



Henden Salt and Mineral Chlorinator HSMC15, HSMC25, HSMC35

INSTALLATION & OWNERS MANUAL



IMPORTANT
Please read carefully



WARNING:
Failure to follow these instructions and comply with all applicable codes may cause serious bodily injury and/or property damage.

The installation of this product should be carried out by a person knowledgeable in swimming pool plumbing requirements following the installation instructions provided in this manual.

Please pass these instructions on to the operator of this equipment

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Henden Salt and Mineral Chlorinator

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INSTALLATION

Congratulations! You are now the proud owner of a new Henden Salt and Mineral Chlorinator. Please read all information in this manual carefully before installing or operating your Henden Salt and Mineral Chlorinator.

PACKING LIST

Included with your system are the following items. Please check the contents of the box carefully prior to attempting to install the system:

- Power Supply with cell lead
- U-shaped electrolytic housing & cell
- Cell blanking cap & o-ring
- 2 x Barrel unions including nut, tail & o-ring
- 2 x Reducing bushes
- Quick reference guide
- Power lead
- Mounting screws & plugs pack



ATTENTION: Your Henden Salt and Mineral Chlorinator is not intended for use by young children or infirm persons without supervision. Please ensure that young children are supervised to ensure that they do not play with the Henden Salt and Mineral Chlorinator system.



ATTENTION: Power connections and wiring must be carried out by an authorised electrician.

IMPORTANT SAFETY INSTRUCTIONS

- To minimise the risk of gas build-up in the cell housing, you must ensure there is sufficient water flow through the cell when the unit is on and producing chlorine.
- It is essential that your pool pump circulates sufficient water through the cell housing to completely fill the cell housing with water during the chlorination process.
- Periodically check the paddle of the safety flow switch to ensure it is free to move back and forth and that the lock nut is done up hand tight.



Diagram A

**CORRECT OPERATION
WITH A PUMP RUNNING**

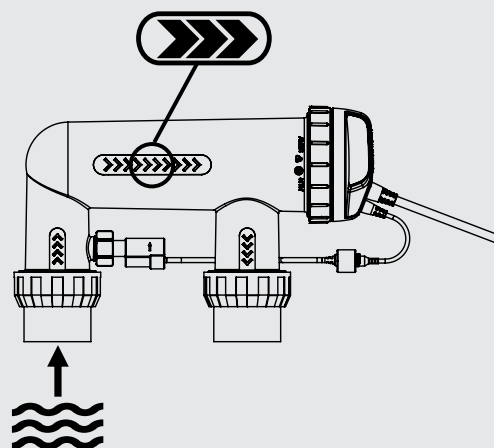
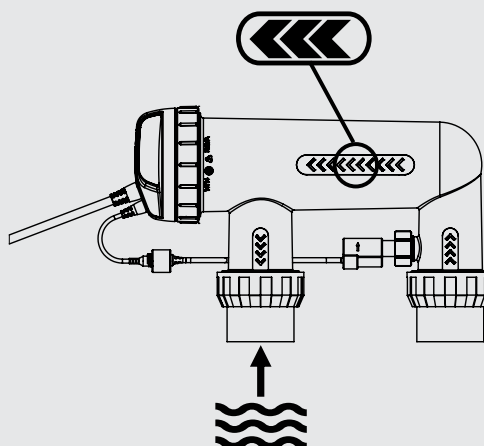


Diagram B

**INCORRECT OPERATION
WITH A PUMP RUNNING**



COMMON TERMS

Algae

Microscopic forms of plant life which enter the pool via rain, wind and dust. There are numerous varieties – some are free floating whilst others grow on walls and in cracks and come in different colours. Some are more resistant to chemical treatment than others.

Bacteria

The germs that contaminate your pool. Introduced by swimmers, dust, rain storms and other elements.

Balanced water

The correct ratio of mineral content and pH level that prevents pool water from being corrosive or scale forming.

Chloramines

Compounds formed when chlorine combines with nitrogen from urine, perspiration, etc. Chloramines cause eye and skin irritation, as well as unpleasant odours.

Chlorine demand

The chlorine required to destroy germs, algae and other contaminants in the pool.

Chlorine residual

The amount of chlorine remaining after chlorine demand has been satisfied. This is the reading obtained with your test kit.

Cyanuric acid

Also known as stabiliser or conditioner. It reduces dissipation of chlorine by direct sunlight.

Liquid acid

A chemical used to reduce the pH and total alkalinity in the pool water, and for cleaning Sanitiser cell.

ppm

An abbreviation for Parts Per Million, the accepted measurement of chemical concentration in swimming pool water.

1 ppm = 1 mg/L.

1. INSTALLATION INSTRUCTIONS

1.1 Installing the power supply

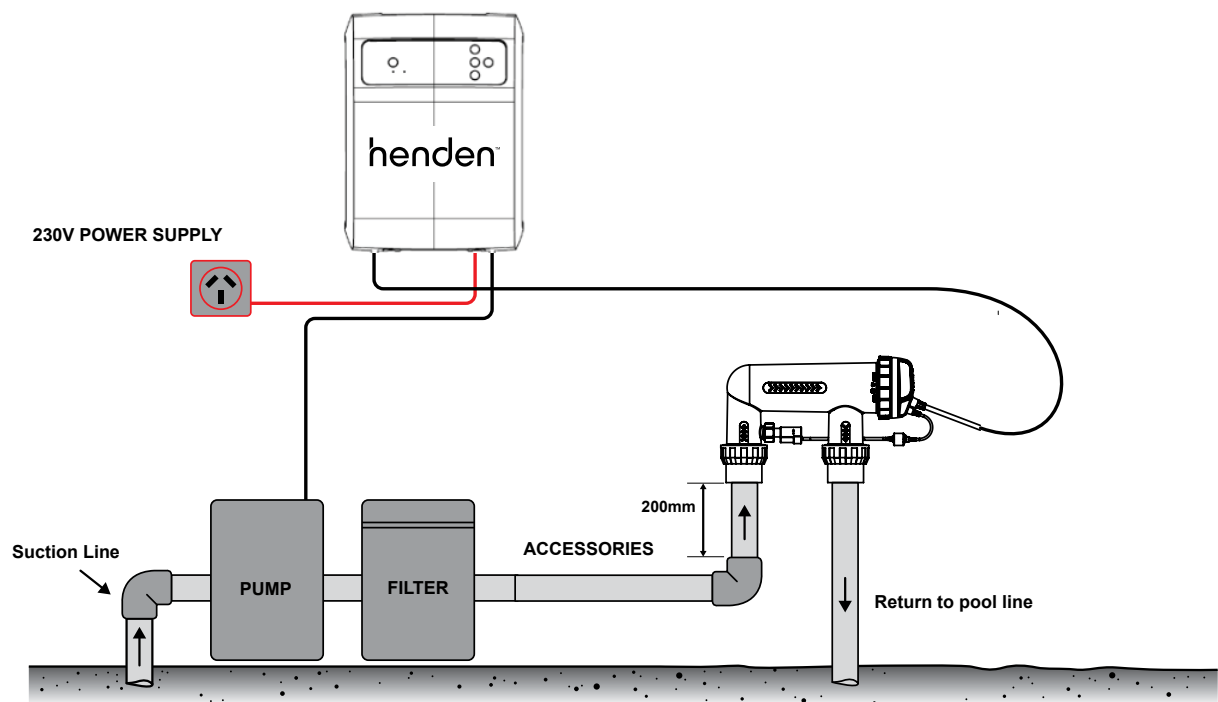
Select a convenient, well-ventilated location within one metre of the filter equipment and mount the power supply vertically onto a wall, or post at least as wide as the HSMC power supply itself. Henden recommends that the power supply shall not be located within 3 metres of the pool water.

Plug the pump and chlorinator power supply into a suitable weatherproof power outlet/controller. Or, you can use the 3-pin socket on the rear of the power supply to provide pump power.

The unit must be kept away from acid and other chemical storage areas. Acid and chemical vapours will corrode the electronics inside the unit. The unit must also be kept away from heat sources. Good ventilation is necessary for correct operation.

Two self-tapping screws and wall plugs have been provided for fast and simple installation. Use a 6mm masonry drill bit when fitting the power supply to a brick or concrete wall. When mounting to a post drill pilot holes and fit the screws provided. The holes should be level and 164mm apart. Once the screws are in position simply hang the HSMC power supply via the mounts on the back of the unit.

For adequate weatherproofing, the wall or post that HSMC is mounted to should be flat and at least as wide as the HSMC power supply.



1.2 Installing the cell

The HSMC cell should always be the last appliance in your system. Ensure the cell is installed after pumps, filters and any heating appliances. To achieve best efficiency, the HSMC cell should be installed such that turbulent water is limited. Do not install a 90° elbow closer than 200mm from the cell's inlet barrel union. Isolation valves used when the equipment is located below pool water level should also be installed no closer than 200mm from the inlet barrel union. This will assist laminar flow.

1.3 Connecting the electrolytic cell to the power supply

The HSMC uses a reverse polarity electrolytic cell for low maintenance operation. The HSMC power supply is fitted with a flexible lead terminated with the cell connectors built into a plastic moulding. The three in-line connectors are not "polarity sensitive".

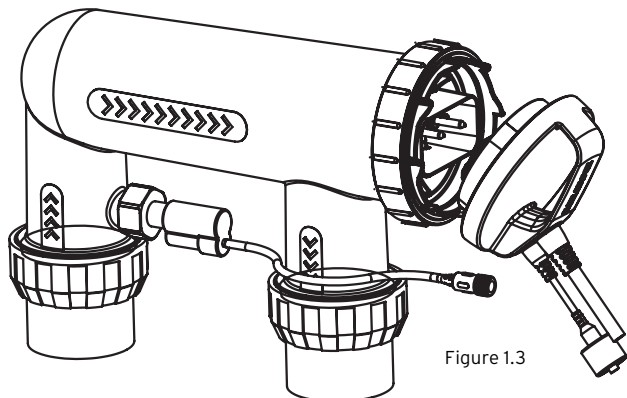


Figure 1.3

NOTE: The HSMC cell is supplied with a paddle type flow switch, which is to be installed on the cell as shown below and connected to the cell lead via the connector on the end of the cable.



NOTE: The flow switch must be mounted with the highlighted arrow on side of the switch pointing in the direction of flow.

1.4 Connecting the flow switch to the cell housing

Ensure that the flow switch is installed into the cell housing.

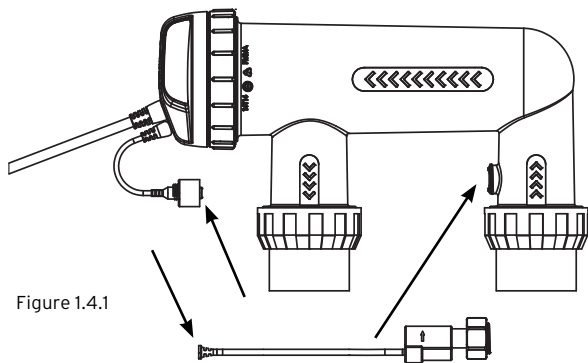


Figure 1.4.1

Ensure the flow switch direction is correct (see page 5)

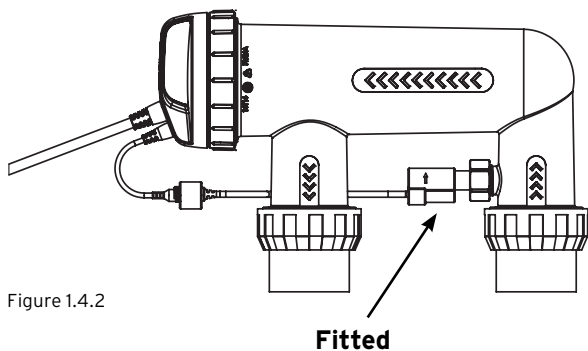


Figure 1.4.2

Fitted

1.5 Pre-start up procedure

Before operating your Henden Salt and Mineral Chlorinator, please ensure the following quantity of pool salt has been added to your pool.

• POOL SALT:

| To raise salt concentration by | | Salt required | | | | | | | | | | | | | | | |
|--------------------------------|-----|---------------|-----|---------|-----|---------|-----|---------|-----|---------|-----|---------|-------|---------|-------|----------|-------|
| ppm | % | 30,000L | | 40,000L | | 50,000L | | 60,000L | | 70,000L | | 80,000L | | 90,000L | | 100,000L | |
| | | kg | lbs | kg | lbs | kg | lbs | kg | lbs | kg | lbs | kg | lbs | kg | lbs | kg | lbs |
| 1,000 | 0.1 | 30 | 66 | 40 | 88 | 50 | 110 | 60 | 132 | 70 | 154 | 80 | 176 | 90 | 198 | 100 | 220 |
| 2,000 | 0.2 | 60 | 132 | 80 | 176 | 100 | 220 | 120 | 265 | 140 | 309 | 160 | 353 | 180 | 397 | 200 | 441 |
| 3,000 | 0.3 | 90 | 198 | 120 | 265 | 150 | 331 | 180 | 397 | 210 | 463 | 240 | 529 | 270 | 595 | 300 | 661 |
| 4,000 | 0.4 | 120 | 265 | 160 | 353 | 200 | 441 | 240 | 529 | 280 | 617 | 320 | 705 | 360 | 794 | 400 | 882 |
| 5,000 | 0.5 | 150 | 331 | 200 | 441 | 250 | 551 | 300 | 661 | 350 | 772 | 400 | 882 | 450 | 992 | 500 | 1,102 |
| 6,000 | 0.6 | 180 | 397 | 240 | 529 | 300 | 661 | 360 | 794 | 420 | 926 | 480 | 1,058 | 540 | 1,190 | 600 | 1,323 |

- **CHLORINE:** For a new pool installation that has not been chlorinated, add sufficient Chlorine (liquid or granular) to achieve a reading of 3 ppm (with a suitable test kit). Alternatively, run the Henden Salt and Mineral Chlorinator continuously on BOOST MODE, for approximately 24 hours, or until a reading of 3 ppm is reached.
- **STABILISER:** It is essential that pool stabiliser be added and maintained at the rate of 25 - 50 ppm at all times (**FOR OUTDOOR POOLS ONLY**). For ORP controlled systems the stabiliser level should be maintained between 15-25ppm.

Refer to Day to Day Operation section on page 38 for further information on pool chemistry.

IMPORTANT INFORMATION ABOUT YOUR CHLORINATOR

FACTORS THAT WILL IMPROVE THE
PERFORMANCE & LIFE OF YOUR HENDEN SALT AND MINERAL CHLORINATOR
PLEASE READ THIS BEFORE OPERATING YOUR CHLORINATOR

POOL BUILDERS: Please cover this information with your customer during the new pool handover.

Sanitisers are a valuable piece of pool sanitising equipment and must be cared for to get the best performance and life span.

There are THREE main factors that will damage your Henden Salt and Mineral Chlorinator and reduce the life of the product. Please monitor the following factors in accordance with your installation & operating instructions.

1. MAINTAIN RECOMMENDED TOTAL DISSOLVED SOLIDS (TDS) LEVELS

RECOMMENDED OPERATING RANGE: 3,000 - 6,000ppm

- Run the HSMC at the salt levels stated within this document and on the product to ensure optimum sanitiser output and cell life.
- Operating this device at low salt levels will damage the cell and reduce its life.
- The control panel displays a red LED indicator warning when the TDS levels are low.
- If no action is taken to rectify the TDS levels, damage to the cell may result which will not be covered under warranty.

2. MONITOR & MAINTAIN YOUR Henden HSMC CELL

The Henden Salt and Mineral Chlorinator has a "Reverse Polarity" cell.

- To keep your HSMC in the best possible condition, regular monitoring of the electrolytic cell is recommended. The 'cell' is the clear plastic housing containing the plates.
- During the sanitisation process a white powdery calcium scale may naturally build up on the titanium plates in the cell. Monitor the cell to prevent excessive scale build up. Excessive scale build up will cause damage to your cell, and dramatically reduce its efficiency and lifespan.
- Reverse Polarity models have low maintenance cells that minimise scale build up.
- The control panel displays a red LED indicator warning when the cell requires cleaning.
- If calcium scale builds up please clean the cell, following the cleaning instructions provided on page 37.

NEVER: Use concentrated acid to clean your cell.

NEVER: Leave the cell in cleaning solution for extended periods of time

NEVER: Use metal implements, scourers or brushes to clean your cell

3. BALANCED POOL WATER CHEMISTRY

- Salt TDS levels **MUST** be maintained at **3,000 - 6,000ppm** for optimum performance and lifespan
- Calcium hardness levels **MUST** be kept within the ideal range of **200 - 275ppm** (for concrete and tiled pools) and **100 - 225ppm** (for other surfaces) to prevent excessive scale build up and damage to equipment.
pH levels **MUST** be kept to ideal levels to prevent damage to equipment and pool surfaces, and to obtain optimum chlorinator effectiveness.
- Total alkalinity and stabiliser levels must also be kept in an ideal range.

Note: Please refer to the **POOL WATER CHEMISTRY** chart on page 40 for more information.

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2. OPERATION OF YOUR HSMC

CHLORINE OUTPUT is expressed as a percentage of the maximum output of the HSMC. Set the HSMC to the percentage output required and the unit will automatically adjust the cell output to the set level. The HSMC is fitted with an electronic control and warning system. This regulates the output of the HSMC to the pre-set maximum and changes cell polarity as indicated by the "+" or "-" on the digital display. The polarity will alternate over a number of hours of chlorination time, not necessarily pump-run hours.

