



## ZELIA ZLT

Salt electrolysis

Ref : PF10I060 / PF10I061 / PF10I062

## Table of Contents

|   |           |
|---|-----------|
| 1. Packaged content .....                 | 3         |
| 2. Technical features .....               | 4         |
| 3. Exploded view .....                    | 5         |
| 4. Description .....                      | 7         |
| 4.1. Principle of electrolysis .....      | 7         |
| 4.2. Presentation of the <b>ZLT</b> ..... | 8         |
| 5. Installation .....                     | 9         |
| 5.1. Hydraulic installation .....         | 9         |
| 5.2. Electrical connection .....          | 12        |
| 6. Commissioning .....                    | 14        |
| 6.1. Stabilizing agent .....              | 14        |
| 6.2. Controlling the salt rate .....      | 14        |
| 6.3. Controlling the TAS/TH .....         | 15        |
| 6.4. Controlling the pH .....             | 15        |
| 7. Operation .....                        | 16        |
| 7.1. Supply .....                         | 16        |
| 7.2. Control interface .....              | 17        |
| 7.3. Choice of a program .....            | 19        |
| 7.4. Temperature control .....            | 20        |
| 7.5. Low temperature .....                | 20        |
| 7.6. Automatic cover .....                | 20        |
| 7.7. Redox-controlled production .....    | 20        |
| 7.8. Display of parameters .....          | 21        |
| 7.9. Water hardness .....                 | 22        |
| 7.10. Production level .....              | 23        |
| 7.11. Error messages .....                | 24        |
| 7.12. Factory reset .....                 | 25        |
| 7.13. Accelerated mode .....              | 26        |
| 8. Maintenance .....                      | 27        |
| 8.1. Addition of salt .....               | 27        |
| 8.2. During winter .....                  | 27        |
| 8.3. Cleaning the cell .....              | 27        |
| <b>A. Declaration of conformity .....</b> | <b>28</b> |



**Read these instructions carefully before installing, commissioning and using this product.**

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**The cell of the ZLT must not be splashed with large amounts of water on a regular basis. When technical blocks are integrated and/or buried, we recommend you do not install it under a skimmer, these regularly overflow when people are in the pool.**

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## 1. *Packaged content*

- 1 ZELIA power supply box
- 1 **ZLT(25-50-75)** cell
- 1 set of 2 1.5" union fittings for tubes with a 1.5" diameter
- 1 bag including
  - 1 clip for the cell connector
  - 3 screws and 3 attachment pegs for the power supply box
  - 2 seals for the union fittings

