INSTRUCTIONS AND USER MANUAL

ChloriProtect Rx

www.avadypool.com

NOT004ENV05

SUMMARY

1.0 - WARNINGS AND TIPS 1

⚠ 1.1 - GUARANTEE AND WARNING 1

⚠ 1.2 - SHIPPING AND TRANSPORTING 1

⚠ 1.3 - PROPER USE OF THE DEVICE 1

⚠ 1.4 - RISKS 1

⚠ 1.5 - TOXIC AND/OR DANGEROUS LIQUID DOSAGE 2

⚠ 1.6 - ASSEMBLING AND DISMANTLING THE DEVICE 2

1.6.1 -ASSEMBLY 2

1.6.2 - DISMANTLEMENT 2

2.0 DESCRIPTION OF THE DEVICE 3

2.1 Parts description 3

2.2 Buttons description 3

3.0 INSTALLATION AND RECOMMENDATION 4

3.1 Installation of the fixing bracket 4

3.2 Mounting of the clamp 4

3.3 Mounting of the probe on the probe holder 5

3.4 Electrical connection 5

3.4.1 Connection of the device in the electric casket 5

3.4.2 Connection of the cordon of supply of the electrolyser on the connector 6

4.0 COMMISSIONING AND OPERATION 6

4.1 Power-on 6

4.2 Turning ON and OFF the device 6

4.3 Operating principle 7

4.4 Manual supplyof the electrolyser with salt 7

4.5 Adjustment of the set point 7

5.0 ALARMS « ALR » 7

6.0 MAINTENANCE 8

6.1 Maintenance of the electrode 8

6.2 Electrode wintering 8

6.3 Calibration procedure 8

7.0 AFTER SALES SERVICE 9

8.0 SPARE PARTS LIST 10

1.0 - WARNINGS AND TIPS

Please read the warning notices very carefully because they provide important information regarding safety in installation, maintenance and use of the device.

• Keep this manual in a safe place, so that it will always be available for further consultation.

• The device complies with EMC: 2004/108/EEC “electromagnetic compatibility” and LVD: 2006/95/EC “low voltage” as also the subsequent modifications.

• The electrical installation is carried out in compliance with standard NF C15-100 (or equivalent for other European countries)

N.B.: the device has been constructed in accordance with best practice. Both its life and its electrical and mechanical reliability will be enhanced if it is correctly used and subjected to regular maintenance.

⚠ 1.1 - GUARANTEE AND WARNING

The material is guaranteed 24 months parts and labor back in our workshop in:

AVADY POOL
9 Chaussée Jules César
Bât. 4 Hall 406
OSNY - 95520

The shipping costs to OSNY are charged of the customer. If the repair is carried out as part of the warranty, return is supported by AVADY POOL. The wear parts excluded of the warranty are: pH or redox probe, injection valve, foot filter and peristaltic hose.

⚠ **WARNING:** any intervention or repair to the internal parts of the device must be carried out by qualified and authorized personnel. The manufacturers decline all responsibility for the consequences of failure to respect this rule.

⚠ 1.2 - SHIPPING AND TRANSPORTING

The device will always be moved in a vertical (and never in a horizontal) position. No matter what the means of transport employed, delivery of the device, even when free to purchasers or the addressee’s domicile, is always at the purchaser’s risk. Claim for any missing materials must be made within 10 days of arrival, while claims for defective materials will be considered up to the 30th day following receipt. Return of device or other materials to us or the authorized distributor must be agreed beforehand with the responsible personnel. Material should be disassembled and packed with care. All parts in contact with the chemical should be purged and rinsed for everyone’s safety. In the case of non-compliance with this guideline, we reserve not to support the materials and to return it at your expense and any damage created by the chemical on the material will undergo a repair quote.

⚠ 1.3 - PROPER USE OF THE DEVICE

The device should be used only for the purpose for which it has been expressly designed namely the dosing of liquids. Install the device in a dry place and well away from sources of heat, and in any case, at environmental temperature not exceeding 40°C. Any different use is to be considered dangerous. The device should not therefore be used for applications that were not allowed for in its design. In case of doubt please contact our offices for further information about the characteristics of the device and it proper use. The manufactures can not be held responsible for damage deriving for improper, erroneous or unreasonable use of the device.

