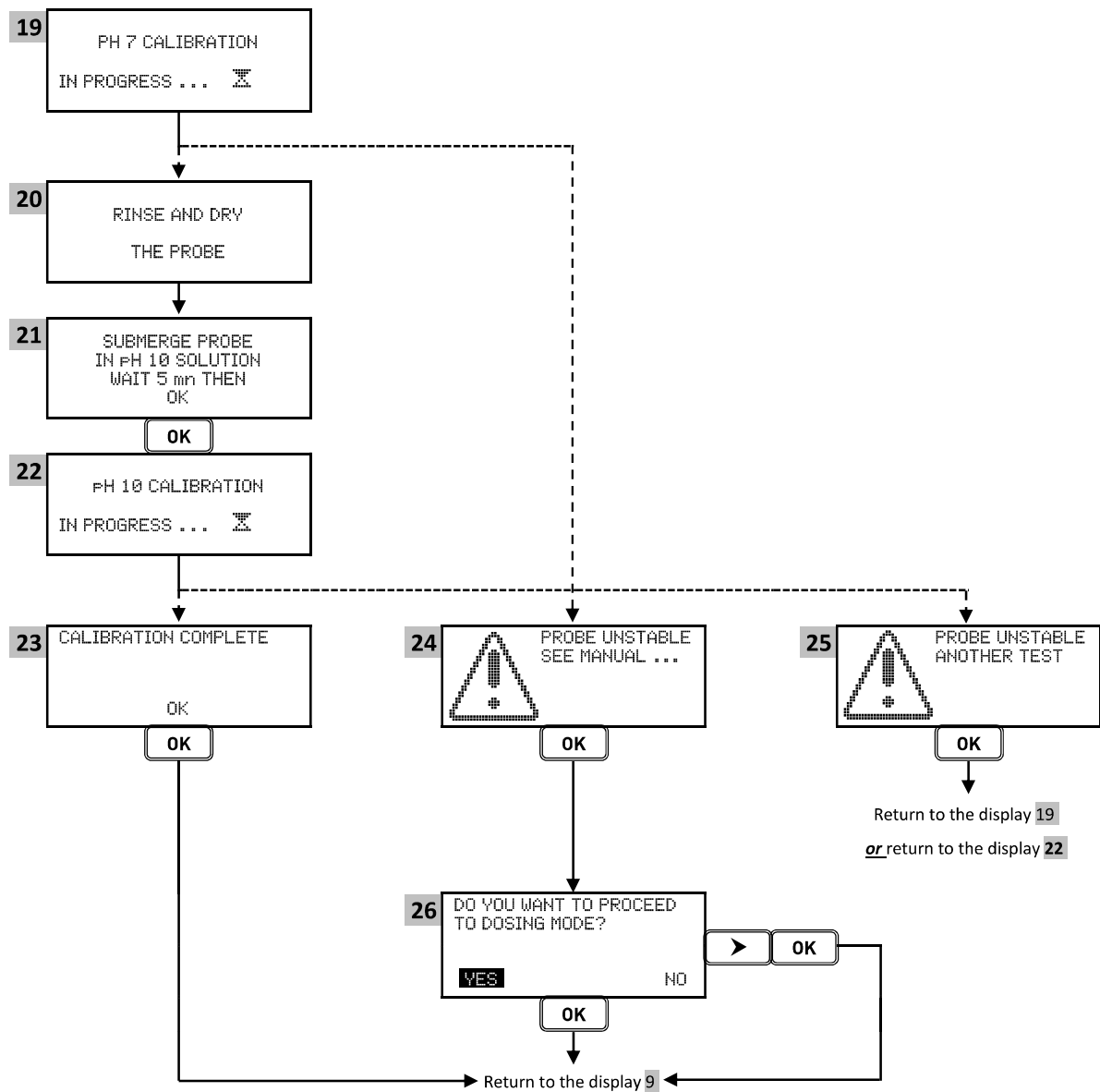
Display / Navigation AUTOSALT:



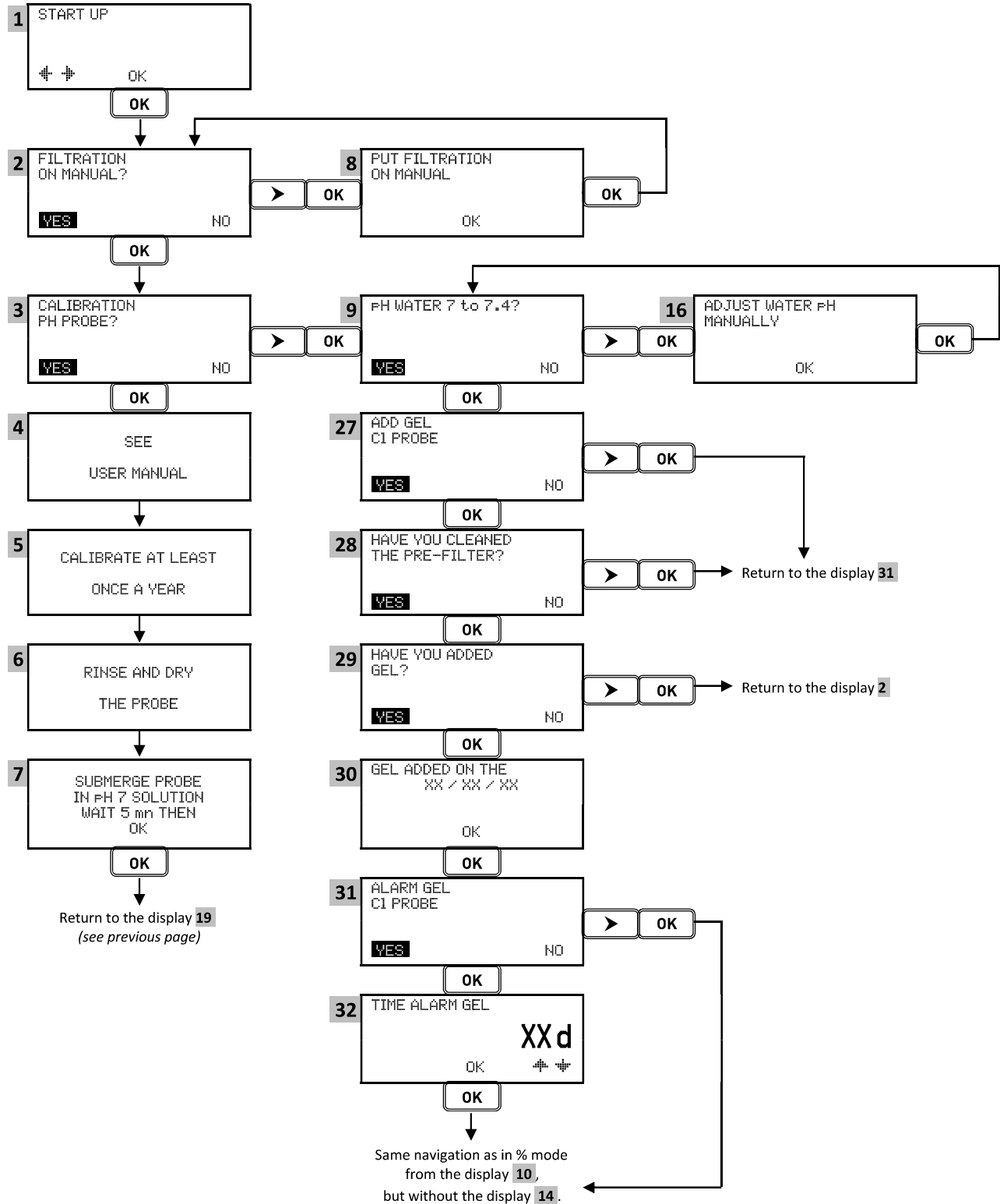
The recommissioning program
is complete.
The display when the
power is turned on reappears.

