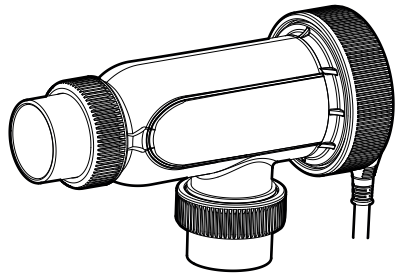
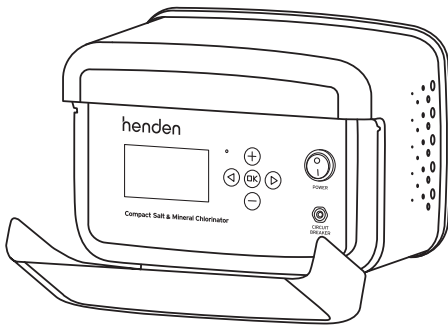


henden™

Henden Compact Salt & Mineral Chlorinator

INSTALLATION & OWNER'S MANUAL



IMPORTANT
Please read carefully



CAUTIONS AND WARNINGS:

Installation and maintenance must be handled by a professional pool builder/service agent.

The Compact Salt & Mineral Chlorinator internally contains live components. There is a danger of electric shock if opened. If the power cord is damaged then it should be replaced by the manufacturer, their agent or similar.

When mixing acid with water, always add acid to water. Never add water to acid.

Salt levels above 6000ppm may overload the unit, cause excessive heat, and void your warranty.

Do not plug unit in if the carton has been wet.

Never add salt/minerals directly to the skimmer box.

Gas build-up can occur with improper wiring. If the pump is not installed to the AC Socket (pump outlet) on the Henden Compact Salt & Mineral Chlorinator, then the installer must ensure that the Electrolytic Cell is never energized when the pool pump is OFF, or water is not flowing through the unit.

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Henden Compact Salt & Mineral Chlorinator

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INTRODUCTION

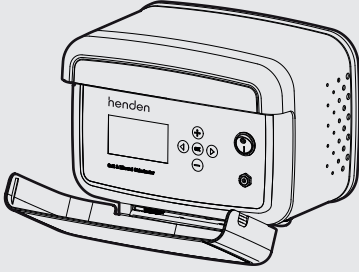
Thank you for purchasing the Henden Compact Salt & Mineral Chlorinator. Designed for efficient chlorine production and consistently clear water. With a quick connect cell for easy installation and a long-life self-cleaning cell for hassle-free maintenance, it's compatible with both salt and mineral pools.

HELPFUL HINTS

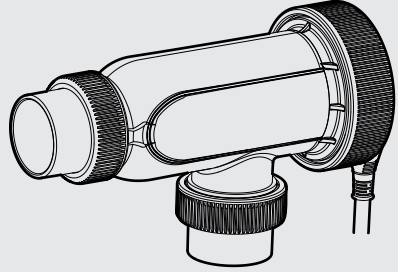
- > The Henden Compact Salt & Mineral Chlorinator is not designed to chemically maintain the pool water and keep it balanced, but rather to produce chlorine from a mild salt solution within the water. We encourage regular water testing, balancing and correction if, and when required to maintain the recommended balanced levels of the pool water.
- > To stop the sun from removing chlorine, it is recommended to use a stabiliser in the swimming pool.
- > Maintain your salt levels between 3500-4000ppm and 1200ppm - 1800ppm for Low Salt models, for optimum performance.
- > Decrease the output when the water temperature goes down (less than 15°C) to extend cell life as high chlorine levels are not needed in winter. Increase chlorine production when the temperature goes up again.
- > The unit can operate on other mineral/magnesium chloride salts, and you should allow an extra 20-30% of the product to achieve the correct TDS for these types of salts.
- > If using a pool cover, output will need to be reduced. Weekly water testing is recommended.