Please read carefully the followings:

• This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved.

• Children shall not play with the appliance.

• Cleaning and user maintenance shall not be made by children without supervision

⚠ 1.4 - RISKS

After unpacking the device, make sure that it is completely sound. In case of doubt, do not use the device and contact qualified personnel. The packing materials (plastic bags, polystyrene, etc.) should be kept out of the reach of children: they constitute potential sources of danger.

Before you connect the device make sure that the voltage ratings correspond to your particular voltage supply. You will find this value on the rating plates attached to the device.

The electrical installation to which the device is connected must comply with the standards and good practice rule in force in the country under consideration.
Use of electrical equipment always implies observance of some basic rules. In particular:
- Do not touch with wet or damp hands or feet.
- Do not operate the device with bare feet (typical place: swimming pool)
- Do not leave the equipment exposed to the atmospheric agents
- Do not allow the device to be used by children or unskilled individuals without supervision

• The device must be supplied through a circuit with a residual current differential device (RCD) rated differential operating current not exceeding 30 mA
• The appliance must be placed in a place that can not be flooded.
• The appliance must be connected electrically via a means of disconnection to the supply network, the opening of the contacts of all the poles ensuring a complete break under the conditions of overvoltage category III.
• The power supply is protected by a thermal fuse T315 mA 250V.
• The auxiliary output is protected by a fuse F2: T 3.15 A 250V.

In case of breakdown or improper functioning of the device, switch off, but do not touch. Contact our technical assistance for any necessary repairs and insist on the use of original spares. Failure to respect this condition could render the device unsafe to use.

• For Australia and New Zeland Only, For stationary appliances permanently connected to the fixed wiring, compliance with this requirement is considered to be met if the instruction considering disconnection incorporated in the fixed wiring is in accordance with AS/NZS 3000.
• In case of damage of power supply cord please ask the repair to our technical assistance or qualified and authorized personnel, to avoid any hazard.

When you decide to make no further of an installed device, make sure to disconnect it from the power supply. Before carrying out any service on the item, check to disconnect the plug from the mains.

⚠ 1.5 - TOXIC AND/OR DANGEROUS LIQUID DOSAGE

To avoid risk from contact with hazardous liquids or toxic fumes, always adhere to the notes in this instruction manual:
• Follow the instructions of the dosing liquid manufacturer
• Use only the correct materials fir the tubing, valves and seals to suit the liquid to be dosed (if you use liquid regulation): where possible shield the tubing with PVC conduit.

⚠ 1.6 - ASSEMBLING AND DISMANTLING THE DEVICE

1.6.1 -ASSEMBLY

See paragraph **3.0 "INSTALLATION AND RECOMMENDATION"**

1.6.2 - DISMANTLEMENT

Proceed as follows when you dismantle the device or before performing any operation on it:
1) Disconnect the plug from the mains.
2) See paragraph **1.2 "SHIPPING AND TRANSPORTING"**

2.0 DESCRIPTION OF THE DEVICE

ChloriProtect allows to eliminate the excesses of chlorine in the water of the swimming pool. A redox probe sends a signal giving the quantity of disinfectant in the water (display mV).
When the rate of disinfectant is sufficient (defined by default in 640 mV), ChloriProtect stops a salt chlorinator. When the rate of disinfectant is insufficient, ChloriProtect starts a salt chlorinator.

2.1 Parts description

Here are the complete content of the package you received. All parts will be necessary for the proper operation of your device.