3. CONTROL PANEL

3.1 Layout

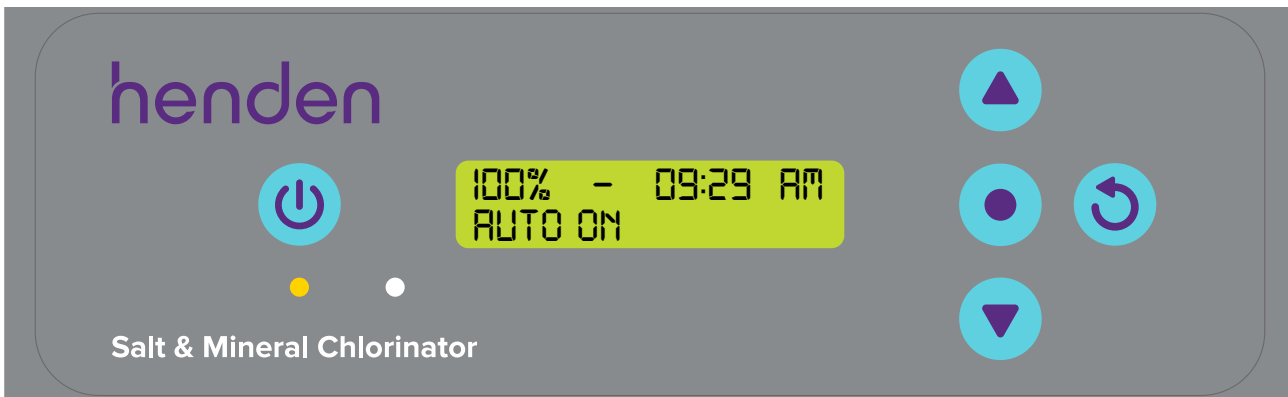


Figure 3.1



4. INITIAL START-UP

Once the salt level in the pool is correct the unit may be switched on (refer to page 9).

Note: Once the unit starts there is a short time delay until the cell operates to ensure the filtration system is primed with water.

- The first time the Henden Salt and Mineral Chlorinator is turned on, the following screen is shown on start-up:



Figure 4.1

- This screen shows the version of software (ie v1.27 shown) and your model of HSMC (ie AU 15 shown, meaning HSMC15).

- The display then automatically reverts to the following screen:

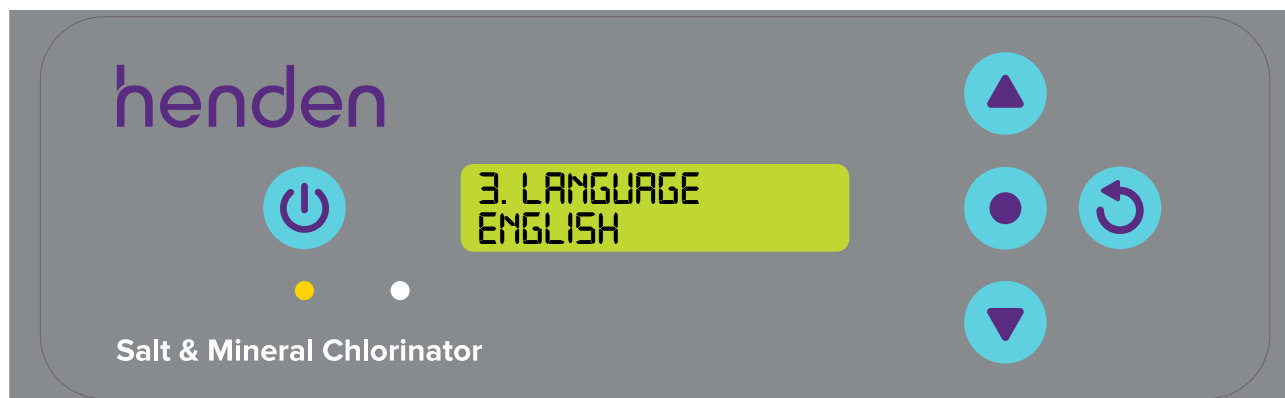


Figure 4.2

- > This screen shows the language menu and the current language setting (ie English shown);
 - > The language setting can be changed by pressing the **menu up/down** buttons to scroll through available languages;
 - > Press **menu/setting select** once your preferred language is displayed;
 - > If a mistake is made, the setting can be changed later.
- The display then automatically reverts to the following screen:

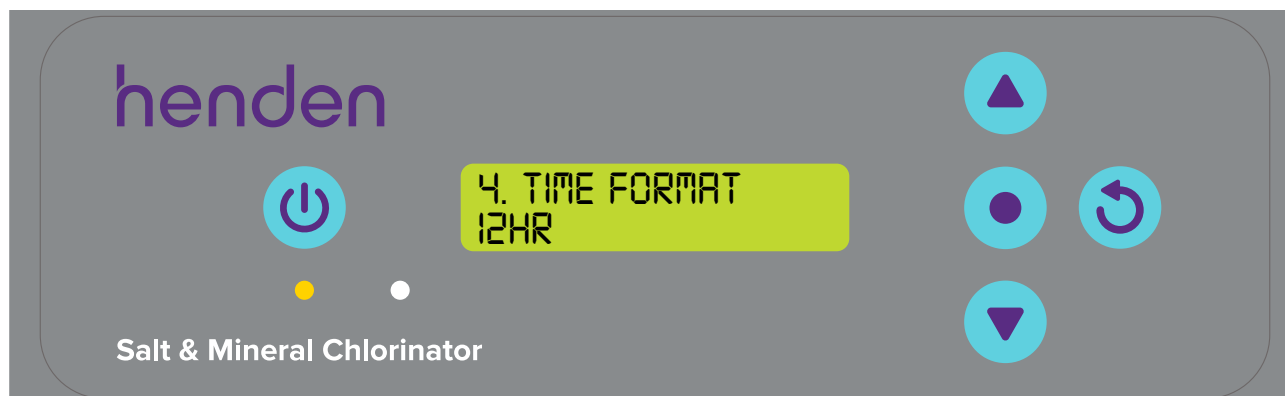


Figure 4.3

- > This screen shows the time format menu and the current time format (ie 12HR shown);
 - > The time format can be changed by pressing the **menu up/down** buttons to toggle between 12HR and 24HR formats;
 - > Press **menu/setting select** once your preferred time format is displayed;
 - > If a mistake is made, the setting can be changed later.
- The display then automatically reverts to the following screen:

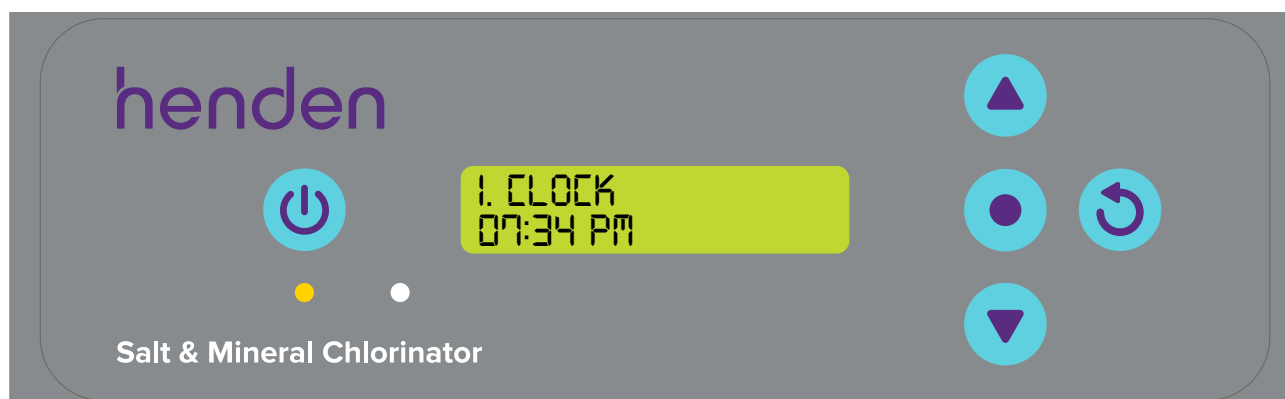


Figure 4.4

- > This screen shows the clock's current time (Figure 4.4 shows 07:34PM, having elected for 12 hour time format earlier);
 - > Initially the clock hours will be flashing;

- > The clock hours can be changed by pressing the ▲▼ menu up/down buttons to scroll to your chosen time;
- > Press ● menu/setting select once your preferred clock hour is displayed;
- > If a mistake is made, the setting can be changed later.
- > Next the clock minutes will be flashing;
- > The clock minutes can be changed by pressing the ▲▼ menu up/down buttons to scroll to your chosen time;
- > Press ● menu/setting select once your preferred clock minutes is displayed;
- > If a mistake is made, the setting can be changed later.
- > Next the clock AM/PM will be flashing (if 12 hour time format chosen earlier. Otherwise, the display reverts to date format menu);
- > The clock AM/PM can be changed by pressing the ▲▼ menu up/down buttons to toggle between AM and PM;
- > Press ● menu/setting select once your preferred clock AM/PM is displayed;
- > If a mistake is made, the setting can be changed later.
- The display then automatically reverts to the following screen:

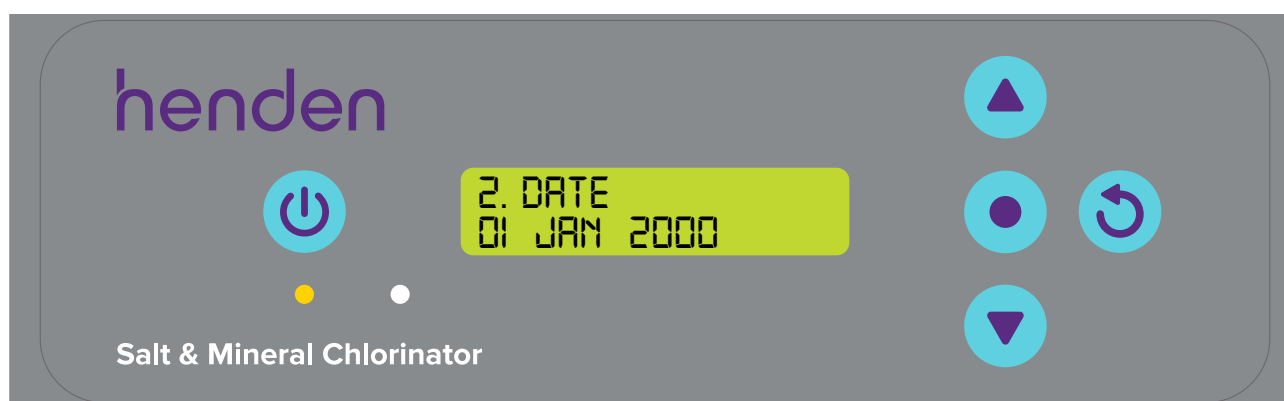


Figure 4.5

- > This screen shows the date format menu and the current date (ie 01 JAN 2000 shown);
- > Initially the date day will be flashing;
- > The date day can be changed by pressing the ▲▼ menu up/down buttons to scroll to your chosen date day;
- > Press ● menu/setting select once your preferred date is displayed;
- > If a mistake is made, the setting can be changed later.
- > Next the date month will be flashing;
- > The date month can be changed by pressing the ▲▼ menu up/down buttons to scroll to your chosen date month;
- > Press ● menu/setting select once your preferred date month is displayed;
- > If a mistake is made, the setting can be changed later.
- > Next the date year will be flashing;
- > The date year can be changed by pressing the ▲▼ menu up/down buttons to scroll to your chosen date year;
- > Press ● menu/setting select once your preferred date year is displayed;
- > If a mistake is made, the setting can be changed later.

- The display then automatically reverts to the following screen:



Figure 4.6

- > The screen shows the **ON-TIME** of **TIMER 1**:
 - current **ON-TIME** of **TIMER 1** is 6:00am (example assumes 12 hour time format chosen earlier).
- > Initially the clock hours will be flashing;
- > The clock hours can be changed by pressing the **menu up/down** buttons to scroll to your chosen time;
- > Press **menu/setting select** once your preferred clock hour is displayed;
- > If a mistake is made, the setting can be changed later;
- > Next, the clock minutes will be flashing;
- > The clock minutes can be changed by pressing the **menu up/down** buttons to scroll to your chosen time;
- > Press **menu/setting select** once your preferred clock minutes is displayed;



Figure 4.7

- > The screen shows the **OFF-TIME** of **TIMER 1**:
 - current **OFF-TIME** of **TIMER 1** is 9:00am (example assumes 12 hour time format chosen earlier).
- > Initially the clock hours will be flashing;
- > The clock hours can be changed by pressing the **menu up/down** buttons to scroll to your chosen time;
- > Press **menu/setting select** once your preferred clock hour is displayed;
- > If a mistake is made, the setting can be changed later;
- > Next, the clock minutes will be flashing;
- > The clock minutes can be changed by pressing the **menu up/down** buttons to scroll to your chosen time;
- > Press **menu/setting select** once your preferred clock minutes is displayed;
- > If a mistake is made, the setting can be changed later;
- > Next, the clock AM/PM will be flashing, assuming 12 hour format chosen earlier;
- > The clock AM/PM can be changed by pressing the **menu up/down** buttons to toggle between AM and PM;
- > Press **menu/setting cancel (go back)** button once your preferred **OFF-TIME** for **TIMER 1** is displayed;
- > If a mistake is made, the setting can be changed later;

- The display then automatically reverts to the following screen:

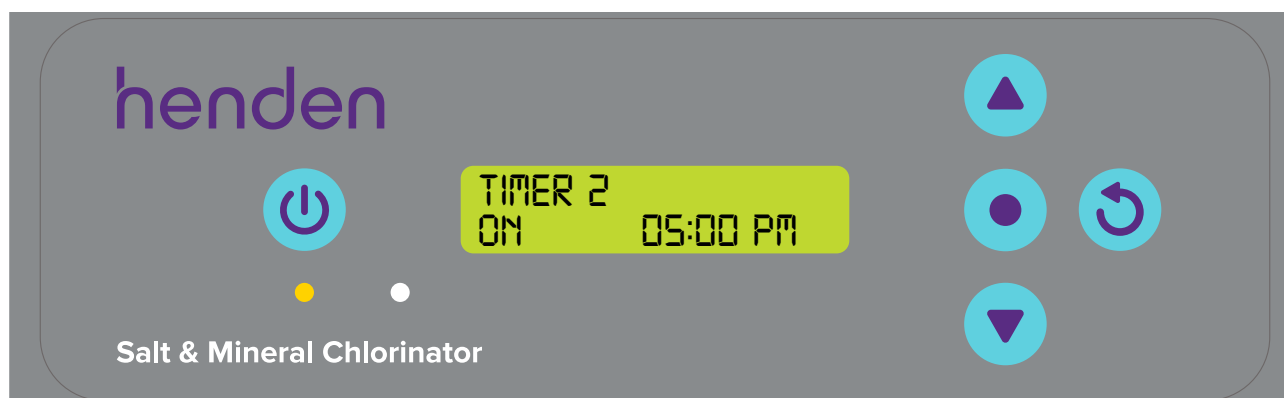





Figure 4.8

- > The screen shows the **ON-TIME** of **TIMER 2**:
 - current **ON-TIME** of **TIMER 2** is 5:00pm.
 - > Initially the clock hours will be flashing;
 - > As before, use the   **menu up/down** buttons to elect your respective times and press  **menu/setting select** to enter through the menu.
 - > If a mistake is made, the setting can be changed later;
- The display then automatically reverts to the following screen:

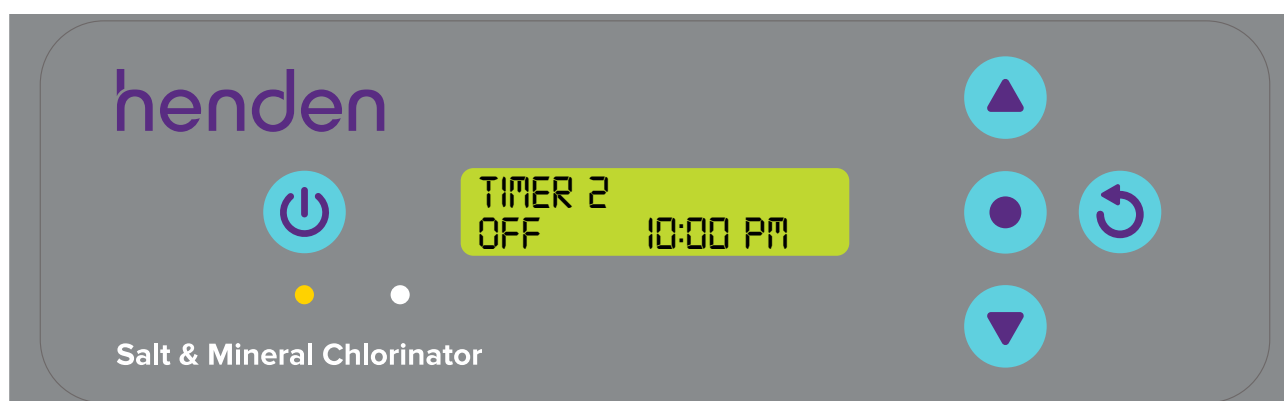





Figure 4.9

- > The screen shows the **OFF-TIME** of **TIMER 2**:
 - current **OFF-TIME** of **TIMER 2** is 10:00pm.
 - > Initially the clock hours will be flashing;
 - > As before, use the   **menu up/down** buttons to elect your respective times and press  **menu/setting select** to enter through the menu.
 - > If a mistake is made, the setting can be changed later;
- The display then automatically reverts to the **HOME** screen:

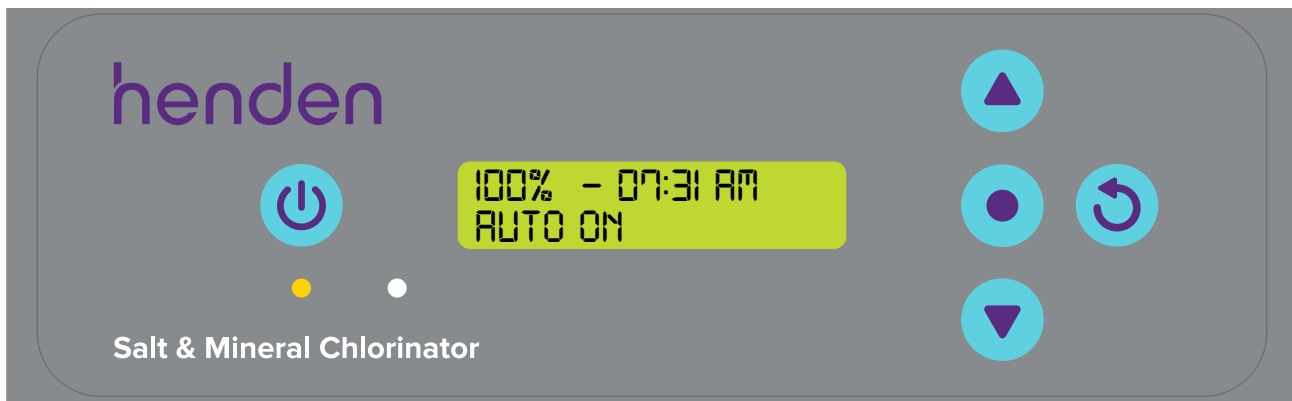


Figure 4.10

> This screen shows the:

- current chlorine output setting (ie 100% shown);
- current time setting;
- current power status (ie ON shown).