Display / Navigation all models except AUTOSALT, in % mode:

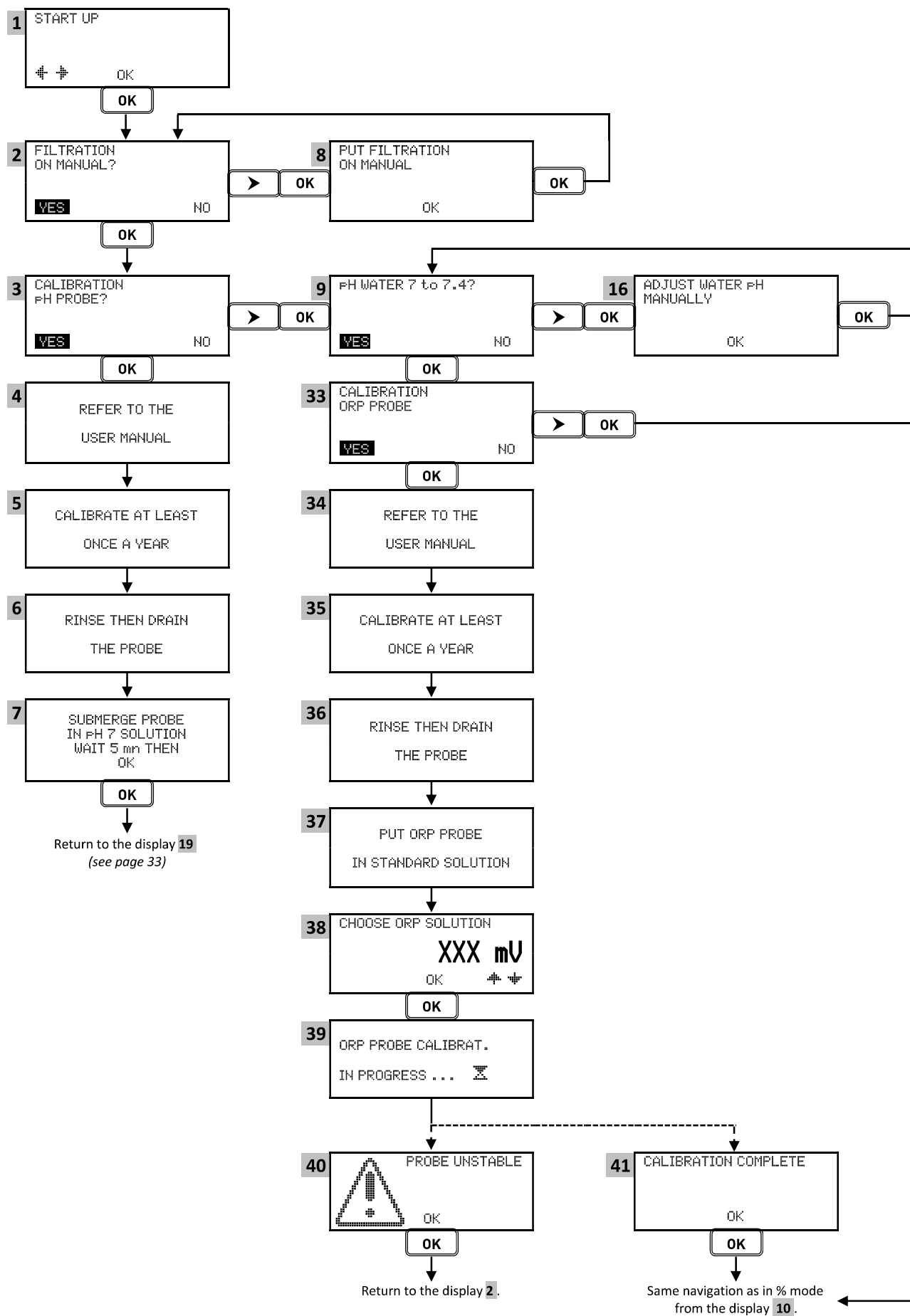




Display/Navigation POOLSQUAD AMPERO in CI mode:



Display/Navigation POOLSQUAD PRO in ORP mode:



13.4. LANGUAGE" menu"

Allows you to change the display language.

Setting: - CZECH

- DEUTSCH
- ENGLISH
- ESPANOL
- FRANCAIS
- ITALIANO
- NEDERLANDER
- POLISH
- PORTUGUES
- TURKISH

Default setting: FRENCH.

13.5. "Screen standby" menu

Enables/disables the standby display. <u>Setting:</u> - ON (to activate) - OFF (to disable) <u>Default setting:</u> ON.	The standby display, if enabled, appears after 5 minutes without any keypad operation:   <u>This display is not an indicator of whether the electronics unit is switched on or off.</u> → To exit the standby display, press on any key.
--	--

13.6. "POOL VOLUME" menu

Enables the entering of the volume of the swimming pool, to ensure the electronics unit operates appropriately and adequately.

Setting: from 5 to 300 m³, in increments of 5.

Default value: 160 m³.

13.7. "SETTING THE TIME" menu

Sets the date and time.

Setting: day/month/year - hour/minute.

Default setting: local date and time in France (UTC+1 time zone).

13.8. "CHLORINATION" menu

Accesses the menus included within it.

13.9. "MODE" menu

Allows you to select the operating mode of the electrolytic cell.

Setting (depending on the device, see table below):

- % (Continual production, at the production setpoint)
- Cl (Production check with amperometric probe, following free chlorine setpoint)
- ORP (Production check with ORP probe, following the ORP setpoint)
- OFF (Deactivation of the electrolytic cell)

Default setting: %.