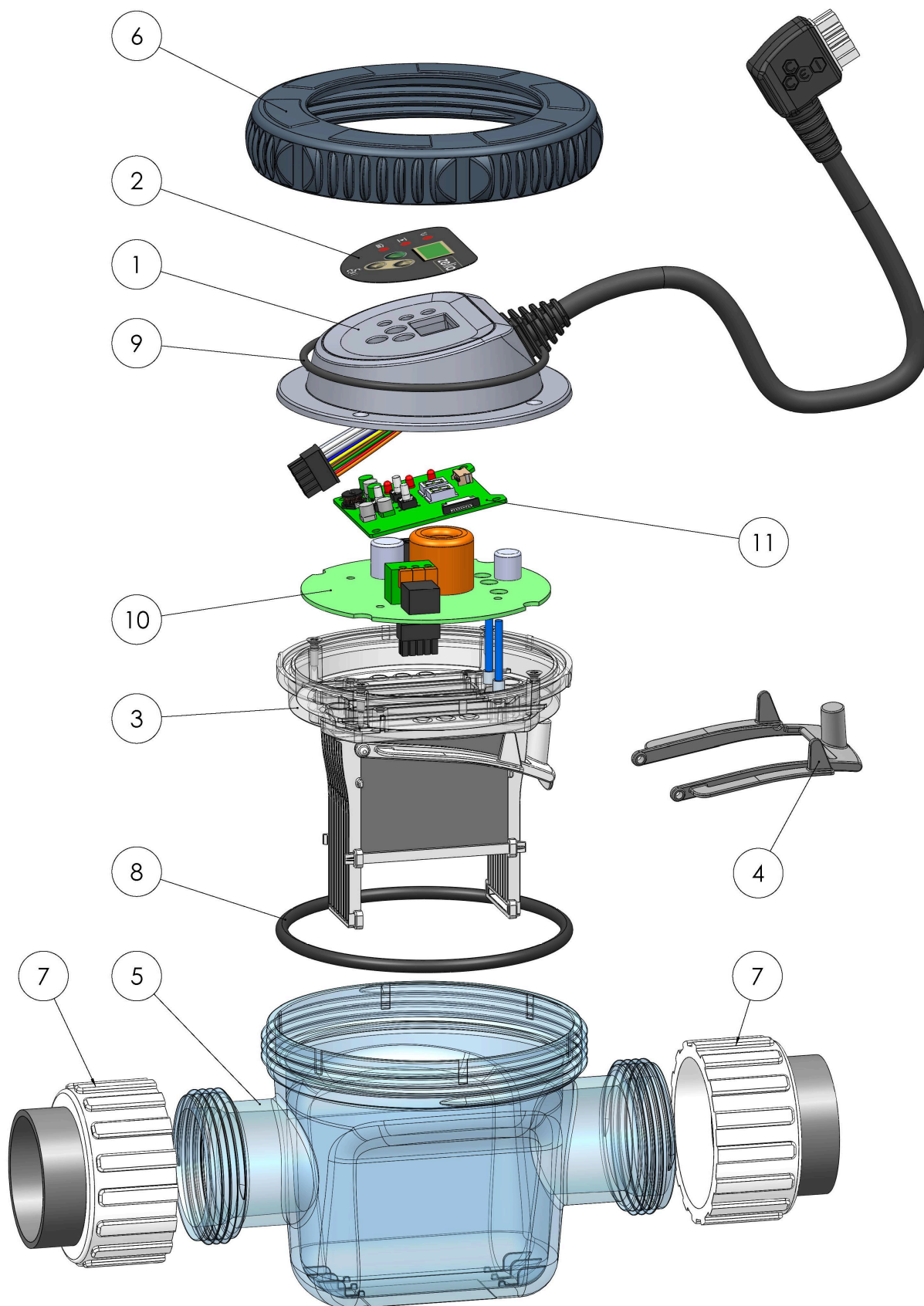
## 2. Technical features

|                         |  |
|-------------------------|--|
| Power supply            | 230V ~ AC 50/60Hz  |
| Power consumed          | 100W   |
| Maximum volume treated* | <b>ZLT25</b> - 25 cubic metre maximum  |
|                         | <b>ZLT50</b> - 50 cubic metre maximum  |
|                         | <b>ZLT75</b> - 75 cubic metre maximum  |
| Cleaning of cell        | Automatic by reversal of polarity  |
| Recommended salt rate   | ideally 3g/litre   |
| Maximum pressure (cell) | 3 bars   |
| Maximum rate (cell)     | 15 m <sup>3</sup> /h   |
| Protection index        | Power supply: IP-44<br>Cell: IP-55   |
| Overall dimensions      | Power supply : 180 x 130 x 66mm<br>Cell: 192 x 138 x 134mm<br>Full box : 383 x 230 x 164mm   |
| Installation            | Power supply : Wall attachment (4 screws/pegs provided)<br>Cell: On PVC tubes with a 50mm diameter (1.5" union fittings provided)  |
| Weight                  | Power supply: 1,04 kg / Cell: 1,03 kg ( <b>ZLT25</b> )<br>1,08 kg ( <b>ZLT50</b> ) 1,13 kg ( <b>ZLT75</b> )<br>Full box: 2,75 kg ( <b>ZLT25</b> ) 2,8 kg ( <b>ZLT50</b> ) 2,85 kg ( <b>ZLT75</b> ) |

\* given Volume for a pool water at 25°C, with a measured pH at 7.0, stabilizer at 40ppm, with no plant residues in water and an appropriate daily filtration time.



### 3. Exploded view



| Marking | Reference   | Description   | Quantity   |
|---------|---|---|------------|
| -       | SF160100<br>(ZLT25)<br><br>SF160102<br>(ZLT50)<br><br>SF160104<br>(ZLT75) | COMPLETE ZLT CELL   | -          |
| 1       | SF160154  | ZLT25/50/75 CABLE + CASE KIT/SPARE PART FOR ZELIA ZLT       | 1          |
| 2       | MPET06N5  | FRONT OF ZELIA V.ZLT CELL                                   | 1          |
| 3       | SF160155<br>(ZLT25)<br><br>SF160151<br>(ZLT50)<br><br>SF160156<br>(ZLT75) | ZLC/ZLT REPLACEMENT PLATE KIT/WITH FLOW SWITCH, TEMP SENSOR | 1          |
| 4       | SF160152  | ZELIA CELL FLOW SWITCH/WITH RESIN-BONDED MAGNET             | 1          |
| 5       | MPTE0150  | ZELIA CELL SHELL/TRANSPARENT ABS                            | 1          |
| 6       | MPTE0151  | ZELIA LOCKING RING/ABS RAL 7031                             | 1          |
| 7       | SF160153  | SET OF 2 UNION FITTINGS FOR ZELIA                           | 1 set of 2 |
| 8       | MPCS01L3  | Ø107.32 O-RING TORUS 5.33/O RINGS 70 IRHD EPDM              | 1          |
| 9       | MPCS01L4  | Ø91.67 O-RING TORUS 3/EPDM CELL CORD                        | 1          |
| 10      | SF1100A6<br>(ZLT25-50)<br><br>SF1100A6<br>V02 (ZLT75)                     | CI_ZILIAFOND_EQP_ZLT/CARD FOR ZELIA CELL                    | 1          |
| 11      | SF1100A7  | CI_ZILIAFF_EQP_ZLT /DISPLAY CARD FOR ZELIA                  | 1          |

Table 1.

## 4. Description

### 4.1. Principle of electrolysis

Salt water electrolysis separates salt (NaCl) into sodium (Na) and Chlorine (Cl). The chlorine is immediately dissolved into the water, producing hypochlorous acid (HClO). This powerful disinfectant destroys bacteria and algae before turning into salt again.