5. TYPICAL (EVERYDAY) START-UP

Note: Once the unit starts there is a short time delay until the cell operates to ensure the filtration system is primed with water.

- Every time the HSMC is turned on, the following screen is shown on start-up:



Figure 5.1

- The display then automatically reverts to the **HOME** screen:

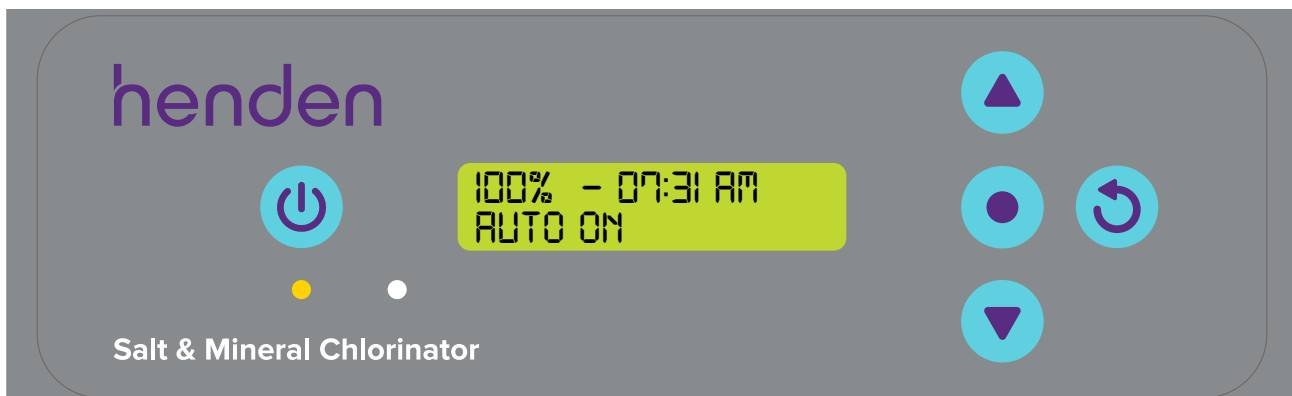


Figure 5.2

> This screen shows the:

- current chlorine output setting (ie 100% shown);
- current time setting;
- current power status:

AUTO ON: (ie as shown above) indicates the HSMC is currently operating within the **ON-TIME** of either **TIMER 1**, or **TIMER 2**;

AUTO: indicates the HSMC is powered but is within the **OFF-TIME** of both **TIMER 1**, and **TIMER 2**;

MANUAL ON: indicates the HSMC is currently operating, having been manually overridden;

MANUAL OFF: indicates the HSMC is powered but is not currently operating, having been manually overridden.

6. Henden Salt and Mineral Chlorinator FEATURES

6.1 Controlling chlorine output

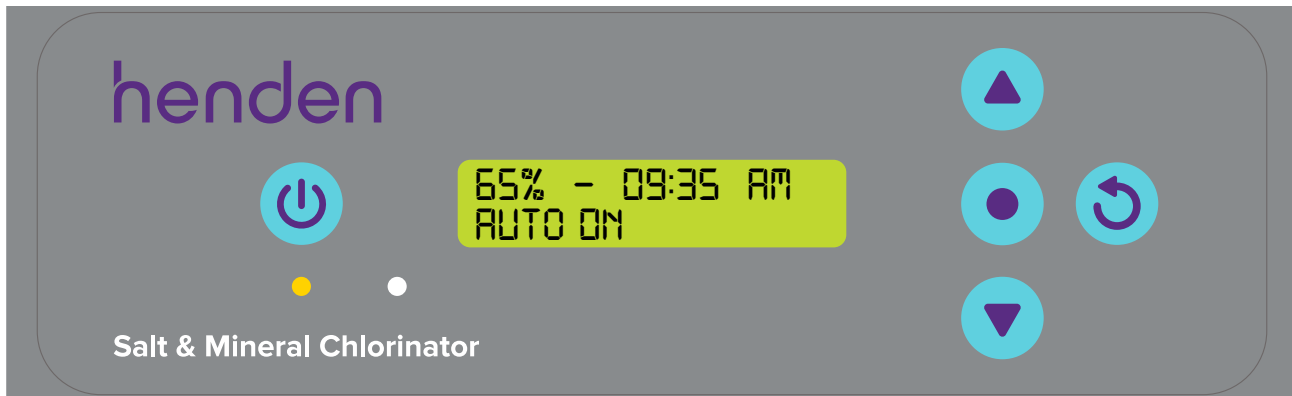


Figure 6.1

The cell run time is referred to as "cell duty cycle".

The **CHLORINE OUTPUT** controls the time that the cell is producing chlorine. This is a percentage of total time that the HSMC is on. If the HSMC cell is producing, it's cell current is 100%, unless otherwise altered (see sections **WINTER MODE** page 27.

For example:

- If the HSMC is on for 8 hours per day, and the **CHLORINE OUTPUT** is set to 50%: the HSMC cell duty cycle is only 4 hours, of that day;
- If the HSMC is on for 8 hours per day, and the **CHLORINE OUTPUT** is set to 25%: the HSMC cell duty cycle is only 2 hours, of that day.

To adjust the **CHLORINE OUTPUT**:

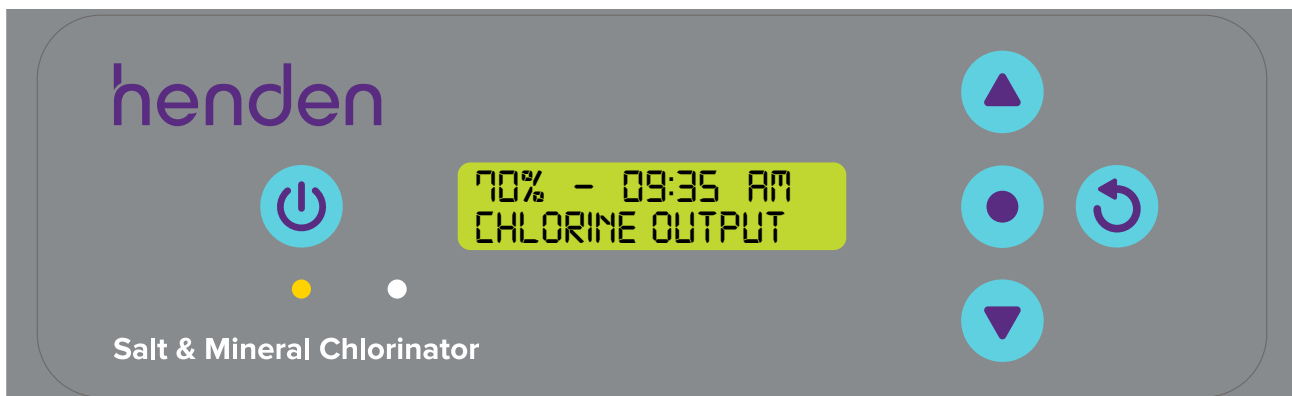





Figure 6.2

- > Press the   **menu up/down** buttons to scroll to your chosen **CHLORINE OUTPUT**;
- > The setting will change the cell duty cycle by 5% increments;
- > Press  **menu/setting select** once your preferred **CHLORINE OUTPUT** is displayed;
- > This will then take you back to the **HOME** screen.

6.2 Automated timers

The HSMC has two separate timers available for automated operation. This is ideal if looking to run the pool a few hours in the morning, then a few hours in the afternoon. It is important to ensure that the timers do not overlap as this may create confusion when the timer turns on and off.

To adjust **ON-TIME** of **TIMER 1**:

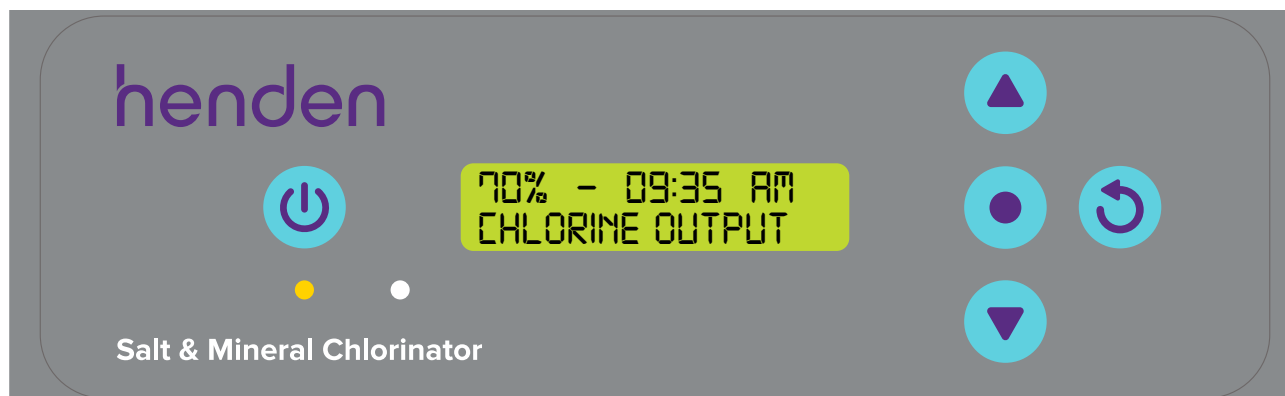



Figure 6.3

- > From the **HOME** screen, press  **menu/setting select**;
- > The display will show this screen:

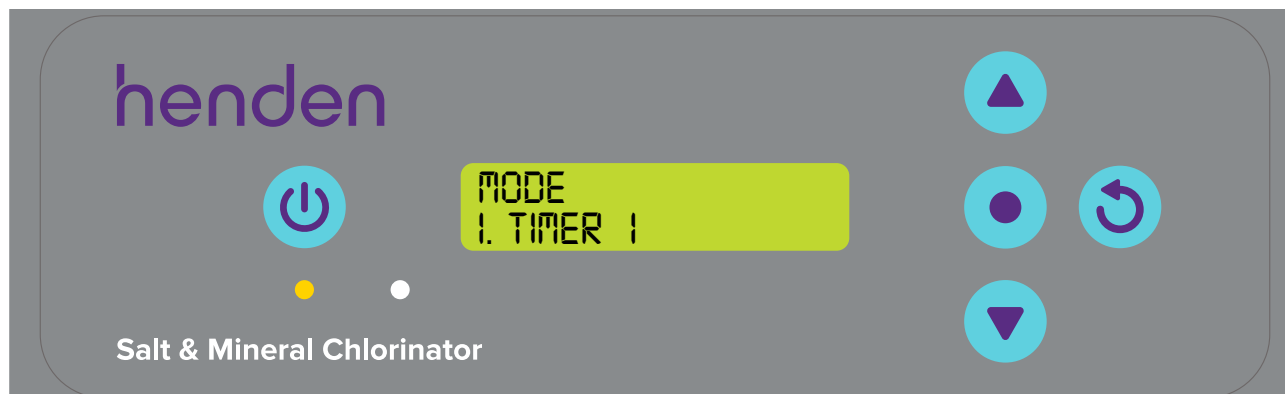






Figure 6.4

- > From this screen, press  **menu/setting select** to enter **TIMER 1** menu;



Figure 6.5

- > The screen shows the **ON-TIME** of **TIMER 1**:
 - current **ON-TIME** of **TIMER 1** is 6:00am (example assumes 12 hour time format chosen).
- > Initially the clock hours will be flashing;
- > Use the   **menu up/down** buttons to change the time values. Press the  **menu/setting select** to enter through the menu.
- > If a mistake is made, the setting can be changed later;
- > Press  **menu/setting cancel (go back)** button once your preferred **ON-TIME** for **TIMER 1** is displayed. This will take you back to the **HOME SCREEN**.

To adjust **OFF-TIME** of **TIMER 1**:

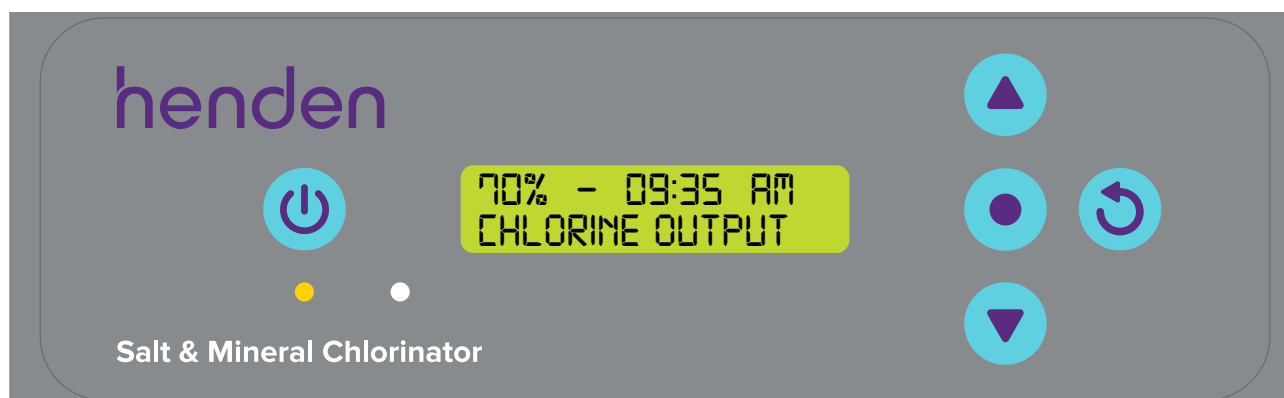



Figure 6.6

- > From the **HOME** screen, press  **menu/setting select**;
- > The display will show this screen:

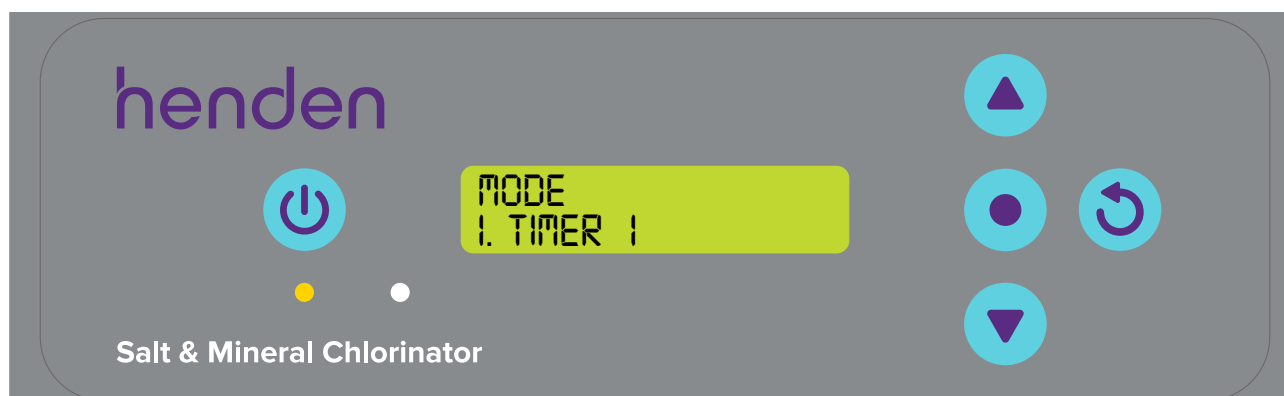


Figure 6.7

- > From this screen, press  **menu/setting select** to enter **TIMER 1** menu;



Figure 6.8





- > Using the  **menu up/down** buttons scroll to the **OFF-TIME** of **TIMER 1**.



Figure 6.9

- > The screen shows the **OFF-TIME** of **TIMER 1**:
 - current **OFF-TIME** of **TIMER 1** is 9:00am (example assumes 12 hour time format chosen).
- > Initially the clock hours will be flashing;
- > Use the  **menu up/down** buttons to change the time values. Press the  **menu/setting select** to enter through the menu.
- > Press  **menu/setting cancel (go back)** button once your preferred **OFF-TIME** for **TIMER 1** is displayed. This will take you back to the **HOME SCREEN**.