A. Shutter
B. Buffer solution 475mV
C. Rx electrode
D. Probe holder
E. Auxiliary plug
F. Clamp DN50
G. Screws and peg for wall mounting x2

Fig. 1

2.2 Buttons description

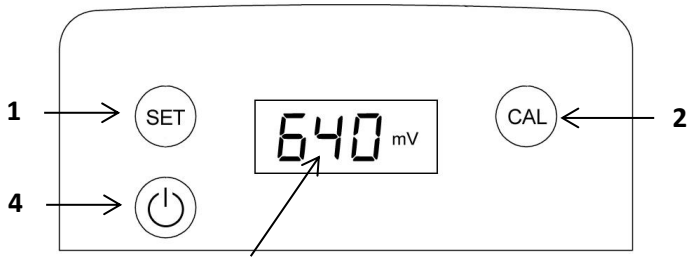


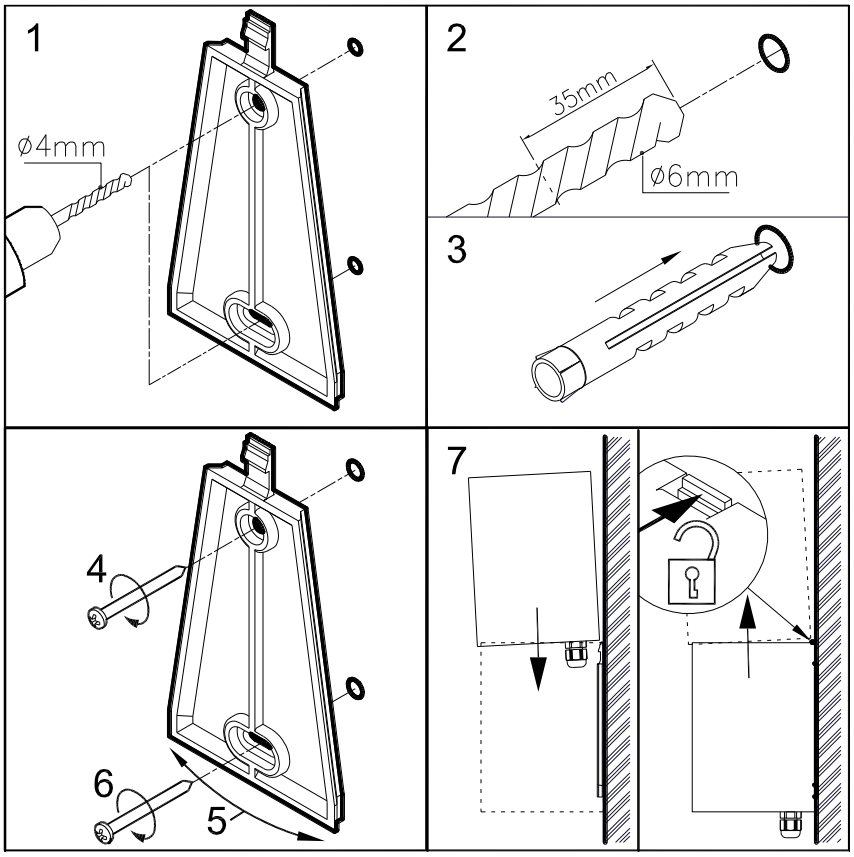
Fig. 2

1- Press **SET** to see and adjust the setpoint
2- Press **CAL** allows the calibration of the Redox to 475mV, associated to the **SET** button to change the value of the set point.
3- 640mV value of the Redox in water.
4- **ON/OFF** button to turn on the device and maintain more than 3 seconds, and, keep pressed, start manually the salt chlorinator.

3.0 INSTALLATION AND RECOMMENDATION

- Install the device in a dry place and well away from sources of heat, and at environmental temperature not exceeding 40°C.
- The device is to be located where flooding cannot occur.
- Carefully observe the national wiring rules in force in the various countries as regards of electrical installations. For Australia and New Zeland, the rules references are in accordance with AS/NZS 3000.

3.1 Installation of the fixing bracket



3.2 Mounting of the clamp

This assembly settles on the pipe, between the filter and the unit of electrolysis. Furthermore, if a regulator pH is installed, this assembly must be installed upstream to the point of injection of " pH - ".