IN THE BOX

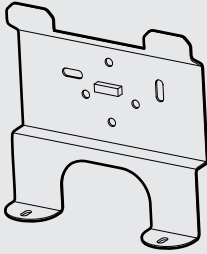
Henden Compact Salt & Mineral Chlorinator



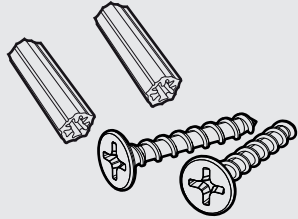
Henden Electrolytic Cell Housing with Unions



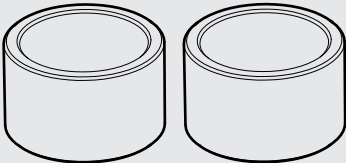
Wall Mounting Bracket with Levels



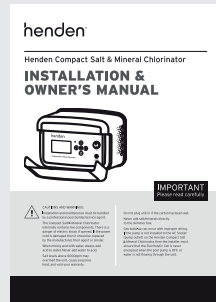
2x Green Wall Plug with Screws



2x 50/40 Reducing Bushes

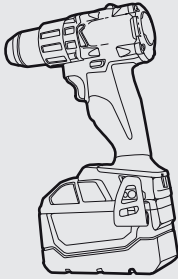


Installation Manual

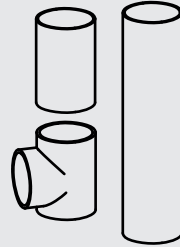


TOOLS REQUIRED FOR INSTALLATION:

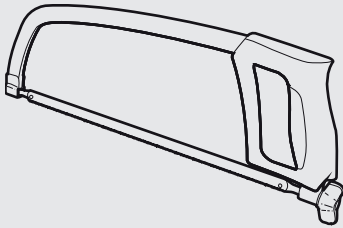
Drill with 6mm Bit



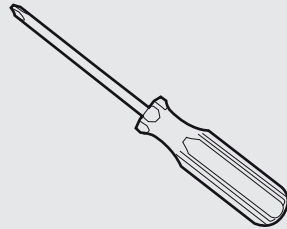
Basic PVC Fittings



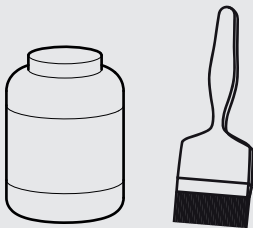
Hacksaw



No.2 Phillips Head Screwdriver

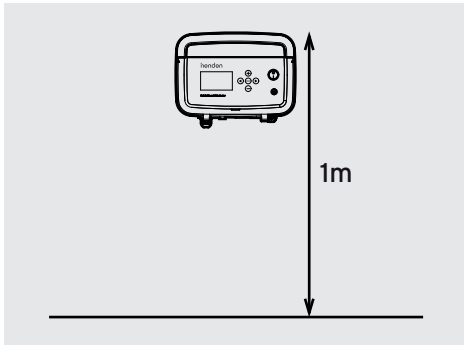


Pressure Rated Solvent Cement

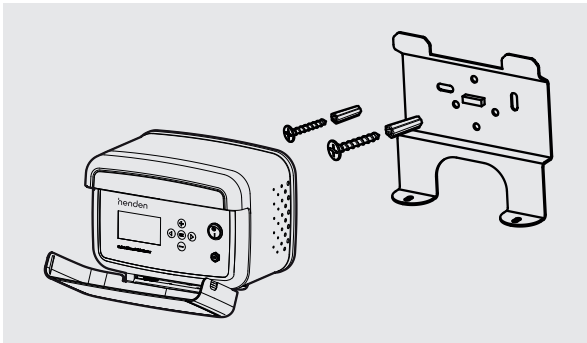


POSITIONING THE HENDEN COMPACT SALT & MINERAL CHLORINATOR

- 1 Position the Henden Compact Salt & Mineral Chlorinator at least 1m above ground.
- 2 Ensure the Henden Compact Salt & Mineral Chlorinator is positioned in a well-ventilated location and is protected from the weather.



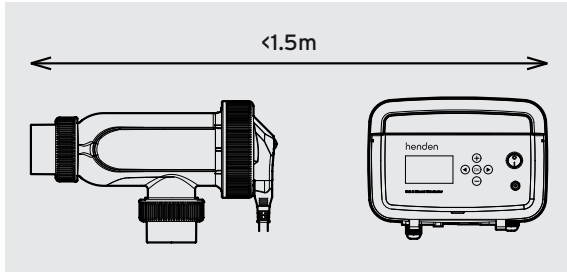
- 3 Using the mounting bracket, green plugs and screw provided, mount the Henden Compact Salt & Mineral Chlorinator onto the pool pad.