To adjust both **ON-TIME** and **OFF-TIME** of **TIMER 2**:

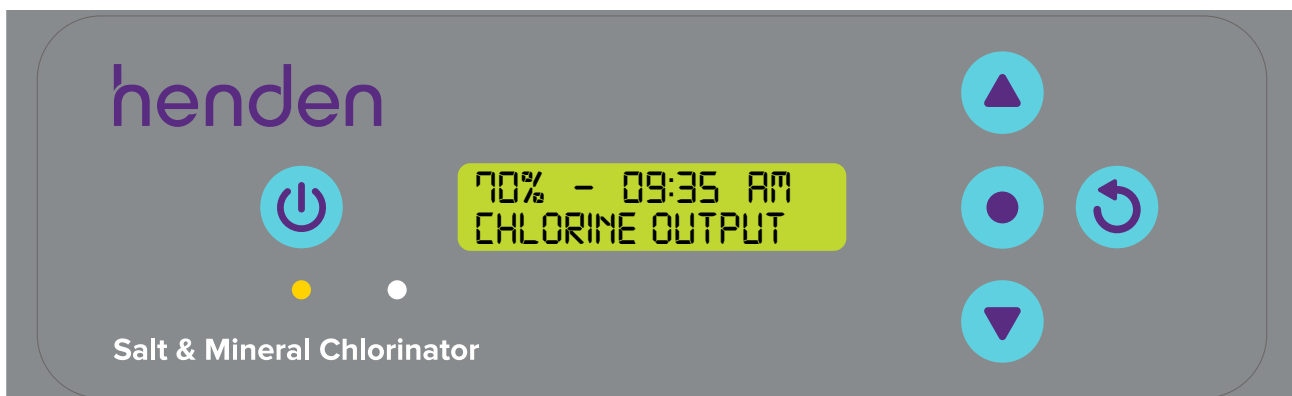



Figure 6.10

- > From the **HOME** screen, press  **menu/setting select**;
- > The display will show this screen:

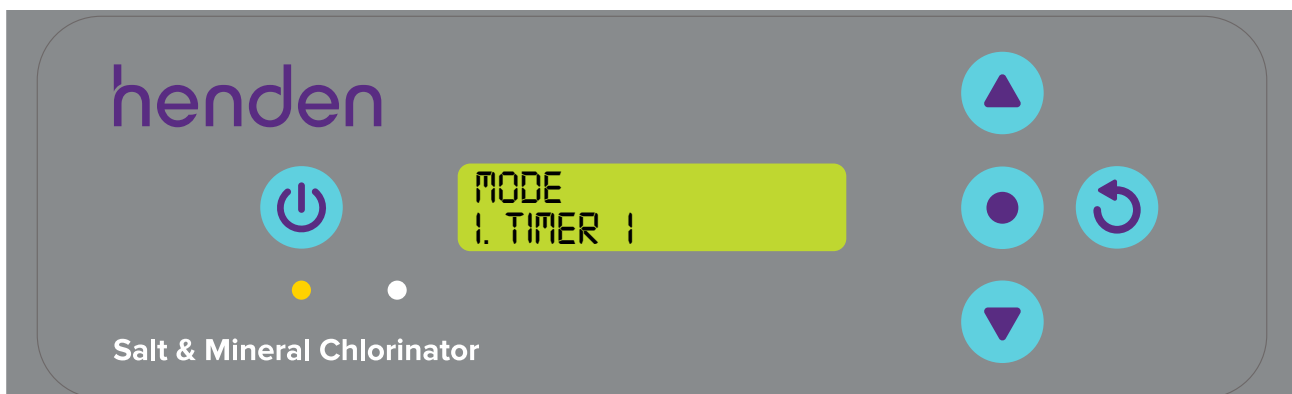



Figure 6.11

- > Using the  **menu up/down** buttons scroll to the **TIMER 2** menu.

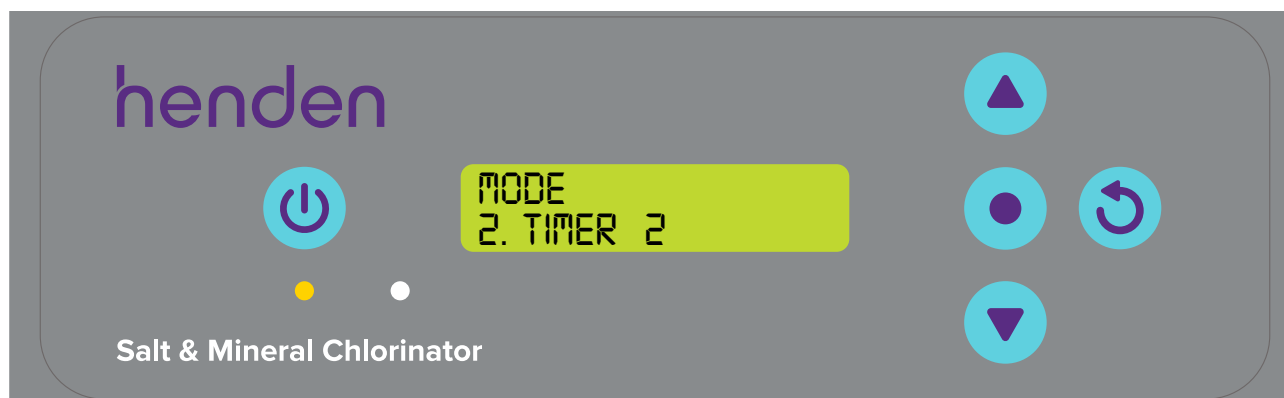



Figure 6.12

- > From this screen, press  **menu/setting select** to enter **TIMER 2** menu;
- > To adjust both the **ON-TIME** and **OFF-TIME** for **TIMER 2**, follow the same steps shown previously for **TIMER 1**.

6.3 Activating cover mode

A pool's exposure to UV contributes significantly to the pool's total chlorine demand. I.e the amount of chlorine the pool uses. Excessive amounts of chlorine in a pool with a cover on, can significantly shorten the life expectancy of the pool cover, if left for long periods of time (eg weeks). Turning on the **COVER MODE** reduces the cell duty cycle by 80% of its current setting.

For example:

- If the HSMC is on for 8 hours per day, the **CHLORINE OUTPUT** is set to 50%, but the **COVER MODE** is on: the HSMC cell duty cycle is only 48 minutes, of that day;
- If the HSMC is on for 8 hours per day, the **CHLORINE OUTPUT** is set to 25%, but the **COVER MODE** is on: the HSMC cell duty cycle is only 24 minutes, of that day.

To turn on **COVER MODE**:

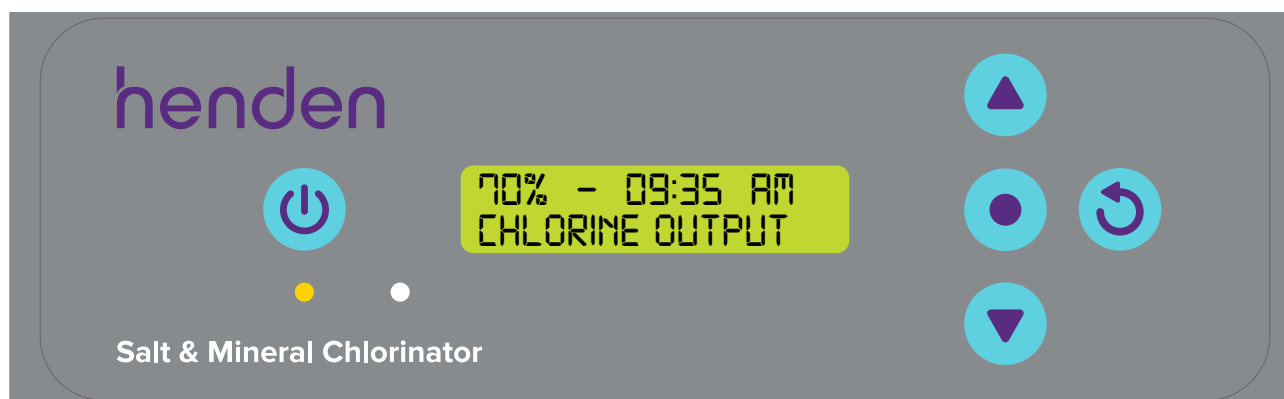



Figure 6.13

- > From the **HOME** screen, press  **menu/setting select**.
- > The display will show this screen:

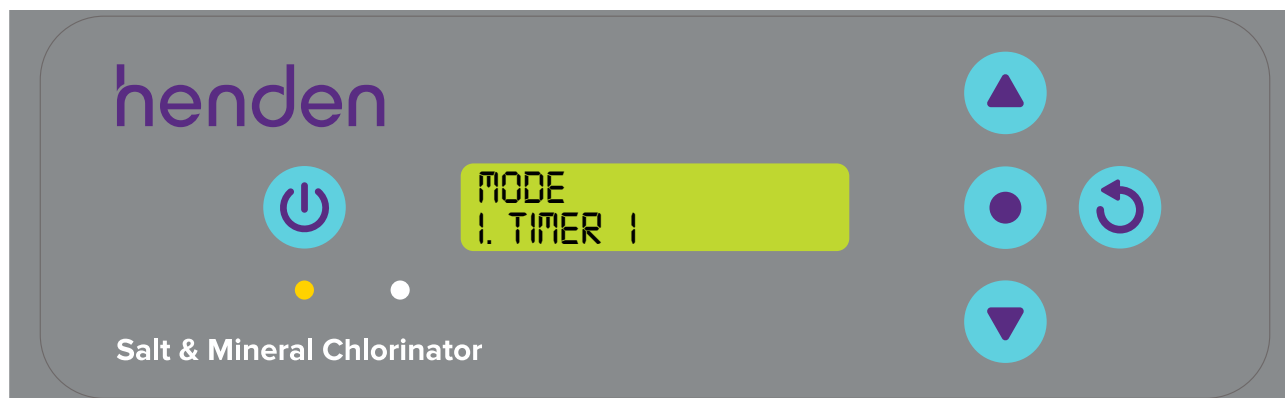


Figure 6.14

- > Use the  **menu up/down** buttons to scroll to the **COVER MODE** menu:

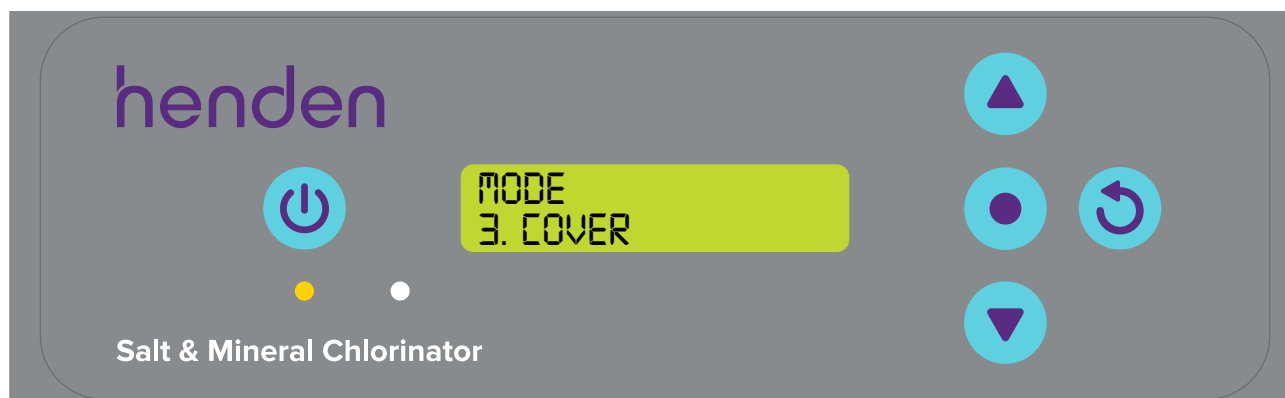



Figure 6.15

- > From this screen, press  **menu/setting select** to enter **COVER MODE** menu;
- > The display will show the current **COVER MODE** setting (ie **COVER MODE** off shown):

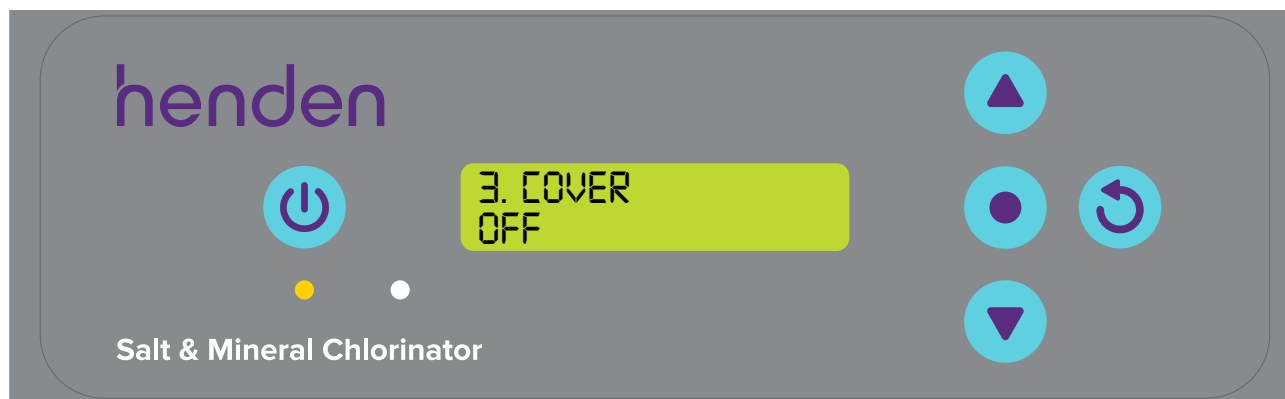





Figure 6.16

- > Press  **menu up/down** buttons to toggle between **COVER MODE** on and off;
- > Press  **menu/setting select** once your preferred **COVER MODE** is displayed;
- > This will then take you back to the first setting menu;
- > If the HSMC is left untouched for ~ 30 seconds, or the  **menu/setting cancel (go back)** button is pushed, the display reverts to the **HOME** screen.



COVER MODE can also be triggered remotely by an automated pool cover controller. By closing the terminal block contacts on the rear of the power supply, the HSMC will remotely switch to **COVER MODE**. This can be overridden by user intervention, by following the steps explained previously.

Figure 6.17

6.4 Activating boost mode

Should the pool experience a heavy bather load, debris/contamination, or extreme warm weather, there may be a need to super-chlorinate the pool. Turning on the **BOOST MODE** increases the cell duty cycle to 100% and overrides the cell current to 100% for a period of 24 hours.

To turn on **BOOST MODE**:



Figure 6.18

- > From the **HOME** screen, press  **menu/setting select**.

- > The display will show this screen:

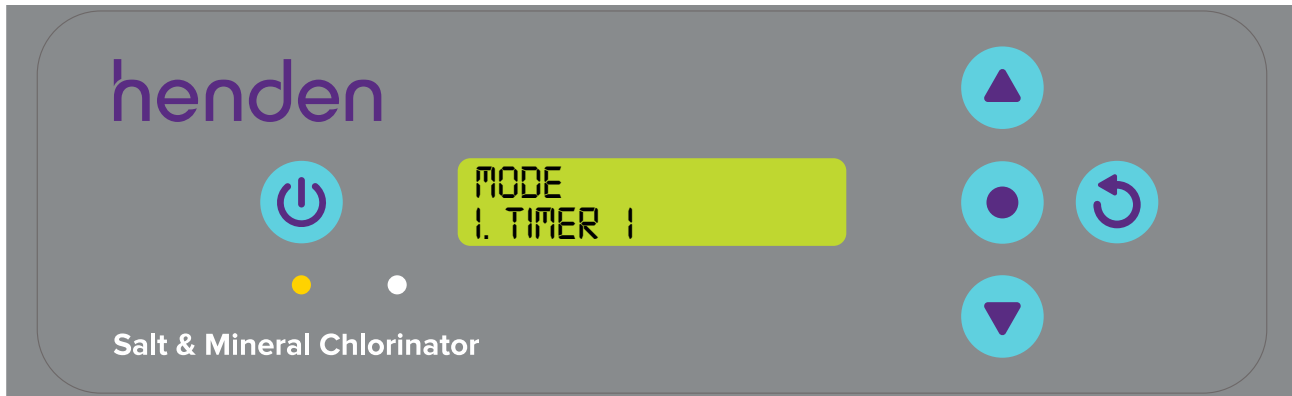



Figure 6.19

- > Press the  **menu up/down** buttons to scroll to **BOOST MODE**;

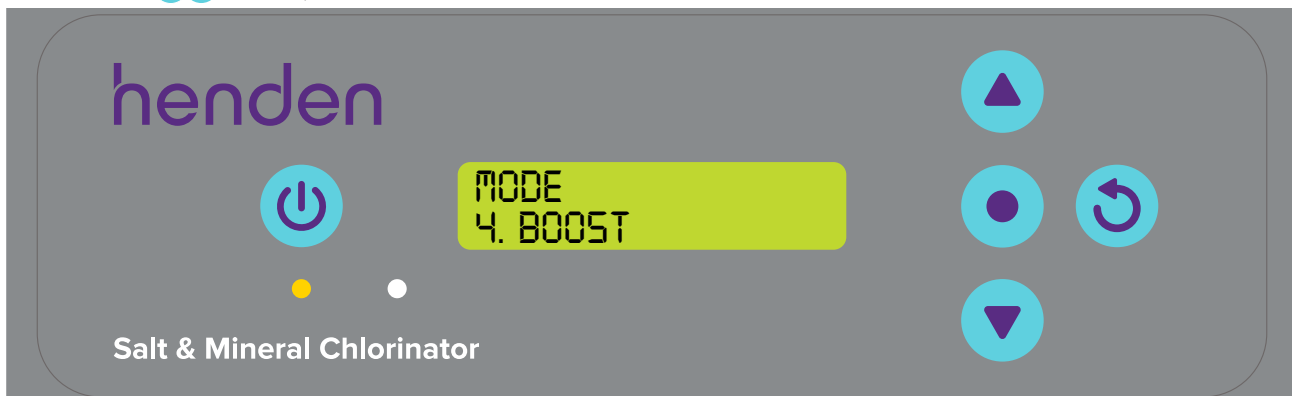


Figure 6.20

- > Press  **menu/setting select**;