	% mode	Cl mode	ORP mode	OFF mode
AUTOSALT	✓			✓
POOLSQUAD POOLSQUAD LOW SALT	✓			✓
POOLSQUAD AMPERO	✓	✓		✓
POOLSQUAD PRO	✓		✓	✓

13.10. "FREE Cl GAIN" menu

→ If the Cl mode is not selected (see chapter 13.9), this menu does not appear.

Calibrates the free chlorine measurement (displayed on the menu **C** chapter 12.1).

Setting: 0.2 to 5 ppm, in increments of 0.1.

13.11. "FREE Cl SETPOINT" menu

→ If the Cl mode is not selected (see chapter 13.9), this menu does not appear.

Allows you to set the free chlorine setpoint.

Setting: 0.2 to 5 ppm, in increments of 0.1.

Default value: 0.7 ppm.

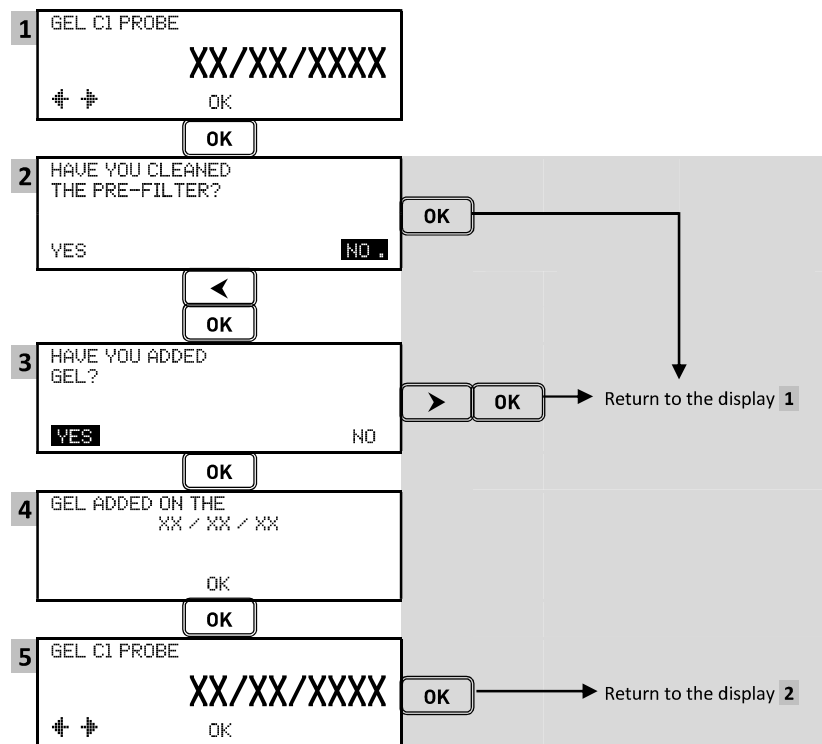
13.12. "GEL CI PROBE" menu

→ If the CI mode is not selected (see chapter 13.9), this menu does not appear.

Displays the date of the last change of the electrolyte gel of the amperometric probe.

→ This date must be updated with each gel change, so that the user receives a notification on the day where another gel change must be carried out. A reminder message to change the gel appears systematically after a certain number of days (see page 53). To program this number of days, go to the display **32** (see page 35).

To update this date, carry out the navigation below (*the grey part is for informational purposes only*):



1: Initial display of the menu.

2: Reminder message that the pre-filter of the measuring chamber needs cleaning (*circled below*) when changing the gel in the probe.



3: Request for confirmation of gel change.

4: Date of the update in real time.

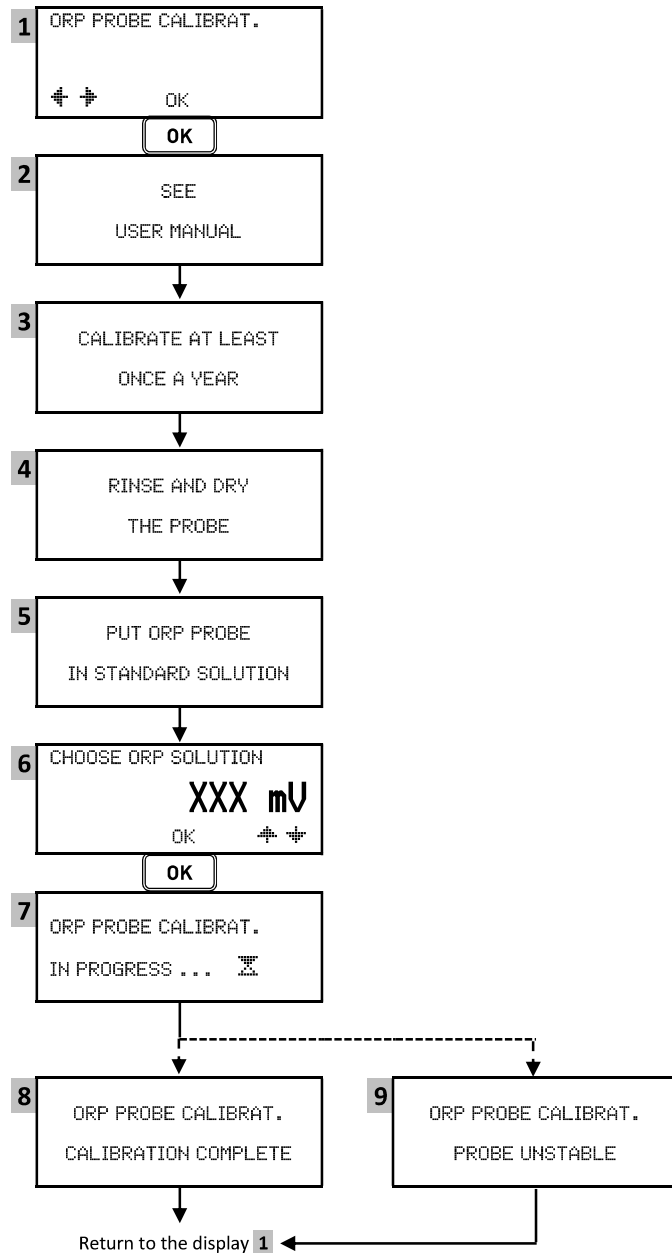
5: Confirmation of the date of update.

13.13. "ORP PROBE CALIBRAT." menu

→ If the ORP mode is not selected (see chapter 13.9), this menu does not appear.

Allows you to carry out a calibration of the ORP probe.

Display / Navigation:



1: Initial display of the menu.

2, 3: Basic recommendations.

4, 5: Operations to carry out.

The "STANDARD SOLUTION" is the ORP calibration bottle supplied.

6: The mV value is the same voltage as the calibration solution. This value must be the one indicated on the ORP calibration bottle. The default display is 470 mV (standard value). If required, correct this value with the keys ▼▲.

7: Wait a few seconds.

8: The calibration is complete.

9: The calibration has failed.