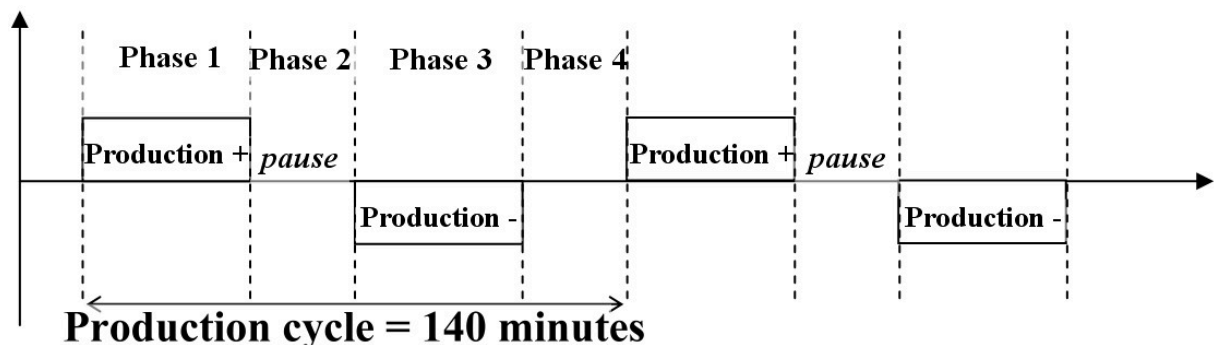
The quantity of chlorine required to disinfect a pool increases with the temperature and pH of the water.

The production of chlorine must be adjusted according to the environment and characteristics of the water:

- the water conductivity
- the water temperature
- the volume of the tank to be treated
- the water pH

With the safety of the installation in mind, the electrolyser only produces chlorine when the flow detector signals that water is flowing in the cell.

Thus, the electrolyser only produces chlorine during the filtration periods established by the programming clock of the pool's electrical box. Within these filtration periods, the production time consists of cycles of two periods (Normal and reverse) which alternate the polarity of the electrodes. This polarity reversal prevents scale formation on the electrodes.



Thus, a production cycle is broken down into 4 stages:

1. Stage 1, normal production (positive)
2. Stage 2, standby
3. Stage 3, reverse mode production (negative)
4. Stage 4, standby

At the end of a filtration period, the **ZLT** stops being produced and, when the filtration begins again, it resumes its cycle at its exact point of interruption.

The main advantage of this choice of operation is to guarantee in all cases (even in the event of a power failure) strictly identical normal or reverse production times and, consequently, to ensure

the less possible scale formation on the cell (commitment of production quality and longevity of the material).

## 4.2. Presentation of the ZLT

CCEI has developed light electrolysis. ZELIA's compact and light salt electrolyser is fitted with a transparent cell whose color varies according to the salinity and water temperature of the pool (patented method).



When users open their technical room, they know the status of their treatment device straight away and are assured about the water quality:

- Production in shut down mode, color according to the water temperature



- Production in operating mode, color according to the salinity



Efficient and optimum production - according to water temperature - reduced when the automatic cover is closed - 8 production modes

Compact and resistant monobloc cell - fitted with complete titanium plates.

Compact to fit into the most confined technical rooms.

Self-cleaning cell by polarity reversal.

Increased safety by in-built flow detection.

Is assembled in just a few minutes, easy connection with connector.

Specially adapted to underground technical rooms.

In temperature controlled mode, the production period is adapted **according to the temperature**.

## 5. Installation

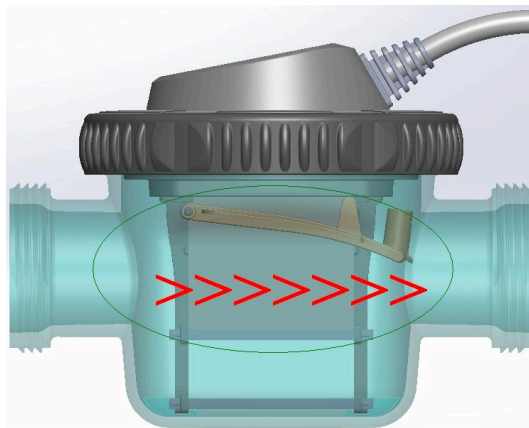
### 5.1. Hydraulic installation

The **ZLT** is installed on a conduit with a diameter of 50mm, using the provided union fittings. It is installed subsequent to filtration (after the filter). It can be placed both horizontally and vertically.

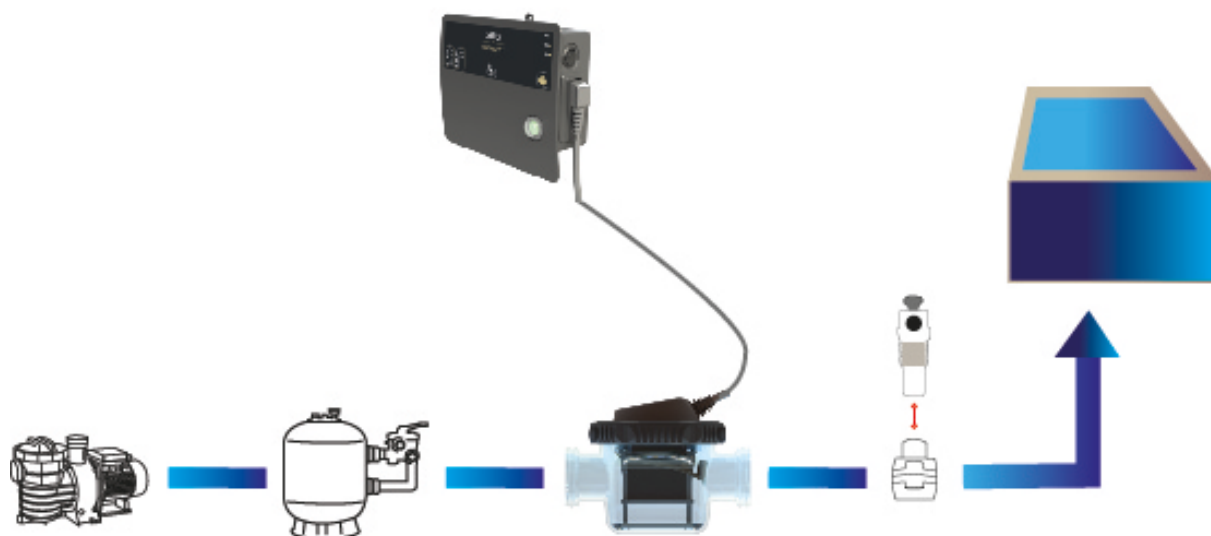
A bypass installation is favored (essential beyond 22m<sup>3</sup>/h) so that the flow in the cell can be controlled and the cell can be dismantled without interrupting the filtration.