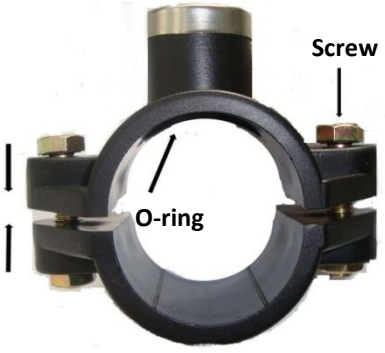


Fig. 4

Next

Drill the top wall of the pipe through the clamp :
- Ø 14 mm for the probe.

Fig. 5

3.3 Mounting of the probe on the probe holder

After removing the protective cap from the electrode and calibrate the probe (Cf 6.3), you need to insert all the parts as shown in the fig.7. When all parts are engaged, tighten the nut without blocking it then push slowly the electrode to the bottom of the hose and lift it about 2 cm so that the electrode tip is at the middle of the hose. Connect the probe to the back of the device on the BNC (fig.8).

Fig. 6

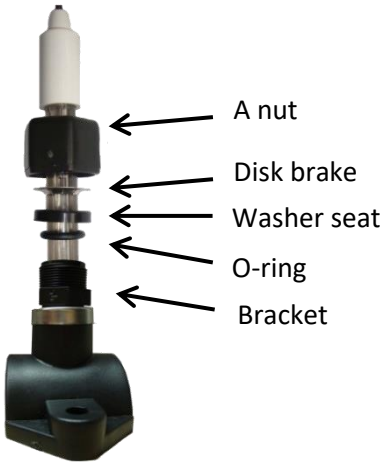


Fig. 7

Plug the plug into the bayonet socket

Fig. 8.1

Rotate the plug ¼ turn to close the connection

Fig. 8.2

3.4 Electrical connection

3.4.1 Connection of the device in the electric casket

The power supply cable of ChloriProtect must be connected in the electric case of the swimming pool:

- Either on the borders of an auxiliary contact in the relay of the pump of filtration in the electric casket
- Either on borders in parallel of the reel A1 A2 of the relay of the pump of filtration in the electric casket

The tension to be applied to this cable is 230V-240V. So the device will be only fed when the pump of filtration will be underway.

⚠ On no account the device will be connected in parallel on the borders of supply of the pump of filtration in the electric casket

.

3.4.2 Connection of the cordon of supply of the electrolyser on the connector

The cordon of food of a salt chlorinator is connected to ChloriProtect thanks to the connector **E** supplied in the kit.

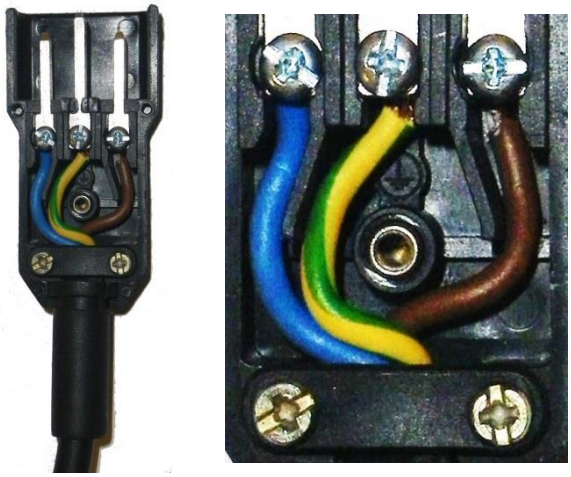


Fig. 9

- Remove the sheath from the cable on 30 mm
- Strip the 3 wires to obtain 7 mm of copper
- Insert the wires like on the left picture:
    - Blue to the left (letter N)
    - Yellow / green in the center
    - Brown to the right (letter L)

⚠ Be sure to clear the central hole to avoid pinching a wire when closing the connector

Fig. 10

The auxiliary plug is connected to the connector on the back of the unit to the dedicated socket.