In this case, visually check the condition of the probe, and then attempt the calibration again, several times if necessary. If the calibration still fails, change the ORP probe and recalibrate.

13.14. "ORP SETPOINT" menu

→ If the ORP mode is not selected (see chapter 13.9), this menu does not appear.

Allows you to set the ORP value.

Setting: from 200 to 900 mV, in increments of 5.

Default value: 650 mV.

13.15. "TIME INVERSION" menu

→ *If the OFF mode is selected (see chapter 13.9), this menu does not appear.*

- **On electronics unit AUTOSALT model:**

Allows you to set the frequency at which flow through the cell is reversed.

Setting: from 3 hours to 24 hours, in 30-minute increments.

Default value: 6 hr.

- **On electronics unit for other models:**

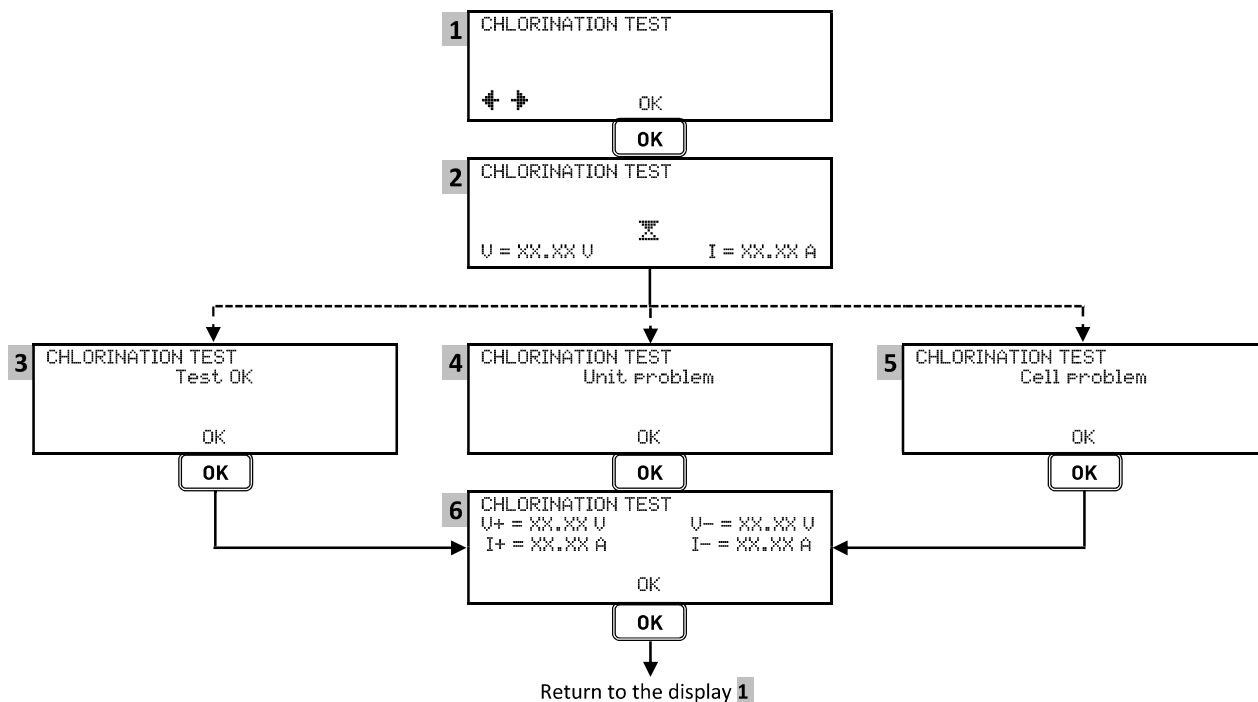
Displays the inversion frequency of the current that powers the cell. This value is adjusted automatically according to the water parameters.

13.16. "CHLORINATION TEST" menu

→ If the OFF mode is selected (see chapter 13.9), this menu does not appear.

Enables self-diagnosis of the operation of the electrolysis.

Display / Navigation:



Display	Description	Fault detected	Checks and solutions
1	Initial display	-	-
2	Instantaneous tension and intensity to the terminals of the cell	-	-
3	Test result	No defects detected in the equipment	-
4		Anomaly in the power circuit of the electronics unit	Contact a professional to repair the electronics unit
5		Anomaly in the cell	- Check that scale deposits have not built up on the cell (<i>to remove scale, see chapter 17.2</i>). - For AUTOSALT equipment: check and adjust if necessary the inversion frequency of the current which powers the cell (<i>see chapter 13.15</i>). - Check that the electrical connections to the terminals of the cell are sufficiently tight and not oxidised. - Check that the cell's power cable is in a good condition. - Check that the cell's power cable connector is correctly connected to the electronics unit. - As a last resort, replace the cell.
6	Peak voltages and currents recorded during the test, between each terminal of the cell (+ -) and the mass	-	-

13.17. "pH REGUL." menu

Accesses the menus included within it.

13.18. "MODE" menu

Allows you to enable/disable the pH regulation function.

Setting: - SMART (to activate)
- OFF (to disable)

Default setting: SMART.

13.19. "MANUAL INJECTION" menu

→ ***If the pH Regulation function is deactivated (see chapter 13.18), this menu does not appear.***

- Allows you to carry out a pH corrector injection for a determined duration.
- Allows you to check that the peristaltic pump is working correctly.
- Allows you to prime the peristaltic pump (when changing the pH corrector container).

Setting: 30 sec to 10 min, in 30-sec increments.

Default value: 2 min.

→ To launch an injection, press on **OK**.

→ To stop the injection before the elapsed time, press again on **OK**.

13.20. "pH ADJUSTMENT" menu

→ ***If the pH Regulation function is deactivated (see chapter 13.18), this menu does not appear.***

Allows you to calibrate the pH measurement (displayed on menus **B**, **C**, **D** chapter 12.1).

Setting: from 6 to 8, in increments of 0.1.