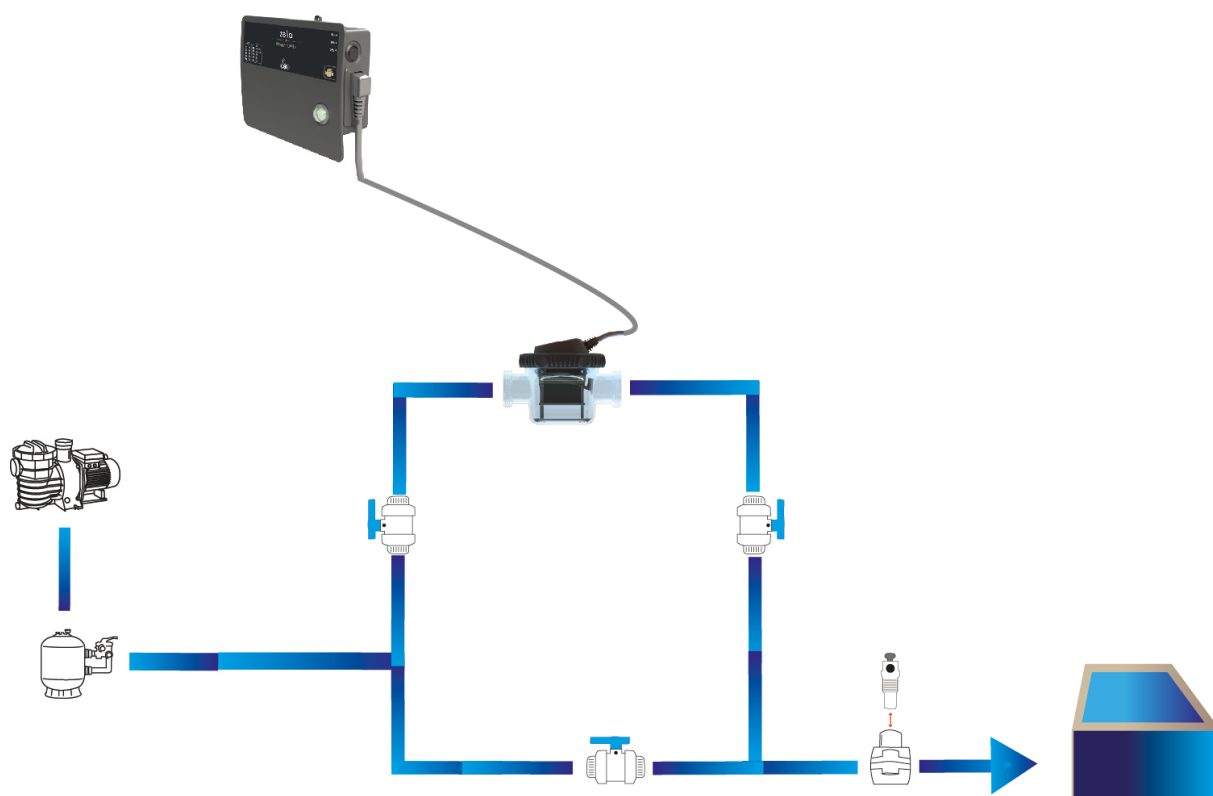
**Pay careful attention to the direction in which the water passes, to make sure that the flow is being correctly detected by the apparatus.**



### 5.1.1. Linear installation



### 5.1.2. Bypass installation



## 5.2. Electrical connection



Installation of this project involves a hazard of electric shocks. We strongly recommend you contract a professional installer. Incorrect installation places you in danger and may irreversibly damage the product and the equipment connected to it.



For reasons of safety and in accordance with the standard NF C15-100, the supply box of the ZLT must be installed

- either more than 3.5 m away from the edge of the pool. This distance is measured taking into account any workaround of obstacles. If the supply box of the ZLT is installed behind a wall, this therefore concerns the distance required to go round it and reach the box.
- or in an underground room in close proximity to the pool. In this case, the room must be accessible by a trap door which requires the use of a tool to be opened.

The box resists projected water but must not be placed in any place liable to flooding. To maintain its water-tightness, the 4 screws on the front must be tightly fastened. The supply box of the **ZLT** must be placed on a flat and stable platform and attached to the wall using the provided pegs and screws.

### 5.2.1. Supply

The supply box comes with a cable measuring 2m, pre-fitted with an european 2P+Tamerican plug. It must be powered using 120V or 230V single phase current with 50Hz or 60Hz, and protected by a 30mA differential device (ground fault circuit interrupter (GFCI)), capable of providing a sufficient intensity (15A). The cable section used for the supply must be suitable and functional over its entire length.