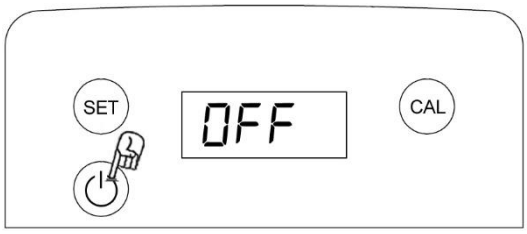
⚠ Max power 700 W
Protected by fuse (5x20mm) F3.15 250V

4.0 COMMISSIONING AND OPERATION

4.1 Power-on

In the switched on of the device or after the ignition of the device by support on the sideline "ON/OFF", **a wait of 15 min is programmed** to wait for the stabilization of the measure. During this phase, the device posts alternately the redox value mV and "OFF".

4.2 Turning ON and OFF the device



When the device is on, a quick press on the « ON/OFF » button turns off the device.
Alike, when the device is off, « OFF » is displayed. A quick press on the « ON/OFF » button turns on the device. The device will start after 15 minutes.

The putting into service of ChloriProtect is ended, it is from now on ready to check the salt water chlorinator

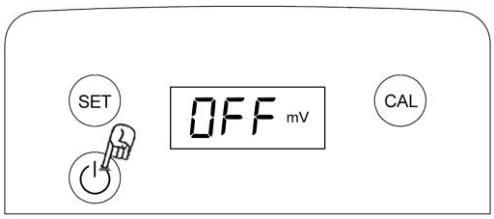
4.3 Operating principle

When **the rate of disinfectant is insufficient**: **redox value < Value records** (30 mV of mini gap) then:
- The electrolyser with salt is fed
- The device shows the redox value there mV

When **the rate of disinfectant is sufficient : redox value ≥ Value records** then:
- The electrolyser with salt is not fed

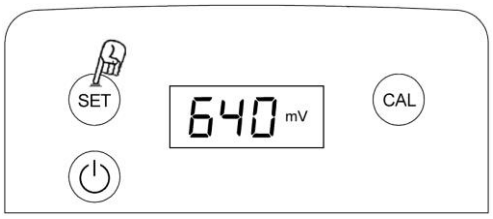
For example, for a value record 640 mV:
- Measured value > 640 mV: STOP of the salt water chlorinator
- Measured value 610 mV: Switch on the salt water chlorinator

4.4 Manual supply of the electrolyser with salt

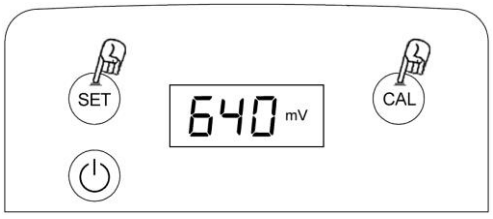


When the device is on standby state (display on « OFF »), press ON/OFF during 3 second. It starts the water salt chlorinator.

4.5 Adjustment of the set point



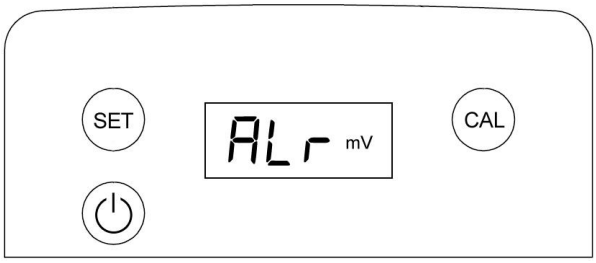
When you press the **SET** button, the value of the set point is displayed.



To change the value of the set point, hold the **SET** key and press **CAL** by pulse. Each pulse changes the Redox value of 10mV between 350 and 850mV.

5.0 ALARMS « ALR »

The alarm bustles when the value redox is lower than 100 mV or superior to 900 mV: the device does not feed the electrolyser with salt.



The screen alternates between "ALr" and "the Redox value" .

6.0 MAINTENANCE

We recommend you to change the electrode, if the measures aren't good and to change the solution standard if you have a doubt on its quality after several uses or after the expiry date. Note that the average life cycle of an electrode varies from 6 to 18 months, according to the use. The TAC 100 mg / L reduces the electrode's life.