13.21. "pH CALIBRATION" menu

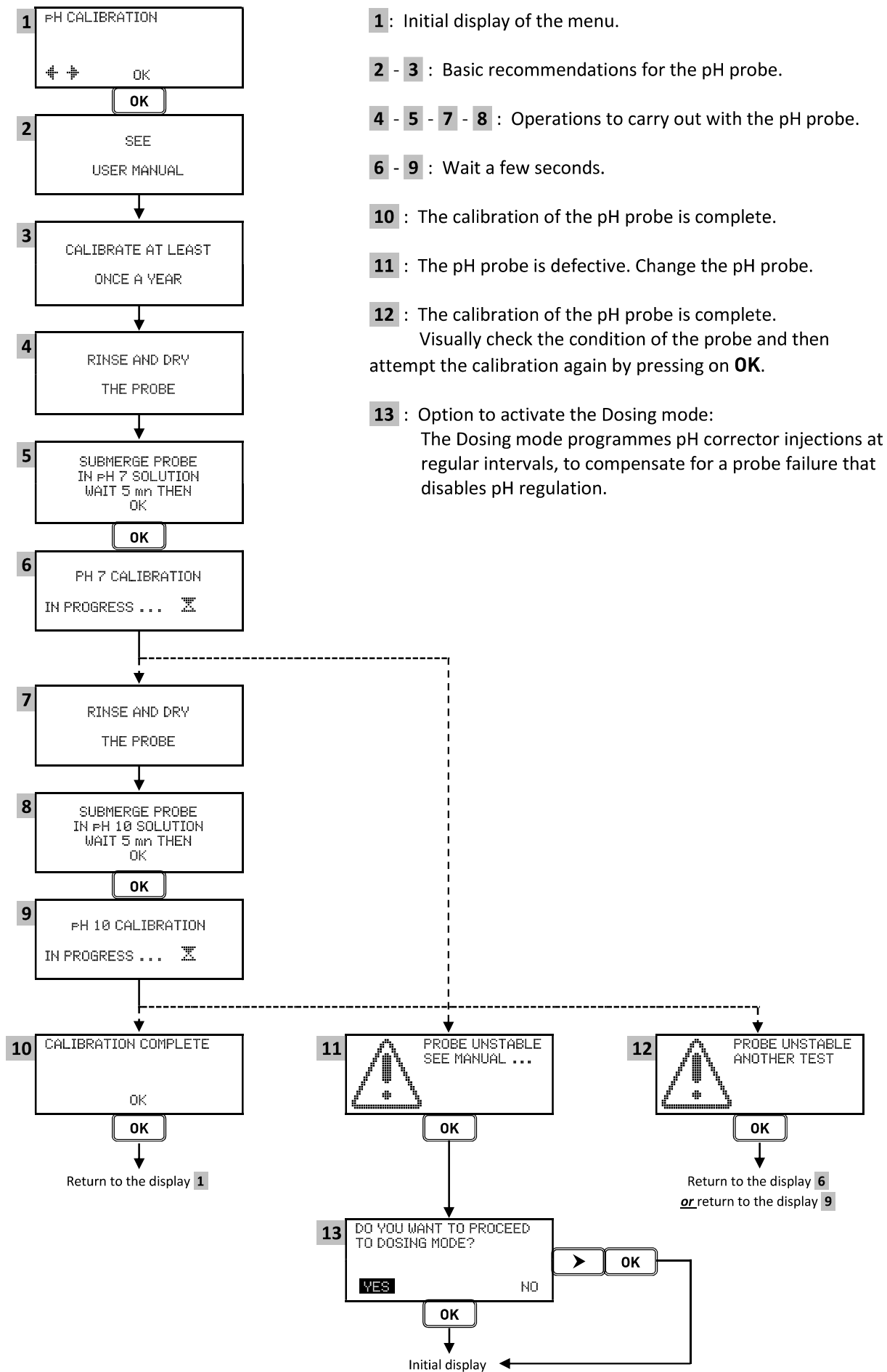
→ ***If the pH Regulation function is deactivated (see chapter 13.18), this menu does not appear.***

Allows you to carry out a calibration of the pH probe.



Only use single-use calibration solutions.

Display / Navigation: see next page.



13.22. "pH SETPOINT" menu

→ If the pH Regulation function is deactivated (see chapter 13.18), this menu does not appear.

Allows you to set the pH value.

Setting: from 6.8 to 7.6.

Default setting: 7.

13.23. "pH CORRECTOR TYPE" menu

→ If the pH Regulation function is deactivated (see chapter 13.18), this menu does not appear.

Enables the entering of the pH corrector type used, to ensure the electronics unit operates appropriately and adequately to increase or decrease the pH.

Setting: - ACID (pH-)
- BASE (pH+)

Default setting: ACID.

14. BOOST mode

Boost mode sets the production setpoint to its maximum for 24 hours, but can be stopped at any point. This function can be used when chlorine is urgently needed.



Boost mode cannot replace a conventional shock treatment in the case of water not fit for bathing.

This mode is intended to prevent rather than remedy a problem.

→ To activate the Boost mode, press on **BOOST**: the pictogram  or the index **BOOST** appears on the screen (display according to the operating mode of the electrolytic cell).

→ To deactivate boost mode, press on : the pictogram or the index above disappears.

Note: if Boost mode is activated and the user presses on **BOOST** again, this mode resets for 24 hours.

15. DOSING MODE

Dosing mode programmes pH corrector injections at regular intervals, to compensate for a probe failure that disables pH regulation.

→ To activate Dosing mode, go to the display **13** (see chapter 13.21).
When Dosing mode is activated, the index **DOSING** appears on the screen.

→ To disable Dosing mode, disable the pH Regulation function (see chapter 13.18).

16. SWITCHING OFF FOR EXTENDED PERIODS / FOR WINTER

- 1) Switch off the electronics unit then the complete filtration installation.
- 2) Drain the measuring circuit and the pH injection circuit.

PH PROBE AND ORP PROBE:



- **Never store the probe in distilled water.**
- **Never touch the bulb of the probe.**

- 3) Equip yourself with:
 - the storage vial initially mounted on the probe (*see visuals in chapters 6.8 and 6.10*),
 - of the stopper initially installed in the accessories holder instead of the pH probe.
 - a container filled with 10% hydrochloric acid (for the removal of scale),
 - a container filled with 2.6% bleach (for the removal of organic matter),
 - a suitable KCl solution (for the preservation of the probe).
- 4) Disconnect the probe.
- 5) Remove the pH probe from the accessories holder / Remove the ORP probe from the measuring chamber.
- 6) Soak the probe for 1 hour in the container of hydrochloric acid.
- 7) Rinse the probe with tap water, without wiping it afterwards.
- 8) Soak the probe for 1 hour in the container of bleach.
- 9) Rinse the probe with tap water, without wiping it afterwards.
- 10) Place the probe on a clean surface.
- 11) Fill the storage vial with KCl solution.
- 12) Insert the probe head into the storage vial.
- 13) Tidy away and store the probe in a warm, dry place, positioning it vertically, with the bulb facing downwards.
- 14) Screw the stopper into the accessories holder instead of the pH probe, using Teflon tape.

AMPEROMETRIC PROBE:

- 15) Equip yourself with :
 - the cap initially mounted on the probe (*see visual on page 16*).
 - the stopper initially installed in the measuring chamber (*see visual on page 17*).
- 16) Disconnect the probe.
- 17) Remove the probe from the measuring chamber.
- 18) Unscrew the tank of the probe completely (*see visual on page 16*).
- 19) Remove the electrolyte remaining in the probe, passing the tank and the head of the probe under water.
- 20) Wipe off the probe and the tank.
- 21) Place the cap on the head of the probe.
- 22) Store the probe in a cool, dry place.
- 23) Install the stopper in the measuring chamber.