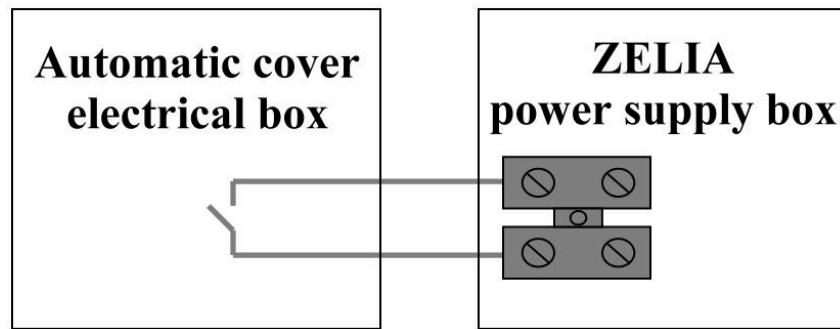
The supply must be permanent and must under no circumstances be controlled by the pool filtration pump.

### 5.2.2. Cover (or Redox analyzer) dry contact input



The cover dry contact should be a potential-free contact switch. A connection error may seriously damage the device.





### 5.2.3. Cell connection

Connect the cell to the side connector and secure it using the metal clip.



## 6. Commissioning



**Only regular analysis enables the device configuration to be adapted.**

**Carefully follow the stages below for the start-up process to run smoothly.**



**The chemical products used in pools are highly corrosive and can adversely affect your health and the environment.**

**These products should be handled with care and stored in suitable rooms.**

### 6.1. Stabilizing agent

Chlorine is a gas at ambient temperature. Its solid form (tablets, granules, etc.) is obtained by association with a cyanuric acid molecule. This cyanuric acid acts as a stabilizing agent as it protects the chlorine from the damaging UV rays of the sun. On the other hand, this cyanuric acid is not consumed and amasses inexorably in pools treated with chlorine tablets and ends up inhibiting the potential of the chlorine. For public pools, the maximum concentration of cyanuric acid is set at 80 ppm (or mg/l). The treatment of salt by electrolysis prevents this overdosing of cyanuric acid; however, it may be useful to add between 25 and 50 ppm (or mg/l) of stabilizing agent when the pool is highly exposed to the sun and when the chlorine concentration is insufficient. Indeed, in very sunny conditions, 90% of the free chlorine is destroyed in two to three hours in the absence of cyanuric acid while this proportion falls to 15% with 30 ppm of stabilizing agent (cyanuric acid).

### 6.2. Controlling the salt rate

**ZLT** is designed to operate with a water conductivity that corresponds to a concentration of salt between 1.5g/l and 3.5g/l at 25°C.

To accurately control the salt rate of your pool, we recommend that you use a conductivity tester. This instrument is very easy to use and provides a direct reading of the salt rate in g/l. There are also analysis tabs which can effectively control the salt concentration of your water.

When the salinity is unsuitable, **ZLT** suspends production in the event of too much or too little salt. If any of these faults are displayed, the first thing to check is that the cell is in a good condition; then make any necessary corrections to the pool water.

The water conductivity is proportional to salinity, but also depends on the temperature at a rate of 2.2% per degree Celsius.

| Salinity (in g/l) | 10°C | 15°C | 20°C | 25°C | 30°C | 35°C | 40°C |
|-------------------|------|------|------|------|------|------|------|
| Minimum           | 2,3  | 2,1  | 1,8  | 1,5  | 1,2  | 1,0  | 0,7  |
| Ideal             | 4,2  | 3,8  | 3,4  | 3    | 2,6  | 2,2  | 1,8  |
| Maxi              | 5,2  | 4,6  | 4,1  | 3,5  | 3,0  | 2,4  | 1,9  |

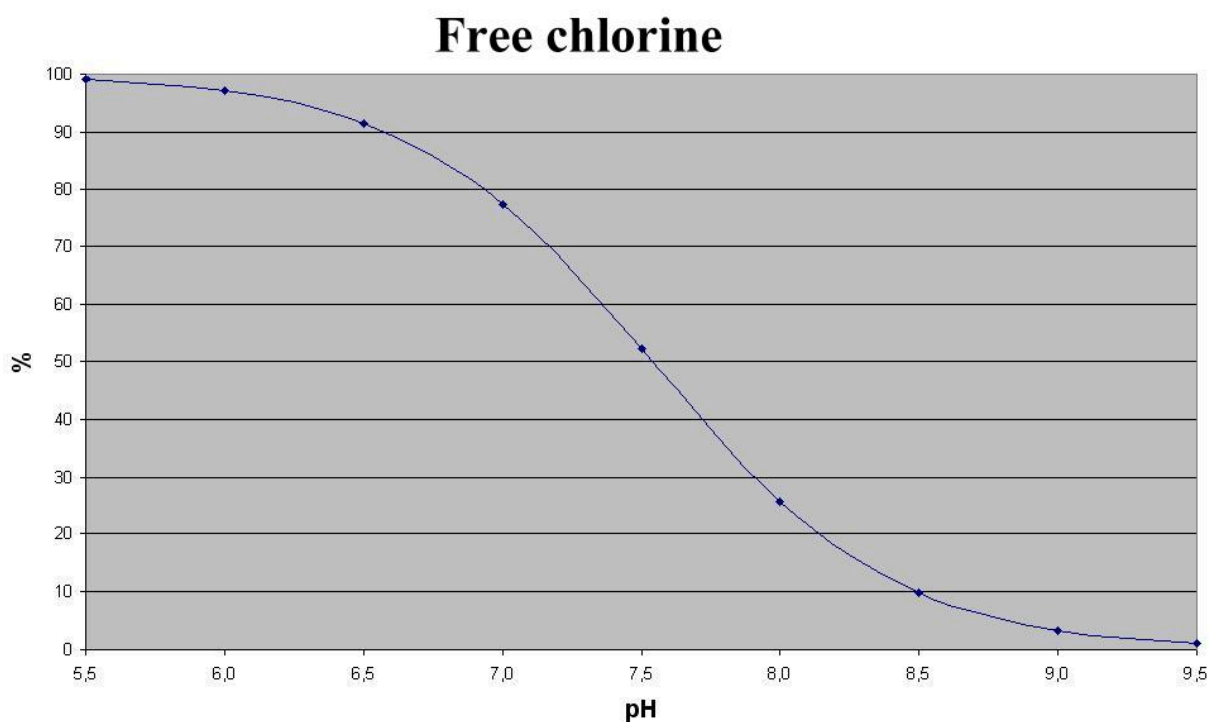
At 35°C, the max. salt rate therefore goes from 3,5g/l to 2,4g/l.