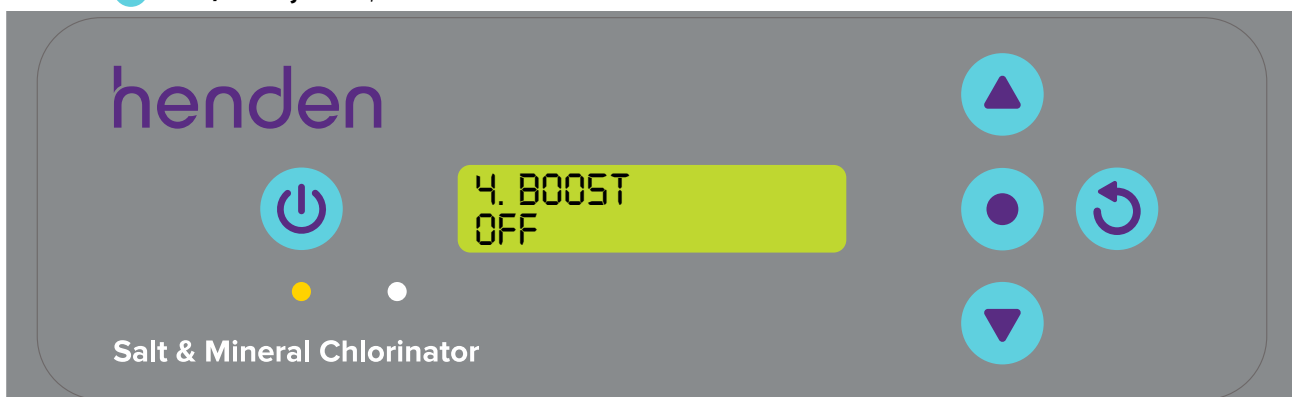



Figure 6.21

- > The display will show the current **BOOST MODE** setting (ie **BOOST MODE** off shown);
- > Press the  **menu up/down** buttons to toggle between **BOOST MODE** on and off;

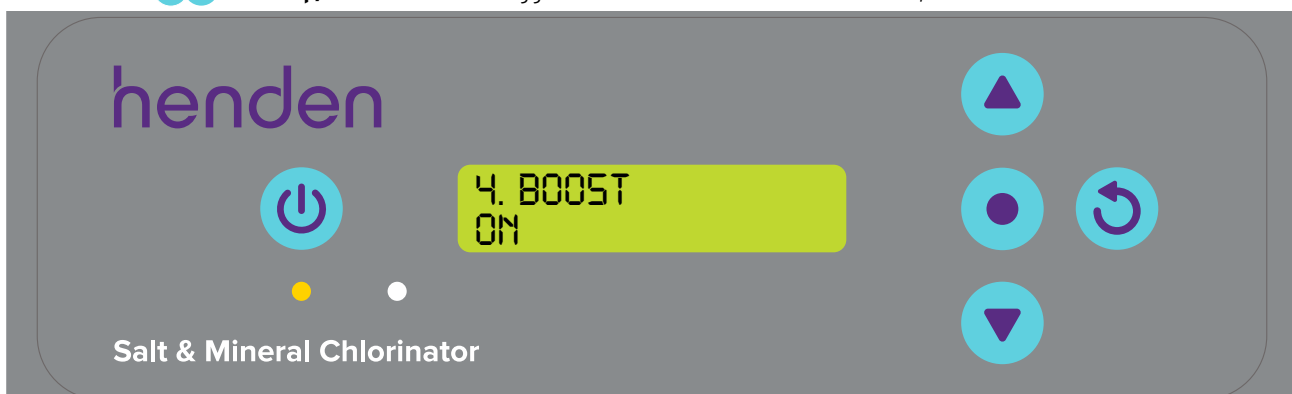




Figure 6.22

- > Press  **menu/setting select** once your preferred **BOOST MODE** is displayed;
- > This will then take you back to the first setting menu;
- > If the HSMC is left untouched for ~ 30 seconds, or the  **menu/setting cancel (go back)** button is pushed, the display reverts to the **HOME** screen.

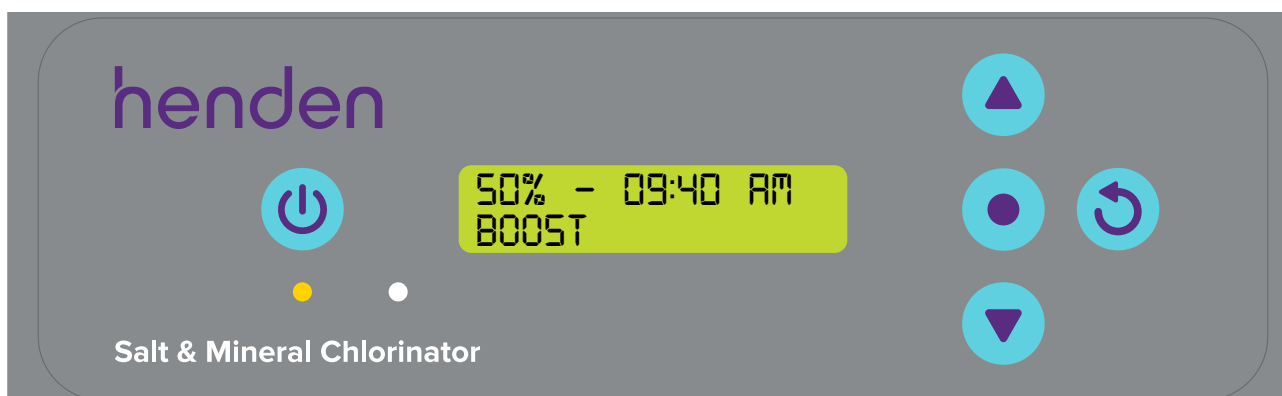


Figure 6.23

- > The **HOME** screen will continue to show the cell duty cycle percentage; however the reference to “MANUAL ON” has been replaced by the reference to “BOOST”. This will remain for the 24 hour period;
- > It is possible to alter the cell duty cycle during a 24-hour boost and the display percentage on the **HOME** screen changes as expected. This could be handy if the setting needs altering for the next day, once the **BOOST MODE** is finished;
- > It should be noted that **BOOST MODE** overrides every other setting. During the 24 hour period while is **BOOST MODE** is active, the cell current is 100%, and duty cycle is overridden to 100%. This is regardless of the display on the screen.

6.5 Activating spa mode

The Henden Salt and Mineral Chlorinator is compatible with large swimming pool applications as well as much smaller spa applications. Turning on the **SPA MODE** reduces the cell duty cycle by 80% of its current setting.

For example:

- If the HSMC is on for 10 hours per day, the **CHLORINE OUTPUT** is set to 50%, but the **SPA MODE** is on: the HSMC cell duty cycle is only 1 hour, of that day;
- If the HSMC is on for 10 hours per day, the **CHLORINE OUTPUT** is set to 25%, but the **SPA MODE** is on: the HSMC cell duty cycle is only 30 minutes, of that day.

To turn on **SPA MODE**:

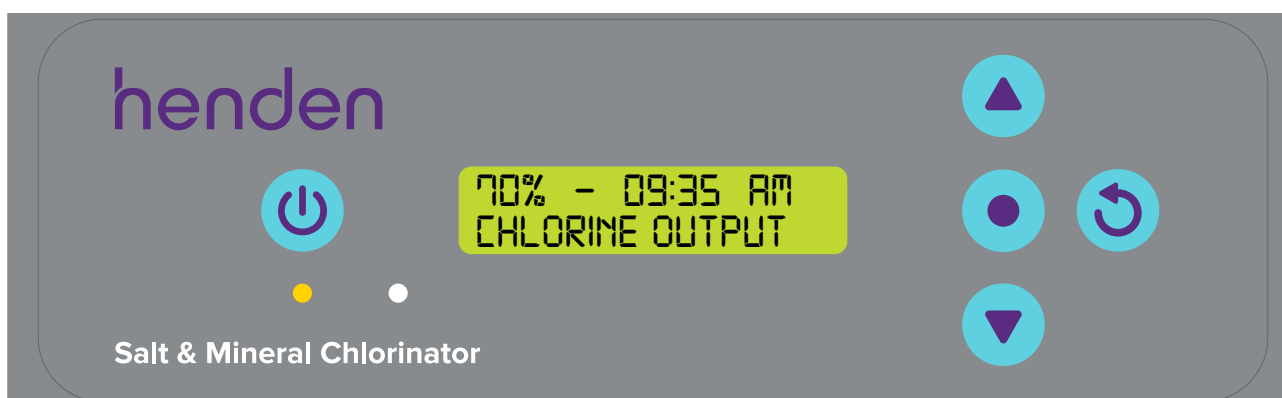



Figure 6.24

- > From the **HOME** screen, press  **menu/setting select**.
- > The display will show this screen:

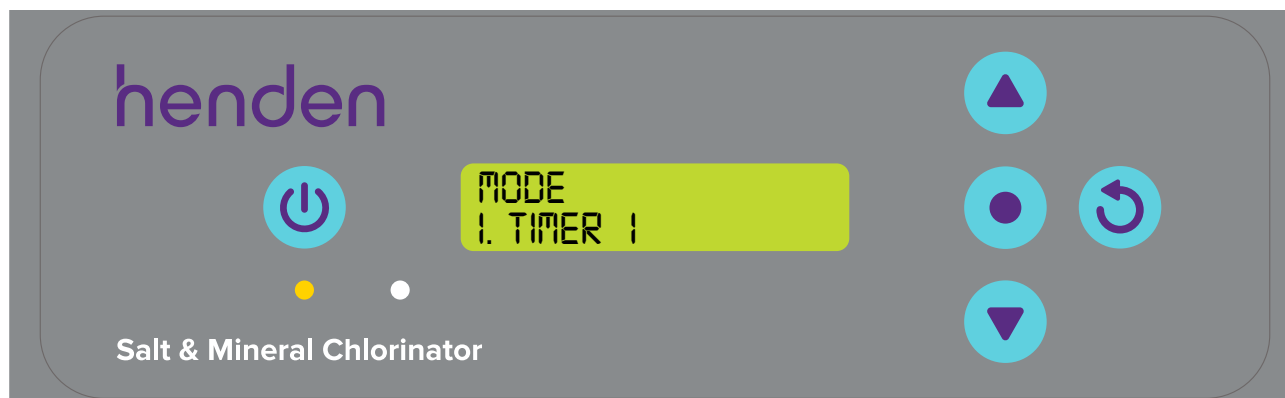


Figure 6.25

- > Press the  **menu up/down** buttons to scroll to **SPA MODE**;

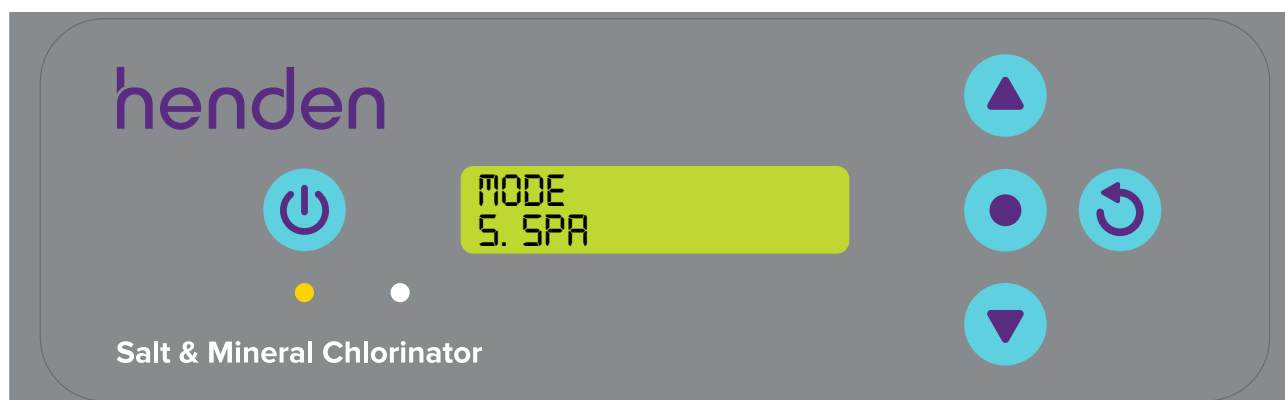


Figure 6.26

- > From this screen, press  **menu/setting select** to enter **SPA MODE** menu;
- > The display will show the current **SPA MODE** setting (ie **SPA MODE** off shown):

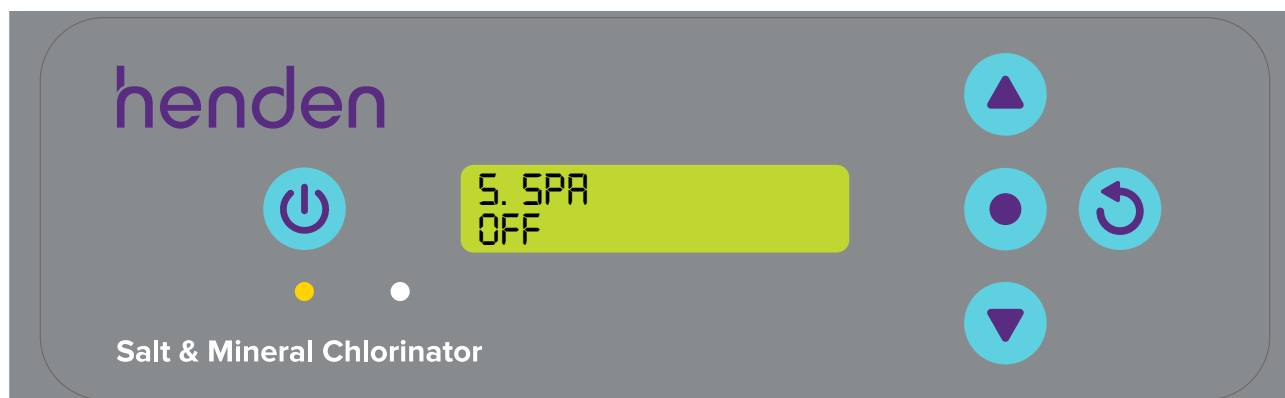





Figure 6.27

- > Press  **menu up/down** buttons to toggle between **SPA MODE** on and off;
- > Press  **menu/setting select** once your preferred **SPA MODE** is displayed;
- > This will then take you back to the first setting menu;
- > If the HSMC is left untouched for ~ 30 seconds, or the  **menu/setting cancel (go back)** button is pushed, the display reverts to the **HOME** screen.

6.6 Activating spa mode and cover mode simultaneously

Should it be necessary to run **SPA MODE** and **COVER MODE** simultaneously, the cell duty cycle is only reduced by 80%. That is, the cell duty cycle isn't reduced by 80%, followed by a further 80%. The **HOME** screen display will toggle between showing **COVER** and **SPA**.

6.7 Activating winter mode

A pool's exposure to UV contributes significantly to the pool's total chlorine demand ie. the amount of chlorine the pool uses. Bather load is also a significant contributor to the pool's total chlorine demand. In winter, the pool's chlorine demand is typically far less. Unless otherwise altered, if the cell is producing chlorine, it's cell current is 100%. **WINTER MODE** reduces the cell's current to 85%. **WINTER MODE** does not alter the cell's duty cycle.

For example:

- If the HSMC is on for 10 hours per day, the **CHLORINE OUTPUT** is set to 100%, the **WINTER MODE** is off: the HSMC cell duty cycle is 10 hours. The cell current will be operating at 100% capacity;
- If the HSMC is on for 10 hours per day, the **CHLORINE OUTPUT** is set to 100%, the **WINTER MODE** is on: the HSMC cell duty cycle is still 10 hours, the cell current will only be operating at 85% capacity.
- If the HSMC is on for 10 hours per day, the **CHLORINE OUTPUT** is set to 50%, the **WINTER MODE** is on: the HSMC cell duty cycle is 5 hours. The cell current will only be operating at 85% capacity.