PROPERTIES AND CONDITIONS OF USE OF THE CELL:

- When the water temperature descends below 15°C, its chemical properties cause premature wear to the cell. In this situation, switch off the electronics unit.
- The water in the cell must not freeze under any circumstances.
- Provided the cell is not connected to a power supply, leaving it installed on the pipework poses no risk of deterioration. In this instance, carry out a suitable chemical treatment, preferably without the use of stabilizers.

17. MAINTENANCE

17.1. Regular checks

- Carry out steps 4 to 8 in chapter 7 regularly.
- Ensure that the bulb of the pH probe is always immersed, either in water or in a suitable KCl solution.

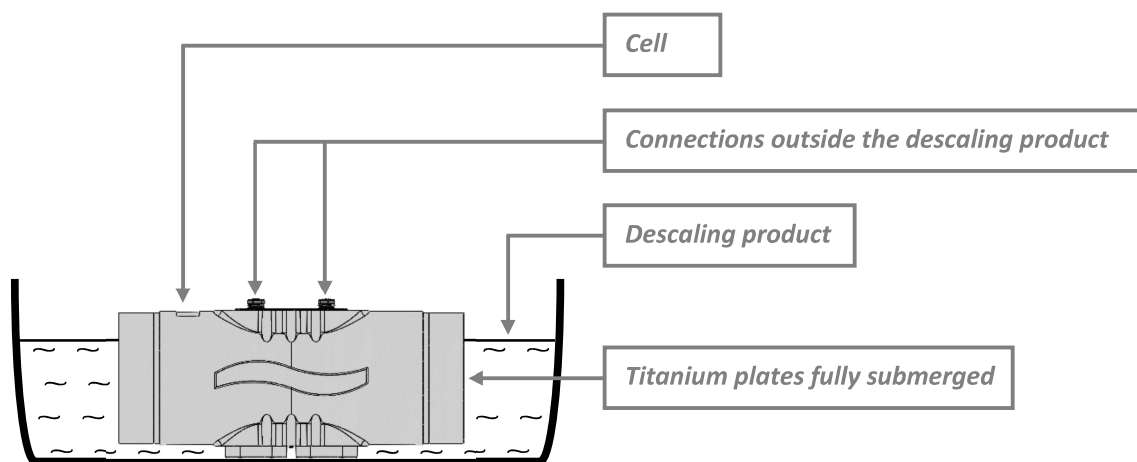
17.2. Cell

The auto-clean function helps prevent scale deposits on the cell. However, if scale builds up despite this, carry out manual cleaning:

- 1) Turn off the equipment, remove the cell and check for signs of scale.
- 2) Soak the cell for several minutes in a suitable descaling solution (examples: white vinegar, pH solution, etc-, ...).



Do not rub the plates of the cell.



- 3) Rinse and then reassemble the cell. If necessary, repeat step 2.
- 4) For **AUTOSALT** equipment: readjust the inversion frequency if necessary (see chapter 13.15).



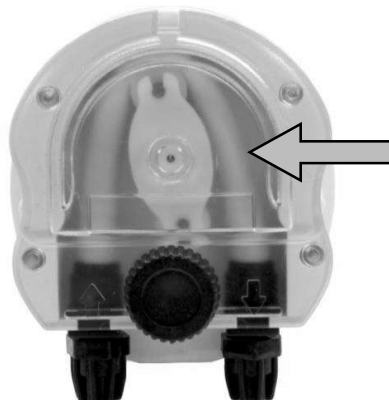
- The service life of the cell is very closely related to observance of the instructions and information contained in this manual.
- The replacement of a cell at the end of its life with a compatible cell may lead to a decrease in production and reduce the life of the equipment. It is therefore strongly recommended to use only an original manufacturer cell.
- Damage due to the use of a compatible cell voids the contractual guarantee.

17.3. pH injection circuit

→ Periodic maintenance to be carried out: - once/year.

→ *To replace the parts below, you will need a maintenance kit.*

- 1) Change the hose inside the peristaltic pump (*see arrow below*).



- 2) Change the non-return valve on the injection connector.



! Ensure the above parts are assembled the right way round, paying particular attention to the direction of the arrow marked on the connector. Failure to follow these instructions can lead to the peristaltic pump being damaged.

17.4. Measuring chamber

Regularly visually inspect the condition of the filter A (*see photos below*).

If the filter is dirty:

Unscrew nut B to extract the filter, then clean the filter with tap water or a suitable solution.

Measuring chamber POOLSQUAD AMPERO	Measuring chamber POOLSQUAD PRO
A photograph of the POOLSQUAD AMPERO measuring chamber. It is a complex assembly with a clear plastic filter labeled 'A' and a black nut labeled 'B' on top.	A photograph of the POOLSQUAD PRO measuring chamber. It is a simpler assembly with a clear plastic filter labeled 'A' and a black nut labeled 'B' on top.

17.5. pH probe and ORP probe

- **Periodic maintenance to be carried out:** - twice/year,
- each time the equipment is put back into service,
- each time the probe is changed.

Carry out a calibration of the probe (*see chapters 13.21 and 13.13*).

17.6. Amperometric probe

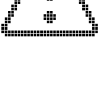
- **Periodic maintenance: every 3 months.**

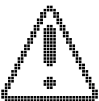
- 1) Take the bottle of electrolyte supplied (*included in the amperometric measuring kit*).
- 2) Switch off the equipment.
- 3) Close the measuring chamber's input and output valves.
- 4) Disconnect the amperometric probe.
- 5) Remove the amperometric probe from the measuring chamber.
- 6) Completely unscrew the tank C located at the end of the probe (*see photo opposite*).
- 7) Remove the electrolyte remaining in the probe, passing the tank C and the head of the probe under water.
- 8) Wipe off the probe and the tank C.
- 9) Half screw the tank C back onto the probe.
- 10) Slowly fill the tank C with electrolyte, as in the photo below, in such a way as to not inject air bubbles into the tank C.
- 11) Completely screw on and properly tighten up the tank C by hand.
- 12) Rinse and wipe off the excess electrolyte coming out of the Tank C.
- 13) Put the probe back in the measuring chamber.
- 14) Open the measuring chamber's input and output valves.
- 15) Wait a few minutes.
- 16) Calibrate the free chlorine measurement (*see chapter 13.10*).



18. ALARMS

→ To dismiss an alarm (*except those indicated at the end of this chapter*), press on **OK**. The initial display reappears with the index **STOP**. This index, indicating an immediate action of the alarm, remains for a few moments then disappears.