### 6.3. Controlling the TAS/TH

At the time of installation, you are advised to test the TAS (Total Alkali Strength) and/or the TH (Total Hardness) of the pool water, or arrange for them to be tested by a specialist. The two measurements are generally close and are more often than not expressed in French degrees (°F). If the TAS and TH are different, use the average value of these two measurements. It is important to note that very soft water (TAS/TH < 10°F) has the advantage that scale can be prevented but, on the other hand, it is highly corrosive and its pH is very unstable. Conversely, very hard water (> 35°F) has a pH which is very difficult to correct, and it is very irritating to the skin and causes scale formation quickly on the installations. In extreme cases, you are therefore recommended to correct the TAS and TH by using suitable chemical products.

### 6.4. Controlling the pH

The pH or Hydrogen potential measures the degree of acidity of the water. Its value is between 0 and 14. A solution with a pH of 7 is neutral. If it is lower than 7, the solution is said to be an acid and if it is greater, the solution is said to be a base or alkaline. For the comfort of swimmers, the effectiveness of the treatment and reliability of the installation, the pH of the pool water must be maintained at about 7. It is generally thought that a pH between 6.8 and 7.4 is ideal. Excessively acidic water (pH < 6.8) attacks mucus membranes, corrodes metals and can damage plastics. Excessively basic water (pH > 7.4) can also be aggressive (caustic) and considerably reduces the effectiveness of the chlorine. Therefore, when the pH goes from 7.2 to 8.2, the percentage of active chlorine goes from 70% to 20%.



To achieve maximum efficiency from the **ZLT**, the pH of the water should be maintained between 7.0 and 7.4.

As the water temperature varies during the season, the production time should be adjusted accordingly. This adjustment of the production according to the temperature is carried out automatically by the **ZLT** in the temperature controlled production modes (**P6** / **P7**)

## 7. Operation

### 7.1. Supply

On the supply box, a switch powers on the electrolyser. When the supply is powered on, this switch is lit.



If an automatic cover dry contact is connected to the box, the switch present on the side of the box should be in EXT position to enable detection. It is still possible to flip the switch to 100% to disregard the tank cover information and force nominal production, or even to 25% to divide the production by 4 regardless of the status of the shutter.







If the dry contact is not connected, it is possible to indicate that the tank is covered by switching to the position "25%". The switch must then be flipped back by hand to "100%" to return to normal operation.






## 7.2. Control interface


The interface consists of a 2-digit multi-function display (temperature, programming, parameters, etc.) of 3 indicators and 3 buttons;



| Item  | Description  |
|---|--|
| Indicator  | <p>"PRODUCTION"</p> <p>Off if the production is not in operating mode</p> <p>Flashing if the production is in standby mode, or if the cycle has ended, before the next cycle</p> <p>Permanently on if production is in progress</p>                            |
| Indicator  | <p>"FLOW"</p> <p>Off if the flow is not detected</p> <p>Flashing if the flow detection is in progress (delay)</p> <p>Permanently on if the flow is detected</p>  |
| Indicator  | <p>"COVER"/"REDOX STATUS"</p> <p>Off if the cover is open (or if the Redox analyzer dry contact is open)</p> <p>Flashing if detection is in progress (delay)</p> <p>Permanently on if the cover is closed (or if the Redox analyzer dry contact is closed)</p> |
| Button   | <p>"TOP/MORE"</p> <p>Makes it possible to increase, move up the display of parameters or programs</p>  |
| Button   | <p>"BOTTOM/LESS"</p> <p>Makes it possible to decrease, move down the display of parameters or programs</p>   |
| Button   | <p>"VALIDATION/OK"</p> <p>Makes it possible to validate the choice of a program</p>  |

### 7.3. Choice of a program

The program is chosen after pressing the  button. Users have 5 seconds to select the desired program (the program flashes during this time) using the buttons  and .

10 different programs can be selected. Once the program is selected, press the  button again to validate the selection. To stop the function, all you have to do is press this button again. **OF** is displayed during deactivation.

| Program   | Description   | Comments   |
|-----------|---|--|
| <b>P1</b> | Production 1 hour/day   |  |
| <b>P2</b> | Production 2 hours/day  |  |
| <b>P3</b> | Production 4 hours/day  |  |
| <b>P4</b> | Production 8 hours/day  |  |
| <b>P5</b> | Production 12 hours/day   |  |
| <b>P6</b> | temperature controlled production (1 - 4 hours/day)                         | Production increases automatically with water temperature  |
| <b>P7</b> | temperature controlled production (2 - 12 hours/day)                        |  |
| <b>P8</b> | "Shock" production  | Electrolysis works for 24 hours (if filtration is in progress) and returns to the previous program     |
| <b>P9</b> | Permanent production  | Electrolysis works permanently (when filtration is in progress)  |
| <b>PA</b> | Externally controlled production. Requires the use of a regulator (see 7.7) | Electrolysis works when the Redox analyzer dry contact is activated (and if filtration is in progress) |

In the event of power cut, the chosen program will be saved, but it will be staggered.