To turn on **WINTER MODE**:

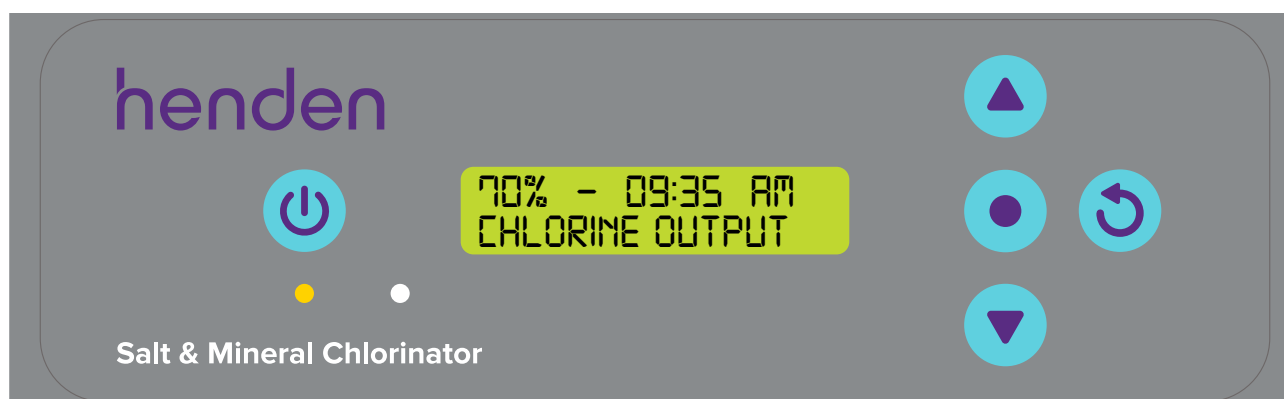



Figure 6.28

- > From the **HOME** screen, press  **menu/setting select**.
- > The display will show this screen:

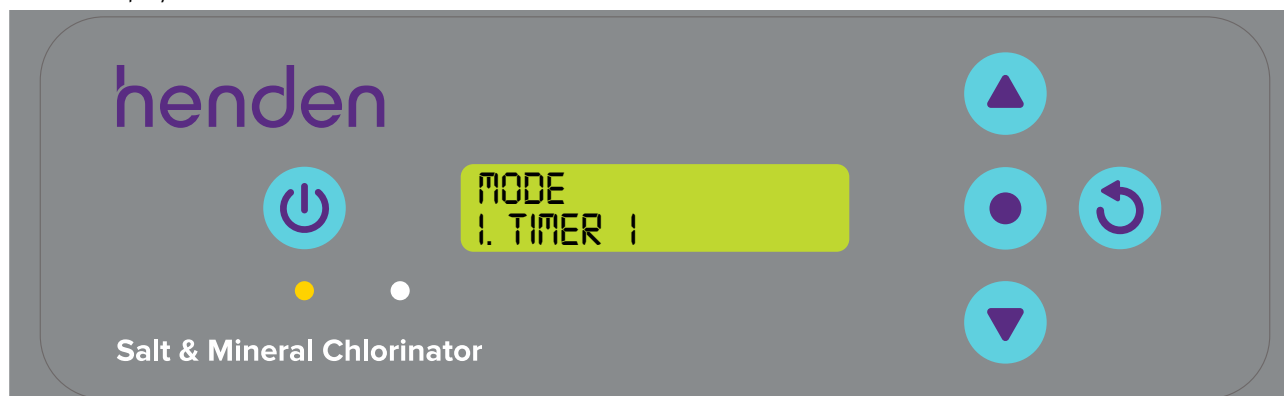




Figure 6.29

- > Press the   **menu up/down** buttons to scroll to **WINTER MODE**;

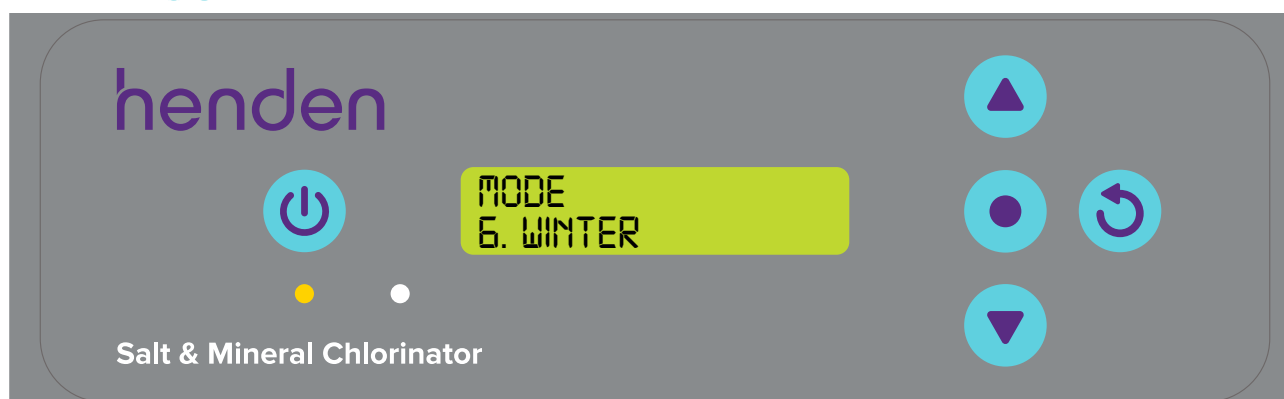



Figure 6.30

- > From this screen, press  **menu/setting select** to enter **WINTER MODE** menu;
- > The display will show the current **WINTER MODE** setting (ie **WINTER MODE** off shown):

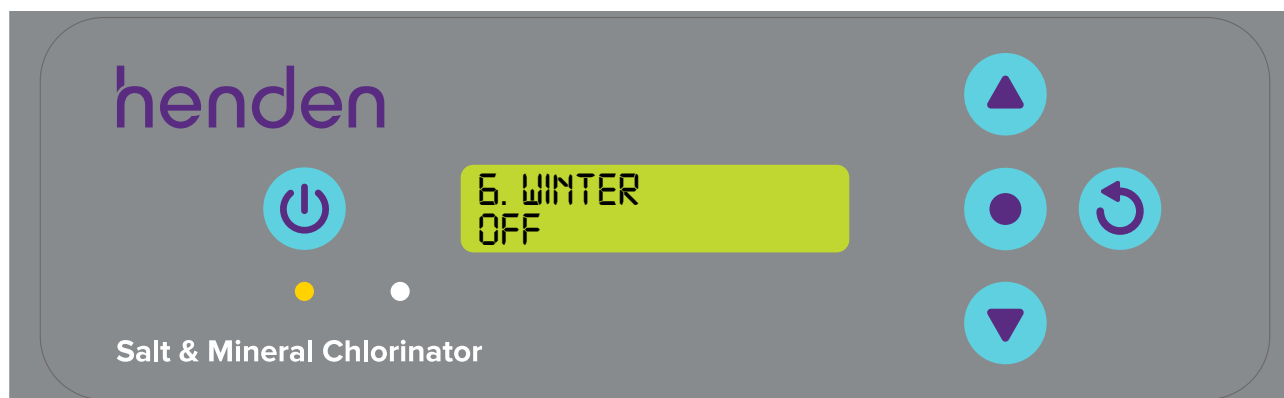






Figure 6.31

- > Press   **menu up/down** buttons to toggle between **WINTER MODE** on and off;
- > Press  **menu/setting select** once your preferred **WINTER MODE** is displayed;
- > This will then take you back to the first setting menu;
- > If the HSMC is left untouched for ~ 30 seconds, or the  **menu/setting cancel (go back)** button is pushed, the display reverts to the **HOME** screen.

6.8 Low flow alarm

Should the HSMC flow switch register a flow rate below 4.8m³/h (80L/min), the HSMC will automatically display the **LOW FLOW ALARM**:

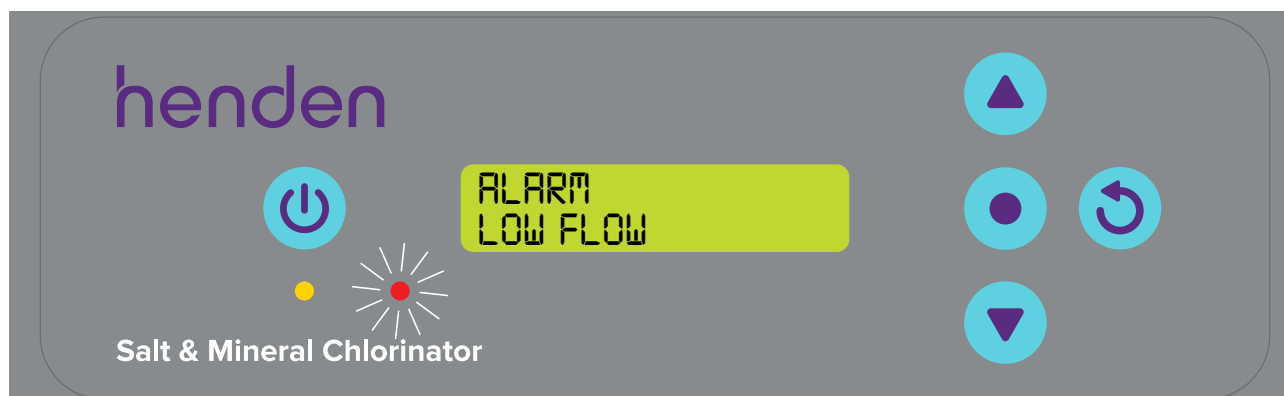


Figure 6.32

When the **LOW FLOW ALARM** is displayed, the HSMC will not produce chlorine. Once the flow switch registers flow above 4.8m³/h (80L/min), the HSMC will return to normal operation. To achieve best efficiency, the HSMC cell should be installed such that turbulent water is limited. Do not install a 90° elbow closer than 200mm from the cell's inlet barrel union. Isolation valves used when the equipment is located below pool water level should also be installed no closer than 200mm from the inlet barrel union. This will assist laminar flow. Should the HSMC register low flow for longer than 2 minutes, the HSMC will turn off the power to the pool pump (assuming it's plugged into the back of the HSMC). To override the low flow alarm (after pump shutdown), the manual on/off button will need to be pushed by user.

6.9 Add salt alarm

Should the HSMC register low conductivity within the cell, the HSMC will display the **ADD SALT ALARM**. This could be triggered by cold water (below 15°C), or a water salt concentration below it's minimum (refer to recommended salt range section in the manual). Additional salt may be added to overcome a lower temperature. However, the maximum salt level should also be considered and if water temperature drops too far, the system should be turned off.

If no action is taken and the salt level continues to be low, damage to the system may result.

It is the responsibility of the owner to ensure adequate salt levels are maintained all year round.



Figure 6.33


Once the HSMC registers a salt concentration within range (refer to recommended salt range section in the manual), the HSMC will return to normal operation.

6.10 Low salt cut-out alarm (Firmware versions prior to 2.1.5 only)

Should the salt concentration continue to be diluted, the HSMC will display the **LOW SALT CUT-OUT ALARM**.




Figure 6.34

Once the salt concentration is corrected, the **LOW SALT CUT-OUT ALARM** must be reset by pushing the  **manual ON/OFF** button. Alternatively, the HSMC will conduct a system check automatically when powered up the next time (if operating via a separate power supply). Upon start-up if the HSMC registers a salt concentration within range (refer to recommended salt range section in the manual), the HSMC will return to normal operation.

The **LOW SALT CUT-OUT ALARM** is triggered at the following (approximate) salt concentrations:

| HSMC model | Low salt cut-out alarm (approx. salt concentration) |
|------------------------|---|
| HSMC15, HSMC25, HSMC30 | 2,500ppm |

6.11 Check pool chem alarm

If the HSMC registers unusual cell behavior it will display the **CHECK POOL CHEM ALARM**. This could be triggered by unbalanced water chemistry. Henden recommends that you perform a full water test to identify the cause of the issue. Once the pool chemistry is corrected, the **CHECK POOL CHEM ALARM** must be reset by pushing the  **manual ON/OFF** button. Alternatively, the HSMC will conduct a system check automatically when powered up the next time (if operating via a separate power supply).

6.12 Overriding clock setting

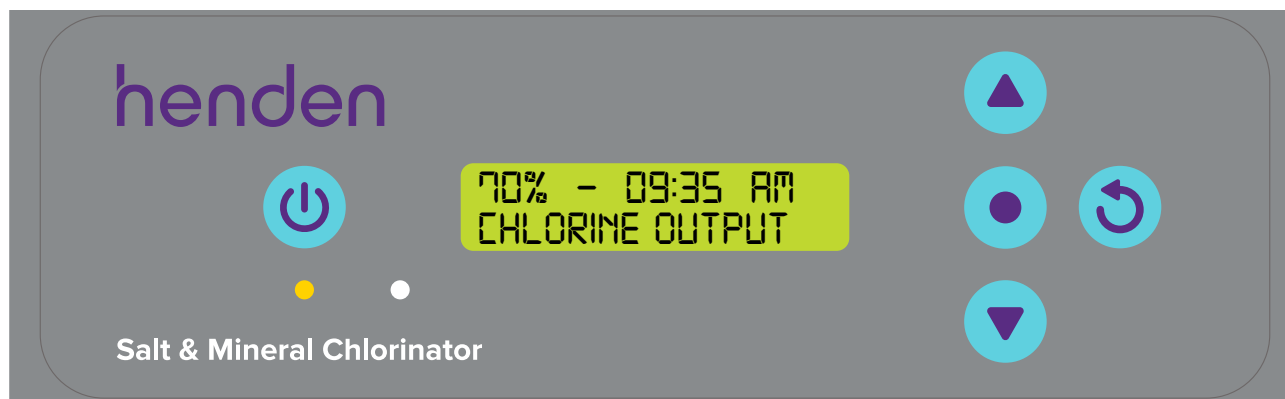


Figure 6.35

- > From the **HOME** screen, press and hold  **menu/setting select** for 3 seconds.

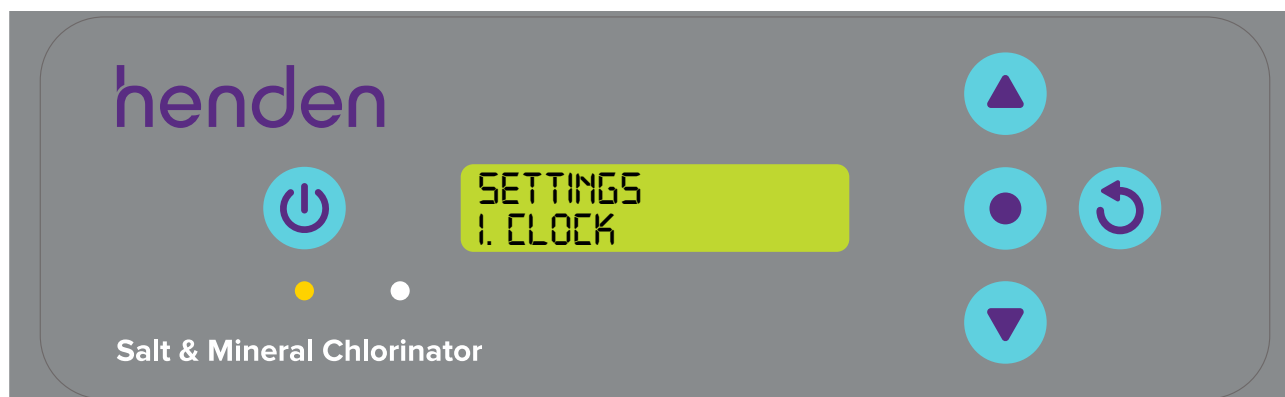


Figure 6.36












- > Press  **menu/setting select**;
- > The display will show this screen.



Figure 6.37

- > This screen shows the clock's current time (ie 11:21AM shown);
- > Initially the clock hours will be flashing;
- > The clock hours can be changed by pressing the   **menu up/down** buttons to scroll to your chosen time;
- > Press  **menu/setting select** once your preferred clock hour is displayed;
- > If a mistake is made, the setting can be changed later;
- > Next, the clock minutes will be flashing;
- > The clock minutes can be changed by pressing the   **menu up/down** buttons to scroll to your chosen time;
- > Press  **menu/setting select** once your preferred clock minutes is displayed;
- > If a mistake is made, the setting can be changed later;
- > Next, the clock AM/PM will be flashing;

- > The clock AM/PM can be changed by pressing the   **menu up/down** buttons to toggle between AM and PM;
- > Press  **menu/setting select** once your preferred clock AM/PM is displayed;
- > If a mistake is made, the setting can be changed later;
- > If the HSMC is left untouched for ~ 30 seconds, or the  **menu/setting cancel (go back)** button is pushed, the display reverts to the **HOME** screen.

6.13 Overriding date setting

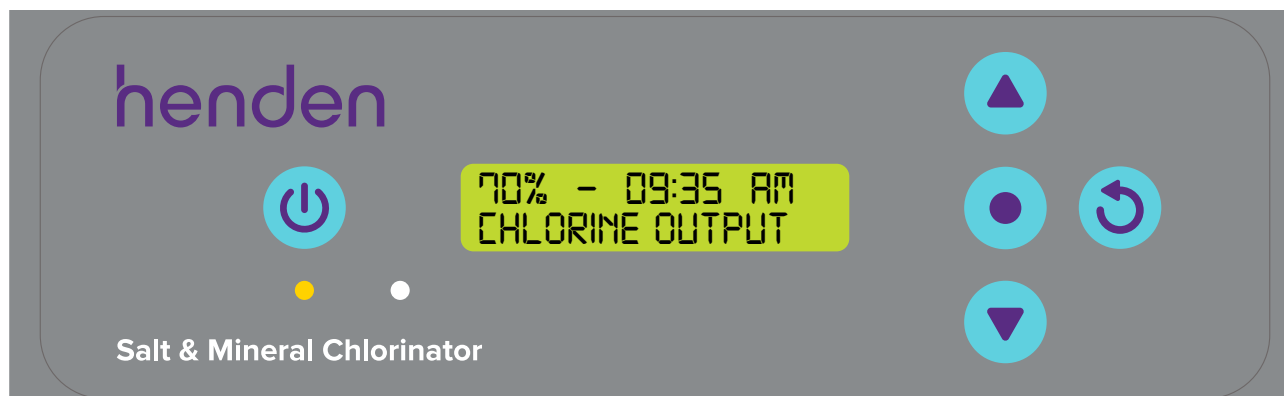


Figure 6.38

- > From the **HOME** screen, press and hold  **menu/setting select** for 3 seconds.