Display	Fault detected	Immediate action(s)	Checks and solutions
 DEVICE BEING WINTERING OK	Water temperature below 15 °C	Chlorination stopped	If the detected fault is not real, check that the salt / temperature / low water sensor is correctly connected. As a last resort, change this sensor.
 CAUTION EMPTY CONTAINER OK	pH corrector container empty	pH regulation stopped	• Add pH corrector into the container or change this container. • Make sure the empty container sensor is correctly connected. • Check the condition of the empty container sensor.
 CAUTION CELL CURRENT OK	Insufficient intensity of electrolysis	-	• Make sure the cell is correctly connected (connections on the cell itself and on the electronics unit). • Carry out an "CHLORINATION TEST" (<i>see chapter 13.16</i>). • As a last resort, replace the cell.
 SAFETY ORP OK	ORP measurement too far from the setpoint	Chlorination stopped	• Make sure the ORP probe is properly connected. • Carry out a calibration of the ORP probe (<i>see chapter 13.13</i>).
 CAUTION LOW pH OK	PH value too low compared to the setpoint	pH regulation stopped <u>Additional actions for the POOLSQUAD PRO model:</u> - Chlorination stopped - ORP check stopped	• Make sure the pH probe is properly connected. • Check that the type of pH corrector used is correctly stored (<i>see chapter 13.23</i>). • <u>If the pH corrector is acidic (pH-):</u> Measure the pH manually. If the value obtained corresponds with the value displayed on the electronics unit, wait until the pH value increases. If the value obtained is different from that displayed on the electronics unit, carry out a calibration of the pH probe (<i>see chapter 13.21</i>). • <u>If the pH corrector is alkaline (pH+):</u> - Ensure the pH corrector container is not empty. - Check the correct operation of the peristaltic pump by carrying out a manual injection (<i>see chapter 13.19</i>). - Carry out a calibration of the pH probe (<i>see chapter 13.21</i>). - Check the condition of the filter with ballast and injection connector.

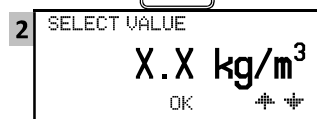
Display	Fault detected	Immediate action(s)	Checks and solutions
 CAUTION HIGH pH OK	PH value too high compared to the setpoint	pH regulation stopped <u>Additional actions for the POOLSQUAD PRO model:</u> - Chlorination stopped - ORP check stopped	• Make sure the pH probe is properly connected. • Check that the type of pH corrector used is correctly stored (<i>see chapter 13.23</i>). • <u>If the pH corrector is acidic (pH-):</u> - Ensure the pH corrector container is not empty. - Check the correct operation of the peristaltic pump by carrying out a manual injection (<i>see chapter 13.19</i>). - Carry out a calibration of the pH probe (<i>see chapter 13.21</i>). - Check the condition of the filter with ballast and injection connector. • <u>If the pH corrector is alkaline (pH+):</u> Measure the pH manually. If the value obtained corresponds with the value displayed on the electronics unit, wait until the pH value increases. If the value obtained is different from that displayed on the electronics unit, carry out a calibration of the pH probe (<i>see chapter 13.21</i>).
 CAUTION SALT LOW OK	<u>If POOLSQUAD model LOW SALT:</u> Salt rate less than 0.5 kg/m³ <u>If other models:</u> Salt rate less than 2.5 kg/m³	Chlorination stopped	• Top up the salt, if necessary, so as to achieve a salt content of 5 kg/m³. • Calibrating the salt level measurement (<i>see chapter 12.4</i>). • Measuring the salt rate manually. If the value obtained is different from that displayed on the electronics unit, change the salt / temperature / low water sensor.
 SAFETY NO FLOW OK	Zero or insufficient water flow	- Chlorination stopped - pH regulation stopped	• Check that the filtration pump is working correctly. • Check that the valves on the filtration circuit are open. • Make sure there are no leaks in the filtration circuit. • Make sure the flow sensor is properly connected. • As a last resort, change this sensor.
 SAFETY LOW WATER OK	Zero or insufficient water quantity	- Chlorination stopped - pH regulation stopped	• Check that the filtration pump is working correctly. • Check that the valves on the filtration circuit are open. • Make sure there are no leaks in the filtration circuit. • Make sure the salt/temperature/low water level sensor is correctly connected. • As a last resort, change this sensor.

Display	Fault detected	Immediate action	Checks and solutions
 CAUTION ADJUST SALT PROBE OK	Reminder to calibrate the salt rate measurement (<i>measurement displayed on the menu F</i> - see page 27). → This alarm is only triggered when the electronics unit is first commissioned, if the calibration is not carried out.	Chlorination stopped	Carry out the navigation below

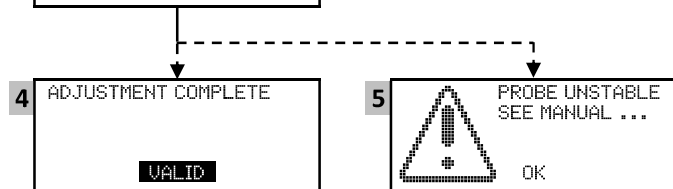
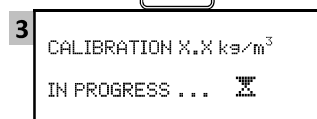
To dismiss this alarm, carry out this navigation:



OK



OK



OK

Return to the menu **F**
(see page 26)



OK

1: Alarm display.

2: Select a value with the keys ▼▲.
Setting: from 1 to 8 kg/m³, in increments of 0.5.

3: Wait a few seconds.

4: The calibration is complete.