6.1 Maintenance of the electrode

Over time, in addition to the normal wear of the electrode, according to the use and water quality which is more or less calcareous, measurement will deteriorate. A thin layer of limestone with other elements present in the pool water will deposit on the sensing element of the probe. To overcome this problem, it is advisable to use the cleaning solution for electrode pH and redox AYACSOLNET02 and to follow the procedure on the bottle.
We recommend you to change the electrode, if the measures do not give good results any more or than the quality shown after the calibration is lower than 50, and to change the buffer solution if you have a doubt on its quality after several uses or after the expiry date.

6.2 Electrode wintering

- During the wintering, the electrode must be removed of the installation and stored in non-freezing conditions.
- Clean the probe with the cleaning solution AYACSOLNET02. This allows to remove any deposits formed during its use in pool water.
- The sensor must be filled to 1/3 with AYACSOLSTK01 storage solution and the protective cap placed on the sensor's extremity. This assembly must be stored away from freezing conditions at ambient temperature.

6.3 Calibration procedure

This operation will be to make at the beginning of every season during the putting into service of the swimming pool so that the reading of the rate of disinfectant stays the most correct possible.

Before carrying out the probe calibration, remember to:

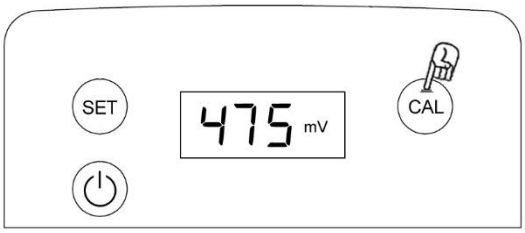
- Stop the filtration pump.
- Close the isolation valves if existing.
- Remove the probe of the probe holder.
- Put the shutter (fig. 11) to plug the hole in the probe holder.
- Open the isolation valves if existing.
- Turn on the filtration pump
- Carry out the probe calibration and repeat the previous actions to put the electrode in place.

Fig. 11

1) Remove the protective cap of the probe and keep it for reuse at the time of wintering.

2) During 20 minutes, let soak the probe to rinse it. We suggest you to start with this step.

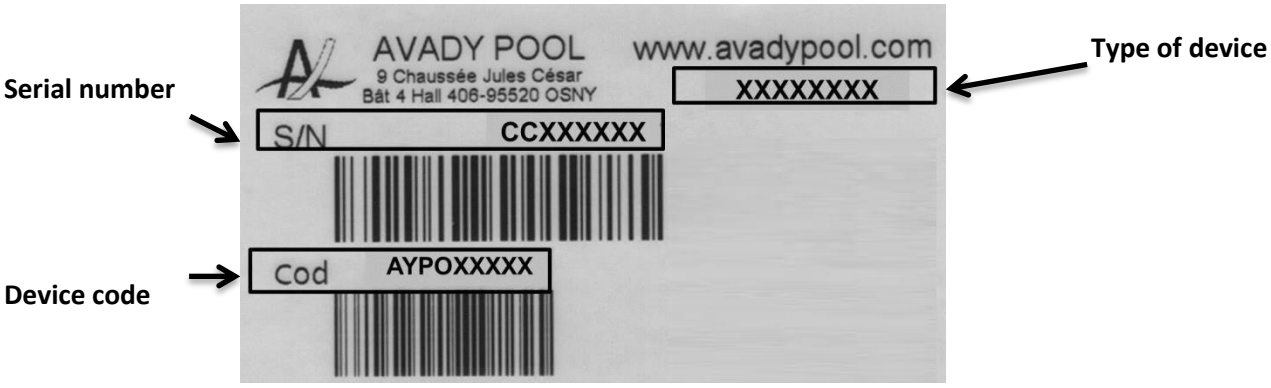
3) Immerse the electrode in the 475mV solution, stir and leave it in the solution without touching the electrode or the cable



4) After waiting minimum one minute, the stabilized value is displayed. Press **CAL** until the display shows CAL flashing then release. Then the quality of the probe is briefly displayed.