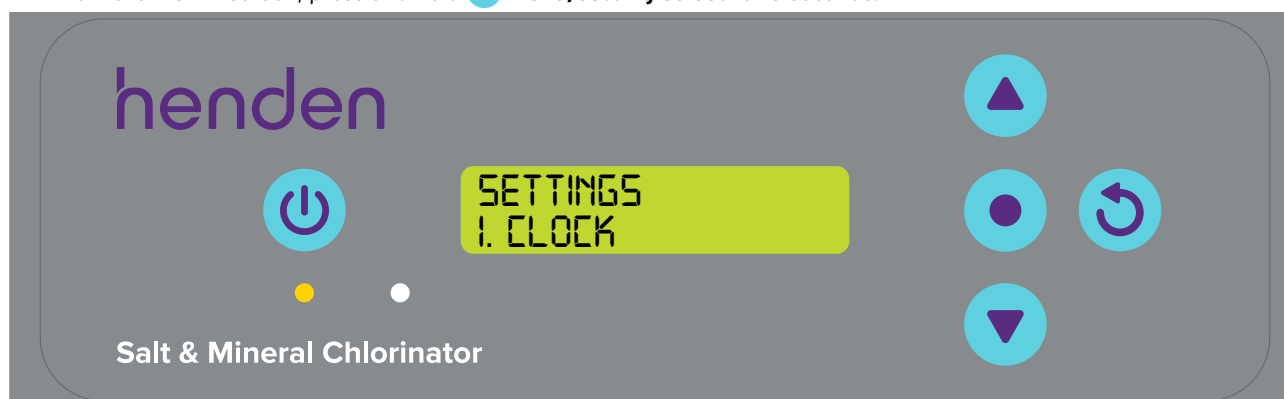




Figure 6.39

- > Press the   **menu up/down** buttons to scroll down to **DATE** menu;

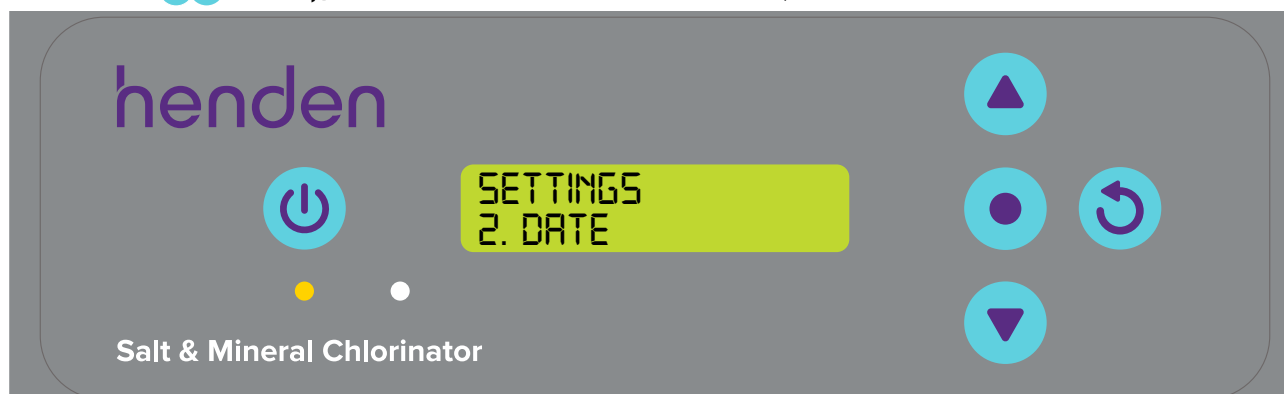


Figure 6.40

- > Press  **menu/setting select**;

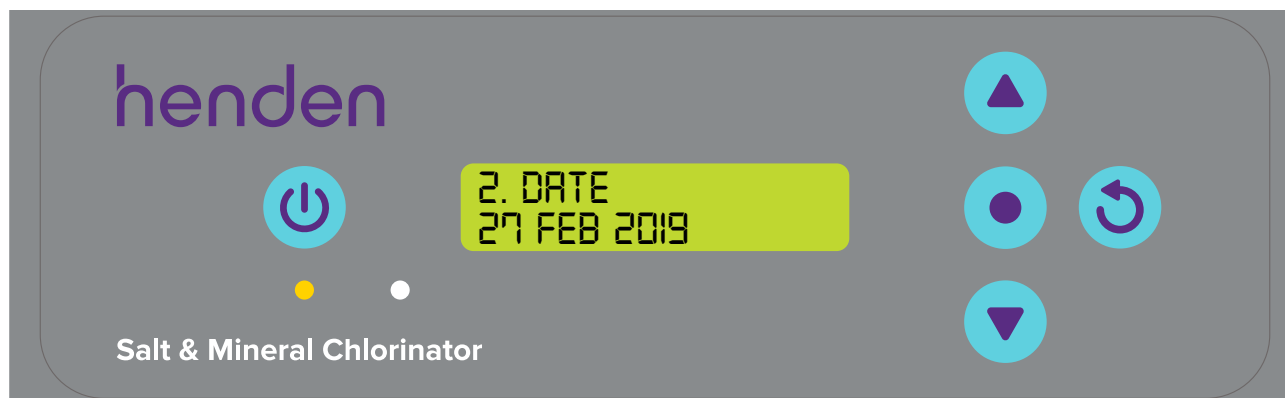


Figure 6.41

- > This screen shows the date format menu and the current date (ie 27 FEB 2019 shown);
- > Initially the date day will be flashing;
- > The date day can be changed by pressing the ▲▼ menu up/down buttons to scroll to your chosen date day;
- > Press ● menu/setting select once your preferred date day is displayed;
- > If a mistake is made, the setting can be changed later.
- > Next the date month will be flashing;
- > The date month can be changed by pressing the ▲▼ menu up/down buttons to scroll to your chosen date month;
- > Press ● menu/setting select once your preferred date month is displayed;
- > If a mistake is made, the setting can be changed later.
- > Next the date year will be flashing;
- > The date year can be changed by pressing the ▲▼ menu up/down buttons to scroll to your chosen date year;
- > Press ● menu/setting select once your preferred date year is displayed;
- > If the HSMC is left untouched for ~ 30 seconds, or the ↺ menu/setting cancel (go back) button is pushed, the display reverts to the HOME screen.

6.14 OVERRIDING LANGUAGE SETTING

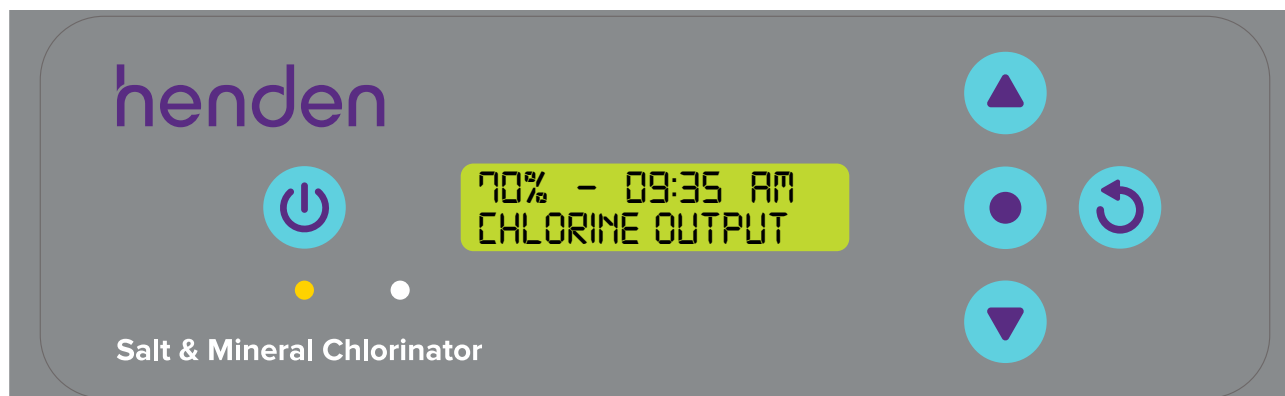


Figure 6.42

- > From the HOME screen, press and hold ● menu/setting select for 3 seconds.



Figure 6.43

- > Press the  **menu up/down** buttons to scroll down to **LANGUAGE** menu;

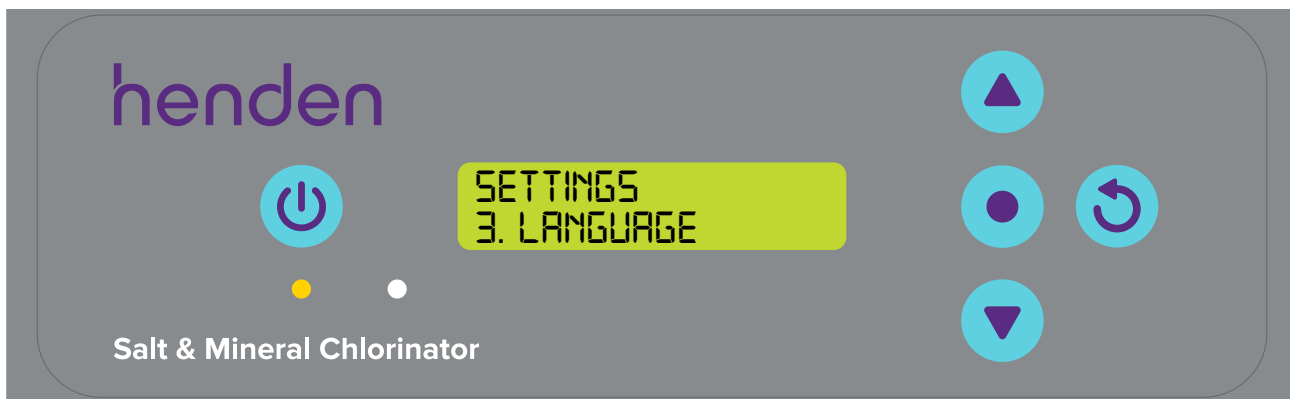


Figure 6.44



- > Press  **menu/setting select**;
- > The current **LANGUAGE** chosen will flash;
- > Use the  **menu up/down** buttons to scroll to your preferred **LANGUAGE**;



Figure 6.45

- > Press  **menu/setting select** once your preferred **LANGUAGE** is displayed;
- > If the HSMC is left untouched for ~ 30 seconds, or the  **menu/setting cancel (go back)** button is pushed, the display reverts to the **HOME** screen.

6.15 Overriding time format setting

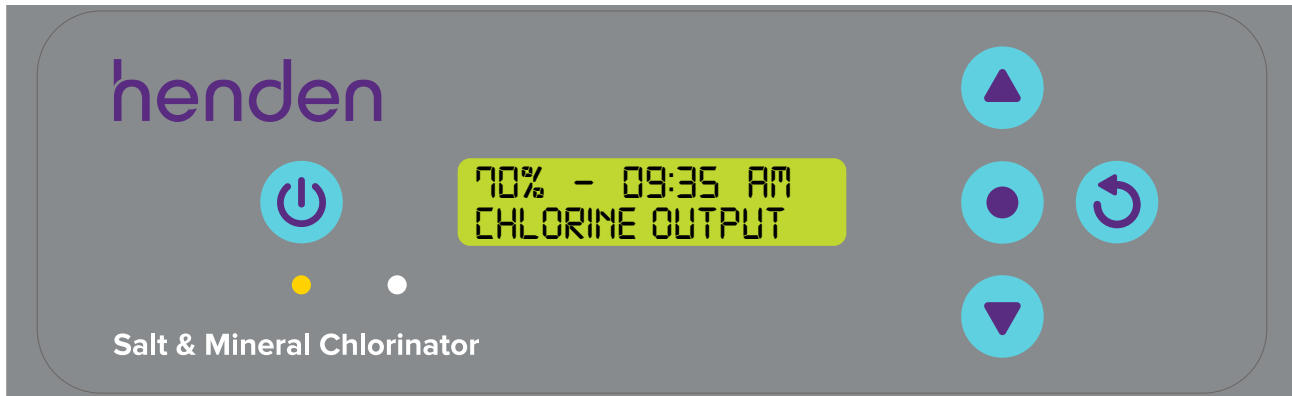



Figure 6.46

- > From the **HOME** screen, press and hold  **menu/setting select** for 3 seconds.



Figure 6.47

- > Press the  **menu up/down** buttons to scroll down to **TIME FORMAT** menu;

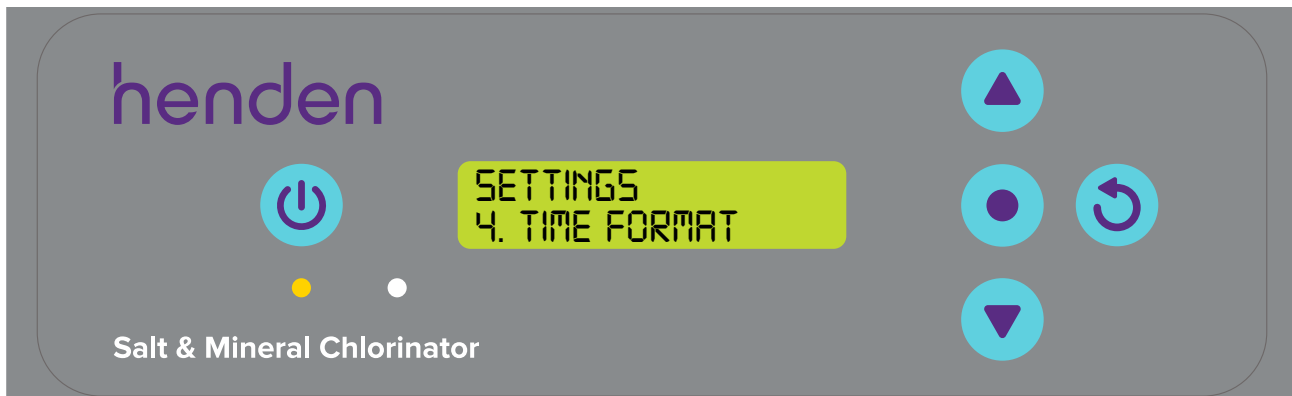






Figure 6.48

- > Press  **menu/setting select**;
- > The current **TIME FORMAT** chosen will flash;
- > Use the  **menu up/down** buttons to scroll to your preferred **TIME FORMAT**, either 12HR, or 24HR;
- > Press  **menu/setting select** once your preferred **TIME FORMAT** is displayed;
- > If the HSMC is left untouched for ~ 30 seconds, or the  **menu/setting cancel (go back)** button is pushed, the display reverts to the **HOME** screen.

6.16 Display alarm history

The HSMC keeps a history log for the user that registers the number of hours during which the HSMC is in alarm mode. As a reminder, the cell life expectancy will be reduced if the HSMC is run with salt concentrations outside of the recommended range.

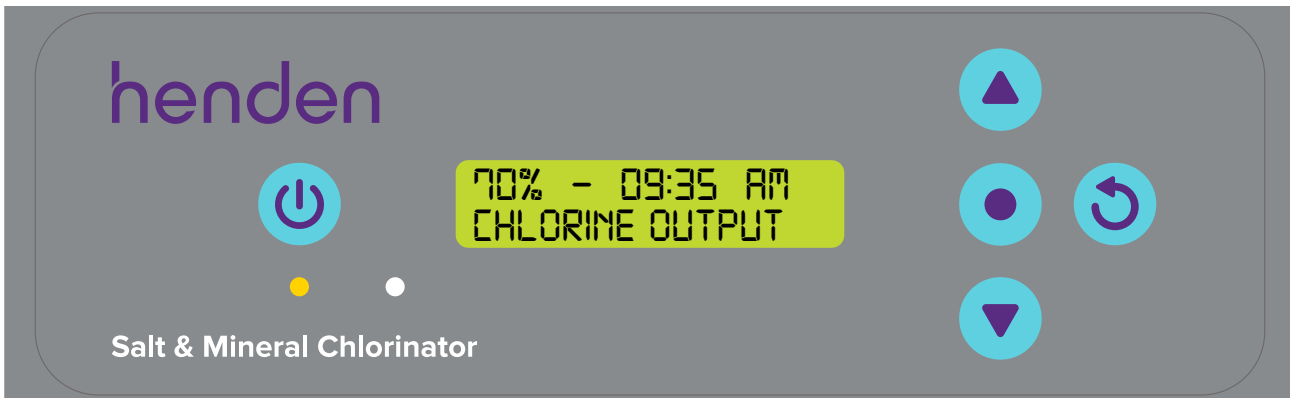


Figure 6.49

- > From the **HOME** screen, press and hold  **menu/setting select** for 3 seconds.



Figure 6.50



- > Press the   **menu up/down** buttons to scroll down to **ALARM HISTORY** menu;



Figure 6.51

- > Press  **menu/setting select**;

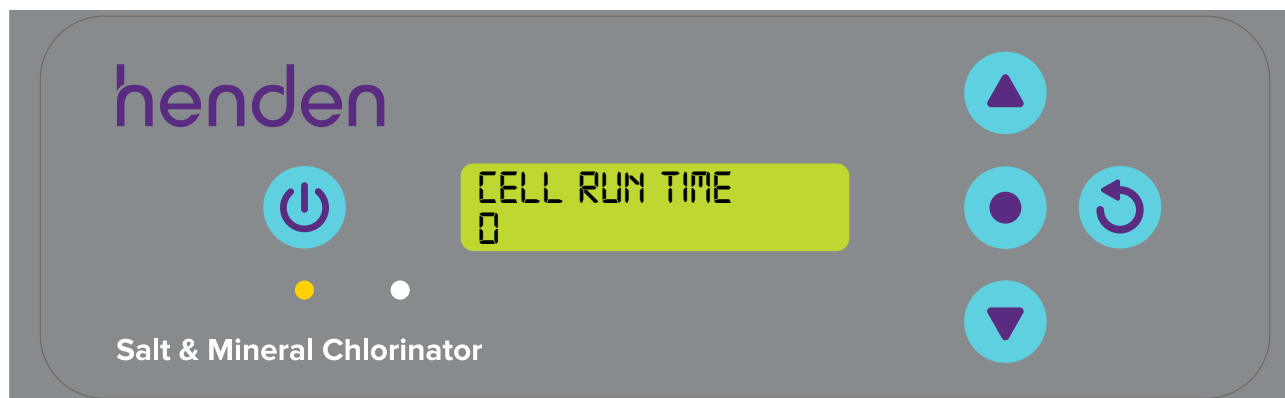




Figure 6.52

- > Press the   **menu up/down** buttons to toggle between cell run time and low salt time.