Once the program is validated, it is recalled alternately with the water temperature.

## 7.4. Temperature control

In modes **P6** and **P7** **ZLT** automatically adjusts the chlorine production period according to the water temperature. Users can choose between two temperature controlled modes:

- The first (**P6**) is for an "economical" production, specially adapted to small-sized tanks. The production time will be between 1 and 4 hours per day.
- The second (**P7**) is for a production time between 2 and 12 hours per day.


The production time changes proportionally to the water temperature when this temperature varies:

| Program   | 15°C    | 17°C          | 20°C          | 22°C          | 25°C           | 30°C     |
|-----------|---------|---------------|---------------|---------------|----------------|----------|
| <b>P6</b> | 1 hour  | 2 hours       | 2 hours       | 3 hours       | 3 hours        | 4 hours  |
| <b>P7</b> | 2 hours | 3 hours + 1/2 | 6 hours + 1/2 | 8 hours + 1/2 | 11 hours + 1/2 | 12 hours |

## 7.5. Low temperature

The need for disinfectant is greatly reduced when the water temperature falls. So as not to needlessly use the electrolysis cell, the device suspends production when the water temperature is below 12°C and displays **E2**. In shock mode (**P8**) the production works even if the temperature is low..

## 7.6. Automatic cover

If the **ZLT** is connected to your automatic cover, it detects that the cover is closed, activates the indicator  and divides by 4 the projected chlorine production period. This functionality means that the risk of a significant accumulation of chlorine is reduced. For instance, if the normally projected production cycle is expected to last 8 hours, the production is reduced to 2 hours when the cover is closed.

## 7.7. Redox-controlled production














**Take care not to use the **PR** mode unless you have a RedOx regulator. In this mode with this external regulator, the switch of the supply must be set to "EXT".**

This mode (**PR**) means that the chlorine production can be regulated according to actual requirements when the **ZLT** is connected to a redox or chlorine measuring device (sold separately). The "Cover" entrance of the **ZLT** is then used to connect the contact switch of the measuring device. When the RedOx or rate of chlorine measured is less than the recommended amount, the analyzer dry contact is closed and the **ZLT** is in production mode (if filtration is in operating mode).



## 7.8. Display of parameters

It may be useful to display some parameters which determine the way in which the device operates. These parameters are viewed by pressing the button  and . In order to identify the parameter, its number is alternated, preceded by a .

| Parameter  | Description   |
|--|---|
|  1              | Remaining electrolysis duration in hours, or in minutes when the point separating the 2 displays is lit   |
|  2              | Duration of electrolysis completed (hours) since the start-up of the program in progress  |
|  3*             | Electrolysis current (1.0 = 1,0A)(2.0 = 2,0A)(3.0 = 3,0A) through the plates.   |
|  4 *            | Conductivity (in mS/cm) on indicative basis. This value is calculated according to the voltage, current and temperature on the theoretical basis of a new cell (doesn't take into account wear and tear of the plates). |
|  5 (editable)   | Water hardness to enter for an optimal calculation of the polarity inversion cycles (refer to section "Water hardness").  |
|  6            | Model identification (25=ZLT25)(50=ZLT50)(75=ZLT75)   |
|  7 (editable) | Desired production level (refer to section "Production level").   |
|  8            | Electrolysis voltage (in Volt) on the plates.   |







\* *Parameters reserved for assessment, corrective maintenance.*

After 10 seconds, the display automatically returns to normal mode (Standby: display of temperature, default and mode)

## 7.9. Water hardness

To extend the lifespan of the cell it is necessary to enter the water hardness. The device will then automatically calculate the best duration of the polarity inversion cycles. The hydrometric title (T.H.) indicates the mineral content of the water and is expressed in French degrees or mg/l. This value is given by the water supplier but may be measured by a water specialist.

To set this parameter:

1. Press the keys  and  until **h5** is displayed.
2. Validate with the key .
3. Adjust the parameter with the keys  and  (see table below) .
4. Validate with the key .

| Water hardness                  | Value to enter under parameter <b>h5</b> | Duration of the polarity inversion cycles* |
|---------------------------------|--|--|
| Very soft (0 to 10 ppm)         | <b>h1</b>                                | 7h20                                       |
| Soft (10 to 30 ppm)             | <b>h2</b>                                | 6h20                                       |
| Slightly hard (30 to 60 ppm)    | <b>h3</b>                                | 5h20                                       |
| Moderately hard (60 to 120 ppm) | <b>h4</b>                                | 4h20                                       |
| Hard (120 to 180 ppm)           | <b>h5</b>                                | 3h20                                       |
| Very hard (180 ppm and over)    | <b>h6</b>                                | 2h10                                       |







After 10s the display automatically returns to normal mode (standby: display of the temperature, error and mode).

\*This value corresponds to the polarity inversion cycles required for the self-cleaning of the cell. This parameter doesn't have any impact on the daily production time.

## 7.10. Production level

The produced chlorine quantity is limited by the daily filtration time (as the salt chlorinator runs together with the filtering pump thanks to its flow switch). In case of a lack of chlorine it is first necessary to check the daily filtration time. It is also possible to change the production level. Reducing the production level if it is too high (for small pools i.e...) will increase the lifespan of the cell. Rising this level will increase the chlorine production but decrease the lifespan of the cell.