7.0 AFTER SALES SERVICE

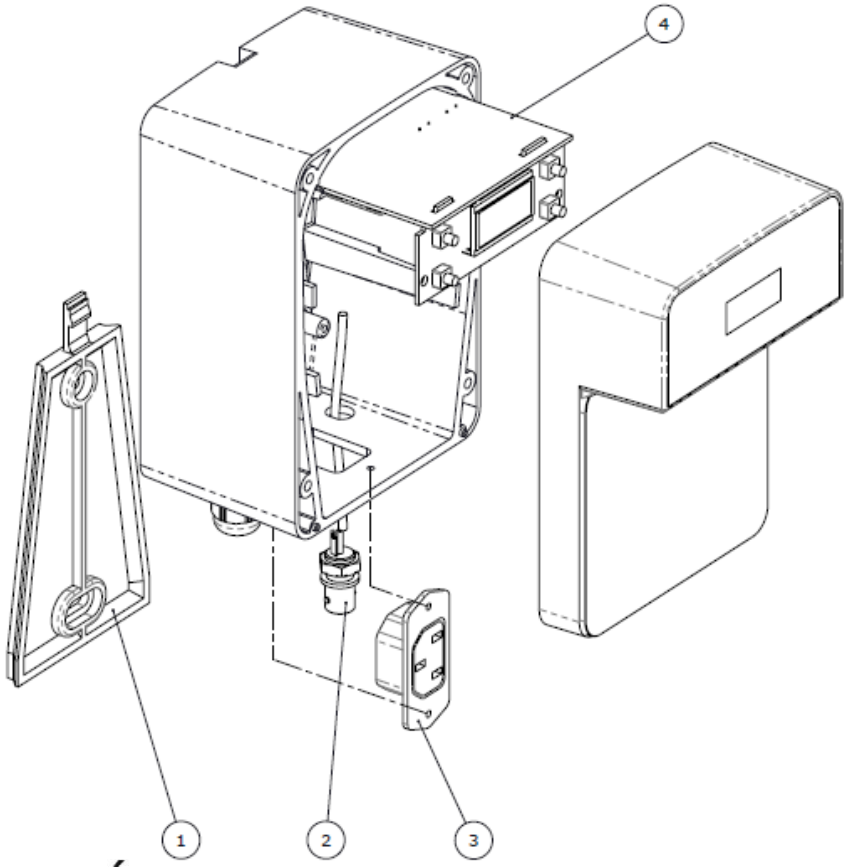
To contact our Technical Services (contact details on page 1), you will need the following informations:



For any return of the unit, thank you to please follow the instructions in "**1.2 SHIPPING AND TRANSPORTING** " on page 1 of this manual.

8.0 SPARE PARTS LIST

Fig. 12	Code	Description of parts
1	**AYAC100167**	Bracket
2	**AYAC100021**	BNC
3	**AYAC100161**	Auxiliary plug C13
4	**AYAC100164C**	Circuit board ChloriProtect
5	**AYAC08BC05**	Rx Gold electrode
6	**AYAC09CF07**	Probe holder
7	**AYFA00003**	Shutter
8	**AYAC100007**	Clamp DN50
9	**AYAC02C004**	Buffer solution 475mV
NOT PROVIDED	**AYACSOLSTOCK**	Storage liquid for probe pH-RX 100mL
NOT PROVIDED	**AYACSOLNET01**	Cleaning solution for probe pH-RX 250mL



5 **6** **7** **8** **9**

NOTES

AVADY POOL - 9, Chaussée Jules César, Bâtiment 4 Hall 406 - 95520 OSNY - France
Tél : +33 (0)1 34 48 16 03 Fax : +33 (0)1 78 76 73 95 Mail : contact@avadypool.com Site : www.avadypool.com

NOTES

AVADY POOL - 9, Chaussée Jules César, Bâtiment 4 Hall 406 - 95520 OSNY - France
Tél : +33 (0)1 34 48 16 03 Fax : +33 (0)1 78 76 73 95 Mail : contact@avadypool.com Site : www.avadypool.com

NOTES

AVADY POOL - 9, Chaussée Jules César, Bâtiment 4 Hall 406 - 95520 OSNY - France
Tél : +33 (0)1 34 48 16 03 Fax : +33 (0)1 78 76 73 95 Mail : contact@avadypool.com Site : www.avadypool.com