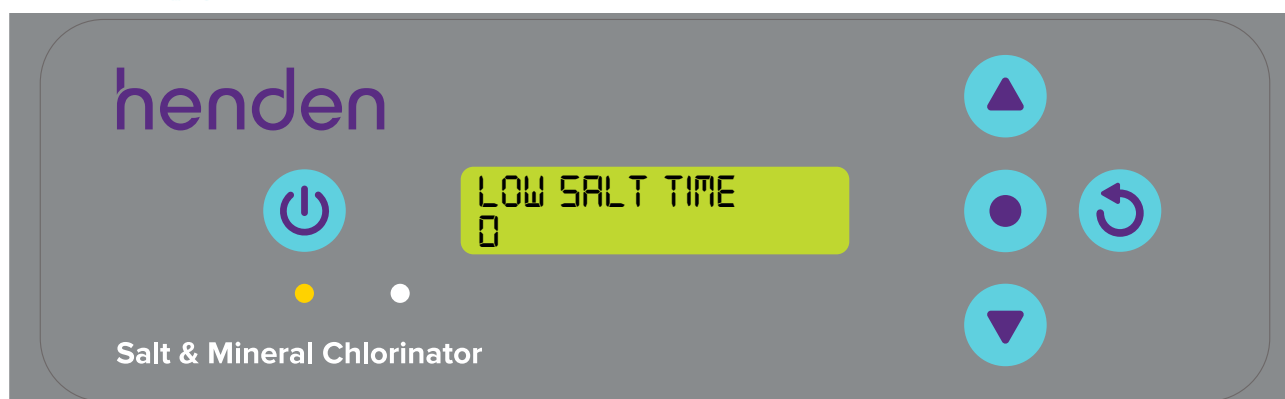


Figure 6.53

7. MAINTENANCE OF POWER SUPPLY

The power supply requires little, or no maintenance. However, it is essential that the wall or post to which the HSMC is installed be sprayed (not the HSMC itself) periodically with a good surface type insect repellent, since penetration by insects may cause damage, which is not covered by your warranty.



IMPORTANT. Certain local electrical regulations state "If the supply cord is damaged, it must be replaced by a special cord available from the manufacturer or its service agent".

8. MAINTENANCE OF THE ELECTROLYTIC CELL

The HSMC cell is composed of precious materials, and although proper maintenance can prolong its life to the maximum, eventually the output will wear away its delicate coating, at which time it gradually ceases to produce chlorine. Calcium (scale) is deposited on the plates as electrolysis takes place. This build up will interfere with the flow of electrical current in the cell and thus lowers chlorine production. It is essential to inspect the cell regularly and clean when necessary. The rate at which deposits will form on the plate differs with each pool and can be influenced by the following:

- Calcium hardness of the water;
- Water temperature;
- pH level;
- Water which has been chlorinated with calcium hypochlorite for an extended period; and/or
- Calcium in the plaster surfaces of a concrete pool.

Because these conditions vary so much, check the cell at least weekly to begin with to see if either scale or a blue/green soapy substance appears on the plates. You will then be able to determine the cleaning cycle necessary for your pool (more frequent cleaning may be required in summer). The intervals between cleaning could get longer to the point where cleaning is only necessary a couple of times each year.



NOTE: In areas with hard water, even reverse polarity systems may require occasional manual cleaning.

The life of the HSMC cell varies substantially from one installation to another due to variations in operating time, water quality and composition, system and cell maintenance.

Please ensure that when cell replacement is necessary you use the correct genuine HSMC replacement cell to match your system. The correct HSMC replacement cells to use are shown in the table below:

| Model | Replacement Cell Code |
|--------|-----------------------|
| HSMC15 | DES2C15H |
| HSMC25 | DES2C25H |
| HSMC35 | DES2C35H |

ALWAYS INSIST ON GENUINE HENDEN REPLACEMENT PARTS.

If it is necessary to replace the electrolytic cell, beware of "look-a-likes". Only the Genuine HSMC cell is designed and warranted to operate with the HSMC Power Supply.

SERIOUS DAMAGE MAY RESULT TO THE ELECTRONICS INSIDE THE HSMC IF CLONE CELLS ARE USED. THIS MAY ALSO VOID WARRANTY.

8.1 To clean the HSMC cell

Ensure that the HSMC and pool pump is turned off. Failure to do so may result in the pool pump turning on while the cell is not in place. Disconnect the flow switch and cell lead from the top of the cell housing. Remove the cell from the pool return line by undoing the cell nut, taking care not to lose the o-rings.

Method one:

Add 1 part HYDROCHLORIC ACID to 10 parts WATER in a suitable container and immerse the cell in this solution. It should not take longer than a few minutes to clean. If it does, the cell should be cleaned more frequently. If the build up is not excessive it may be possible to clean the cell plates with a jet of running water. Return the cell to its housing and connect leads to the head assembly.

Method two:

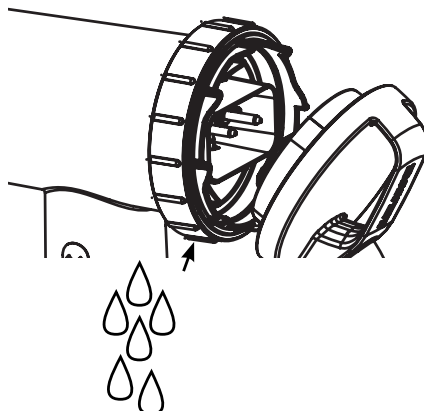
As an alternative, an approved commercial cell cleaning solution can be used a number of times effectively.



NOTE: Always add acid to water. Never add water to acid. Always wear eye protection and rubber gloves. Always clean the cell in a well-ventilated area.

8.2 Re-installing cell after cleaning or replacement

When re-installing the HSMC cell into the housing, ensure that the cell locking nut is tight. Do this by turning on the pool pump once fitted, then checking for leaks.



If there is a leak, turn off the pump, remove the lock nut and inspect the o-ring for debris, or damage. Then re-try. Before re-fitting the cell connectors, ensure that the terminals are dry.

8.3 Safety device

Hydrogen Gas is a by-product of the chlorine producing process. A Flow Switch has been supplied with the HSMC, which will stop output if low or no flow is detected. The HSMC will run to flows down to 4.8m³/h (80L/min).

9. DAY TO DAY OPERATION

Four prime rules must be observed if your unit is to give the best possible service:

9.1 Stabiliser

The importance of pool stabiliser cannot be over emphasised. It is essential in helping retain chlorine in your pool. Chlorine is rapidly dissipated by sunlight and the use of stabiliser will reduce this dissipation substantially. Without stabiliser, it may be necessary to run the unit for up to three times as long!

Stabiliser should be added at the rate of 500 grams for every 10,000 litres of water. Stabiliser should be maintained at a level of 25-50ppm. If a ORP controller is used, Stabiliser should be maintained at a level of 15-25ppm. Before adding more stabiliser, have your pool water analysed at your local Reece Irrigation & Pools branch to ensure that you do not add too much **(FOR OUTDOOR POOLS ONLY, INDOOR DO NOT REQUIRE STABILISER)**.

9.2 pH and total alkalinity

A correct pH level must be maintained to prevent problems such as black spot, staining, cloudy water, etc.

An incorrect pH level can damage the pool. Correct pH levels are as follows; Fibreglass - 7.2 to 7.4; Concrete & tiled - 7.4 to 7.6 If you allow the pH level to rise to 8.0 or above, the chlorine required could be as much as three times the normal amount, in order to correctly sanitise the pool.

Total Alkalinity should not be confused with pH. Although the two are closely related, Total Alkalinity determines the speed and ease of pH change. The ideal range is 80 - 150 ppm or, refer to your pool professional.

You should use a test kit which includes a test for Total Alkalinity. Low Total Alkalinity can cause unstable pH levels. An inability to keep the pH constant may cause staining, etching and corrosion of metals. High Total Alkalinity will cause constantly high pH levels and tends to encourage Calcium scaling.

9.3 TDS levels



WARNING: Some people recommend that you put salt directly in the skimmer box. This is a poor practice as it allows very high concentrations of salt to be passed through your filtration and other pool equipment.

Salt is the essential element by which your HSMC operates with. Insufficient salt will damage your cell.

RECOMMENDED SALT LEVEL RANGE

| | |
|-----------------------------|------------------------|
| Henden HSMC model | HSMC15, HSMC25, HSMC35 |
| Operating salt level | 3,000 - 6,000ppm |
| Add salt alarm | ~ 3,000ppm |



WARNING: Do not add Hydrogen Peroxide to pool water or through swimming pool hydraulic, or sanitiser system. Use of Hydrogen Peroxide will void warranty on Henden products.

Salt is NOT used up in the chlorination process, or by evaporation. It is only lost through dilution caused from: backwashing, splash-out, overflow, leakage from the pool, or plumbing. Heavy rain can dilute the salt levels in your pool therefore, salt levels should be checked during these events.

Low salt levels will destroy the coating on the cell plates and will void all Warranty.

The HSMC has a built-in warning indicator to minimise damage resulting from insufficient salt levels however, the ultimate responsibility is on the owner to ensure adequate salt levels are maintained all year round.

9.4. Running times

These instructions cover the HSMC for residential use only.

If you run your Sanitiser on maximum output for 24 hours a day, or for longer periods, the cell life will be greatly reduced. It is important that the correct model HSMC has been installed on your pool. Many models are available from Henden to cope with small courtyard pools up to commercial size pools (Consult your local Reece Irrigation & Pools branch for more information).

Note: The HSMC warranty does not apply to commercial or semi-commercial applications, i.e. where the pool chlorine demand is far in excess of a typical residential pool.

10. CHLORINE PRODUCTION

The HSMC must be run daily to generate sufficient chlorine to sanitise the pool. During summer a typical installation would

require eight hours per day of chlorination. Depending on when you choose to run the HSMC, it is best to test the residual Chlorine in the pool at the point where you would anticipate the levels be at their lowest. At that chosen time of the day, if the residual Chlorine level from your test is reading too high, reduce the HSMC **CHLORINE OUTPUT**. Alternatively, if the residual Chlorine level from your test is reading too low, increase the HSMC **CHLORINE OUTPUT** (refer to page 27). Correct chemical balances (see page 40) are critical to ensure the HSMC performs correctly.

In cooler times of the year, it's typically possible to reduce running hours of the HSMC. Follow instruction from your pool professional. Chlorine output can also be reduced throughout this time by entering **WINTER MODE** (see page 27).

10.1 "SHOCK" treatment

Periodically, especially during extremely hot conditions, it may be necessary to boost the chlorine level in the pool. This can be achieved by selecting **BOOST MODE**, which will run the system on full for 24 hours (see page 24). Alternatively, add either liquid or granulated chlorine. If granulated chlorine is added, the cell must be checked regularly, since the additives from this product can clog the electrodes.

10.2 Chlorine types and comparisons / max pool size

Many chlorinator manufacturers calibrate their units to compare with 65% granulated chlorine, making it necessary to adjust their readings to a lower level in order to determine true chlorine production. Below is a comparison table of the available types of chlorine used to sanitise pools.

| Henden HSMC Model | Production Maximum (g/hr 100%) | Production (g/hr 65% equivalent) | Chlorine produced over 8 hours (grams 100%) | Maximum Pool Size | | |
|-------------------|--------------------------------|----------------------------------|---|---------------------|---------------------------------|-------------------------------|
| | | | | Cool Climates <25°C | Temperate Climates 25°C to 30°C | Hot & Tropical Climates >30°C |
| HSMC15 | 15 | 23 | 120 | 75m ³ | 58m ³ | 46m ³ |
| HSMC25 | 25 | 38 | 280 | 125m ³ | 96m ³ | 80m ³ |
| HSMC35 | 35 | 53 | 280 | 175m ³ | 134m ³ | 112m ³ |



NOTE: The appropriate Henden Salt and Mineral Chlorinator for your pool is dependent on the local climate, bather load of the pool and running times. Please note that the HSMC cell life can be increased with shorter running times during winter and lower output settings. Henden recommends the HSMC be run for between 6 - 8 hours a day during summer, and 4 hours during winter.

11. GENERAL INFORMATION

11.1 Pool water chemistry instructions

| POOL WATER BALANCE | Free Chlorine (ppm) | pH | Total Alkalinity TA (ppm) | Calcium Hardness (ppm) | Stabiliser - Cyanuric Acid (ppm) | Recommended salt Levels (ppm) |
|------------------------------|---|--|-----------------------------------|---|--|---|
| Ideal reading / range | 1.5 - 3 | Concrete & tiled pools 7.4-7.6 Other surfaces 7.2-7.4 | 80 - 150 | Concrete & tiled pools 200-275 Other surfaces 100-225 | 25-50ppm (15-25ppm if used with an ORP controller) Not to be used in indoor pools. | Depends on model (see page 38) |
| To increase | Increase output of sanitiser. Add chlorine. Increase filtration time. | Add Soda Ash (Sodium Carbonate) | Add Buffer (Sodium Bicarbonate) | Add Calcium Chloride | Add Cyanuric Acid | Add salt |
| To decrease | Decrease output of sanitiser. Decrease filtration time. | Add Hydrochloric Acid | Add Hydrochloric Acid or Dry Acid | Partially drain & refill pool with lower hardness water to Dilute | Partially drain & refill pool to dilute | Partially drain & refill pool to dilute |
| Frequency of testing | Weekly | Weekly | Weekly | Weekly | Regularly | Regularly |

12. TROUBLE SHOOTING

| Problem | Cause | Solution |
|--------------------------------|--|--|
| No chlorine production | No power to the system | Connect power to system |
| | Insufficient flow from pump | Check pump is connected to power, check pump instructions for troubleshooting |
| | Control set to manual off | Set to manual on or timer mode |
| | 'Chlorine Output' set to '0' setting | Change chlorine output to suit your pool installation |
| | Dirty cell | Clean cell, refer to section 8.1 on page 37 for further instructions |
| | Filter needs backwashing | Perform backwash or clean filter. Please refer to your filter operating instructions |
| | Flow switch not connected or damaged | Check flow switch connection and direction of flow. It may be necessary to replace the flow switch |
| | Salt level too low triggering low salt cut-out | Confirm chemistry levels with a water test, adjust to within recommended levels |
| | Pump error | Check pump instructions for troubleshooting |
| Low Chlorine production | Dirty cell | Clean cell, refer to section 8.1 on page 37 for further instructions |
| | Filter needs backwashing | Perform backwash or clean filter |
| | Pool stabiliser too low | Confirm chemistry levels with a water test, adjust to within recommended levels |
| | pH too high | |
| | Salt level too low | |
| | Running time inadequate | Increase scheduled run time |
| | 'Chlorine Output' set too low | Increase % output to suit your pool installation |
| | 'Pool Cover Mode' accidentally turned on | Turn pool cover mode off from the settings menu |
| | 'Spa Mode' accidentally turned on | Turn spa mode off from the setting menu |
| | 'Winter Mode' accidentally turned on | Turn winter mode off from the settings menu |
| | Cell failing | Visit your local Reece Irrigation & Pools branch to replace cell |
| | Pump error | Check pump instructions for troubleshooting |

13. HENDEN™ REPAIR OR REPLACEMENT GUARANTEE

Henden Guarantee Period

Power Supply - Four Years
Electrolytic Cell - Three Years

Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

Should you experience any difficulties with your Henden product, we suggest in the first instance that you contact the installer of the product or your local Reece Irrigation & Pools branch.

Alternatively you can phone Henden. On receipt of your claim, Henden will seek to resolve your difficulties if the product is faulty or defective, advise you on how to have your Henden product repaired, obtain a replacement, or a refund.

Henden does not cover normal wear or tear, or damage resulting from misuse or negligent handling, improper use for which the product was not designed or advertised, failure to properly follow the provided installation and operating instructions, failure to carry out maintenance, corrosive or abrasive water or other liquid, lightning or high voltage spikes, or unauthorised persons attempting repairs. Where applicable, your Henden product must only be connected to the voltage shown on the nameplate.

Henden does not cover freight or any other costs incurred in making a claim. Please retain your receipt as proof of purchase; you MUST provide evidence of the date of original purchase when making a claim.

Henden shall not be liable for any loss of profits or any consequential, indirect or special loss, damage or injury of any kind whatsoever arising directly or indirectly from Henden products.

Should your Henden product require repair or service after the guarantee period contact your nearest Reece Irrigation & Pools branch or phone the number below.

For a complete list of Reece Irrigation & Pools branches visit our website reece.com.au/storefinder or contact:

TECHNICAL AND AFTER SALES SUPPORT:

1300 HENDEN (1300 436 336)

MAILING/MANUFACTURER ADDRESS:

Reece Group
118 Burwood Highway
Burwood, Victoria 3125
ABN 49 004 313 133

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