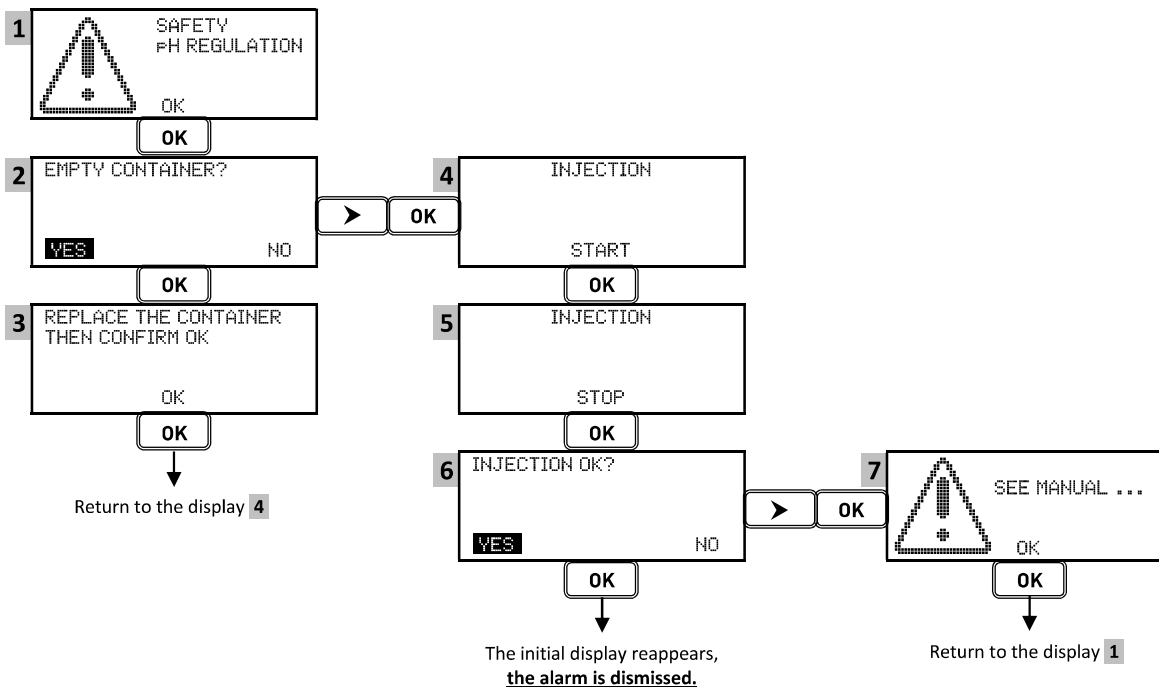
5: The calibration has failed.
Visually check the condition of the salt / temperature / low water sensor, then attempt the calibration again, several times if necessary. If the calibration still fails, change the sensor and recalibrate.

Display	Fault detected	Immediate action	Checks and solutions
 CAUTION CALIBRATING pH PROBE OK	Reminder to calibrate the pH probe	pH regulation stopped	Carry out the navigation below
To dismiss this alarm, carry out this navigation: 1  2  Return to the "pH calibration" menu (see chapter 13.21): navigate this menu to dismiss the alarm. 1: Alarm display. 2: Option to calibrate the pH probe. The initial display reappears.			

Display	Fault detected	Immediate action	Checks and solutions
 CAUTION C1 PROBE ADD GEL OK	Reminder to change the electrolyte gel of the amperometric probe	-	Carry out the navigation below
To dismiss this alarm, carry out this navigation: 1  2  3  4  The initial display reappears, the alarm is dismissed. 1: Alarm display. 2: Reminder message that the pre-filter of the measuring chamber needs cleaning (<i>circled below</i>) when changing the gel in the probe.  3: Request for confirmation of gel change. 4: Confirmation of the gel change, with real time date.			

Display	Fault detected	Immediate action	Checks and solutions
 SAFETY pH REGULATION OK	Series of unsuccessful attempts to correct the pH	pH regulation stopped	Carry out the navigation below

To dismiss this alarm, carry out this navigation:



1: Alarm display.

2 - 3: The "CONTAINER" means the pH corrector container.
Check that this container is not empty and replace it if necessary.
Check that the filter with ballast is at the bottom of the container.

4: A manual pH correction injection is ready to be activated.
This action allows you to check that the peristaltic pump is working correctly.
To start the manual injection, press on **OK**.

5: The peristaltic pump rotates. To stop the pump, press on **OK**.

6: • Check that the pump is correctly injecting the pH corrector.
• Make sure there are no leaks in the injection circuit.
To confirm, press on **OK**.

7: • Carry out a calibration of the pH probe (*see chapter 13.21*).
• Check the condition of the filter with ballast and injection connector.
• As a last resort, change the pH probe;

19. GUARANTEE

Before contacting your dealer, please have the following to hand:

- your purchase invoice.
- the serial no. of the electronics unit.
- the installation date of the equipment.
- the parameters of your pool (salinity, pH, chlorine levels, water temperature, stabilizer level, pool volume, daily filtration time, etc.)

Every effort and all our technical experience has gone into designing this equipment. It has been subjected to quality controls. If, despite all the attention and expertise involved in its manufacture, you need to make use of our guarantee, it only applies to free replacement of the equipment's defective (excluding shipping costs in both directions).

Guarantee period (proven by date of invoice)

Electronics unit: 2 years.

Cell: - 1 year minimum outside the European Union (*excluding warranty extension*).

- 2 year minimum in the European Union (*excluding warranty extension*).

pH probe: 3 years.

Amperometric probe: 1 year.

ORP probe: 1 year.

Repairs and spare parts: 3 months.

The periods indicated above correspond to standard guarantees. However, these can vary depending on the country of installation and the distribution network.

Scope of the guarantee

The guarantee covers all parts, with the exception of wearing parts that must be replaced regularly.

The equipment is guaranteed against all manufacturing defects within the strict limitations of normal use.

After-Sales Services

All repairs will be performed in the workshop.

Shipping costs in both directions are at the user's own expense.

Any downtime and loss of use of a device in the event of repairs shall not give rise to any claim for compensation.

In all cases, the equipment is always sent at the user's own risk. Before taking delivery, the user must ensure that it is in perfect condition and, if necessary, write down any reservations on the shipping note of the carrier. Confirm with the carrier within 72 hours by recorded letter with acknowledgement of receipt.

Replacement under guarantee shall in no case extend the original guarantee period.

Guarantee application limit

In order to improve the quality of their products, the manufacturer reserves the right to modify the characteristics of the products at any time without notice.

This documentation is provided for information purposes only and is not contractually binding with respect to third parties.

The manufacturer's guarantee, which covers manufacturing defects, should not be confused with the operations described in this documentation.

Installation, maintenance and, more generally, any servicing of the manufacturer's products should only be performed by professionals. This work must also be carried out in accordance with the current standards in the country of installation at the time of installation.: The use of any parts other than original parts voids the guarantee ipso facto for the entire equipment.

The following are excluded from the guarantee:

- Equipment and labour provided by third parties when installing the equipment.
- Damage caused by an installation not in compliance with the instructions.
- Problems caused by modifications, accidents, misuse, negligence of professionals or end users, unauthorised repairs, fire, floods, lightning, freezing, armed conflict or any other force-majeure events.

Any equipment damaged due to non-compliance with the instructions regarding safety, installation, use and maintenance contained in this documentation will not be covered by the guarantee.

Every year, we make improvements to our products and software. These new versions are compatible with previous models. The new versions of hardware and software cannot be added to earlier models under the guarantee.

Implementation of the guarantee

For more information regarding this guarantee, contact your dealer or our After-Sales Service. All requests must be accompanied by a copy of the purchase invoice.

Legislation and disputes

This guarantee is subject to French law and all European directives or international treaties in force at the time of the claim, applicable in France. In case of disputes concerning its interpretation or execution, the High Court of Montpellier (France) shall have exclusive jurisdiction.

Manufactured by:

POOL TECHNOLOGIE
ZAC des Jasses
115, rue de l'Oliveraie
34130 Valergues
France
www.pool-technologie.com
contact@pool-technologie.fr