To set this parameter:

1. Press the keys  and  until **07** is displayed.
2. Validate with the key .
3. Adjust the parameter with the keys  and  (see table below).
4. Validate with the key .

| Required production level        | Value to enter under parameter <b>07</b> |
|----------------------------------|--|
| 30%                              | <b>01</b>                                |
| 40%                              | <b>02</b>                                |
| 50%                              | <b>03</b>                                |
| 60%                              | <b>04</b>                                |
| 75%                              | <b>05</b>                                |
| 90%                              | <b>06</b>                                |
| Nominal (100%) (factory default) | <b>07</b>                                |
| 110%                             | <b>08</b>                                |
| Maximal (125%)*                  | <b>09</b>                                |

After 10s the display automatically returns to the normal mode (standby: display of the temperature, error and mode).

\*It is recommended to limit the use of the production levels **08** and **09**



## 7.11. Error messages

The **ZLT** provides users with indications whereby potential faults can be prevented or assessed. Messages are then alternated with the water temperature:

| Message | Cell flashes | Description   | Resolution  |
|---------|--------------|---|---|
| E0      | Orange       | Internal error (communication fault between the two integrated cards) | Check the connection of the canvas between the 2 cards, inside the cell   |
| E1      | Light blue   | Internal overheating (>85°C)  | Allow the cell to cool down or install the cell in a cooler place   |
| E2      | Violet       | Water temperature measurement error                                   | Check the connection of the temperature sensor inside the cell  |
| E5      | Red          | Excessively low current/lack of salt                                  | <p>Check the salt rate</p> <p>Remove scale from the cell using diluted acid</p> <p>Add salt after the requirement has been confirmed.</p> <p>Refer to the section on electrolysis.</p> <p>This fault can easily result in the punctual presence of air in the cell, after the filtration pump has been unprimed or air has entered the circuit.</p> |
| E6      | Blue         | Excessively high current/too much salt                                | <p>Check the salt rate</p> <p>Renew the water part.</p> <p>Refer to the section on electrolysis.</p>  |
| E=      | White        | Temperature < 12°C  | This is not a failure. Please refer to "Low temperature".   |




## 7.12. Factory reset

It may be necessary to reset the **ZLT**. To do so:

1. Cut the power of the electrolyser via the ON/OFF button present on the power box.
2. Wait for about 30 seconds,
3. Press the button  and keep it held down,
4. Turn the electrolyser back on via the ON/OFF button on the power box.
5. Wait for the cell to display the start-up colors,
6. Release the button ,
7. You will see that **88** is displayed and the colors will again be shown in the cell, which confirms that the device has been reset to factory defaults.

### 7.13. Accelerated mode

It may be necessary to perform tests to accelerate the internal clock of the **ZLT**. To do so:

1. Cut the power of the electrolyser via the ON/OFF button present on the power box.
2. Wait for about 30 seconds,
3. Press the button  and keep it held down,
4. Turn the electrolyser back on via the ON/OFF button on the power box.
5. Wait for the cell to display the start-up colors,
6. Release the button ,
7. You will observe that  is displayed, which confirms that the device clock has been accelerated.

## 8. Maintenance

### 8.1. Addition of salt

When the salt level falls below 2g/l, salt must be re-added to the tank.

The use of specially treated salt which contains stabilizing agents is recommended for the pool. The effectiveness of the electrolyser will be significantly improved by it.

At the start of the season, we recommend that you check the salt rate and make sure it reaches 3g/l. According to the measured salt rate, the amounts of salt to be added are as follows:

Weight of salt to add (**in kg**) to reach 3g/l:

| Measured rate/Tank vol. | 20m3 | 40m3 | 60m3 |
|-------------------------|------|------|------|
| 1,5 g/l                 | 30   | 60   | 90   |
| 2 g/l                   | 20   | 40   | 60   |
| 2,5 g/l                 | 10   | 20   | 30   |

*For example, if the measured salt rate is 1.5g/l, 60 kg of salt should be added to reach a rate of 3g/l in a tank of 40m3*

### 8.2. During winter

In winter, weather permitting, the treatment can be maintained by considerably reducing the frequency. A filtration cycle of 8 hours every fortnight is enough in most cases.

However, it is essential to monitor the salt rate to keep the cell from functioning in water that contains too little salt (<2g/l).




If tarpaulin or a cover is used, the chlorine is protected from UV rays and the chlorine requirement is reduced. In Automatic mode and when the cover contact point is connected, **ZLT** automatically reduces production.

To enable the **ZLT** to operate with cold water (less than 18°C), it may be necessary to increase the salt rate to 5g/l.

### 8.3. Cleaning the cell

When the indicated production is low despite the correct salt rate, the status of the cell should be checked; if there is visible scale on the plates, the cell should be cleaned. To clean the cell, one end should be blocked and diluted acid should be poured in (10% HCl recommended). Allow the acid to act over several hours. This operation must be carried out with the greatest of care and it must follow the instructions set out for the use of the acid.

## A. Declaration of conformity

|   |   |                                  |
|---|---|----------------------------------|
| CCEI S.A.S (FR 47 40 35 21 693) declares that the ZELIA ZLT product meets the safety and electromagnetic compatibility requirements of European directives 2014/35/EU and 2014/30/EU. |   |                                  |
|                     |  | Emmanuel Baret<br>Marseilles, on |
| <b>Distributor's stamp</b>  |   |                                  |
| <i>Date of sale: ..... Batch N°: .....</i>  |   |                                  |