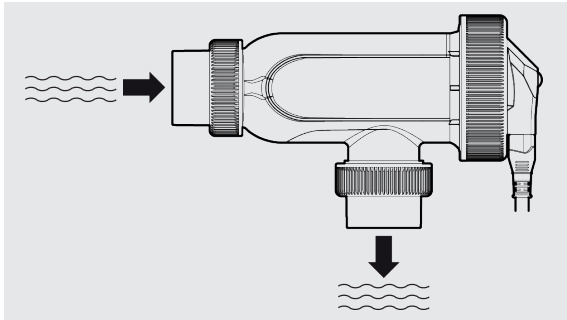
Handy tip: If mounting the Henden Compact Salt & Mineral Chlorinator on a post, install a flat panel at least the same size to act as a waterproof backing plate.

INSTALLING THE CHLORINATOR CELL

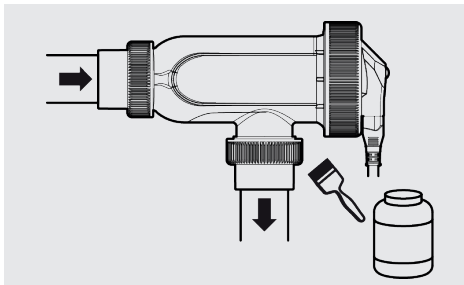
- 1 Position the Chlorinator cell housing no further than 1.5m from the power supply.



- 2 Ensure the housing is positioned in line with this illustration. This positioning will mean less water hammer on the cell plates over time and improved product lifespan.



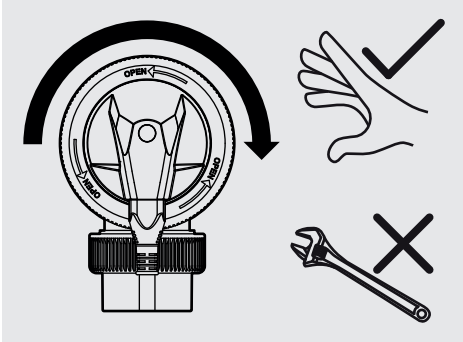
- 3 Using the reducing bushes provided, connect the Chlorinator Cell horizontally in the return line to the pool. Ensure you use high pressure cement.



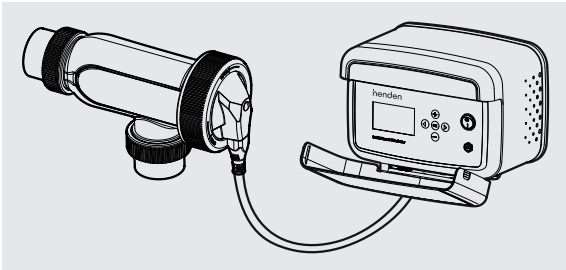
Handy tip: Check that the O-ring is clean, greased with silicone grease and securely located in the Cell Housing. Do not grease with petroleum-based jelly.

INSTALLING THE CHLORINATOR CELL cont.

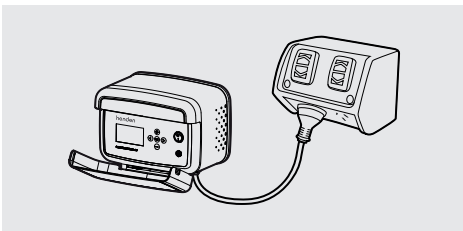
- 4** Ensure the Cell Locking Ring is firmly tightened by hand. DO NOT use a tool to tighten. This will damage the housing.



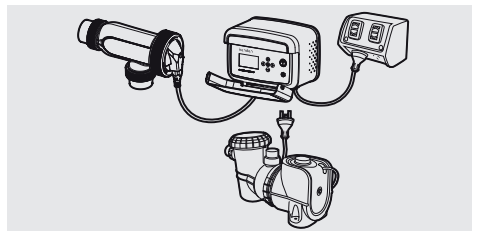
- 5** Connect the cell lead from the Henden Compact Salt & Mineral Chlorinator to the Cell cap. Ensure a firm fit to prevent water entry.



- 6** Plug the Henden Compact Salt & Mineral Chlorinator 3-pin plug into a suitable weatherproof RCD-protected 10amp outlet.

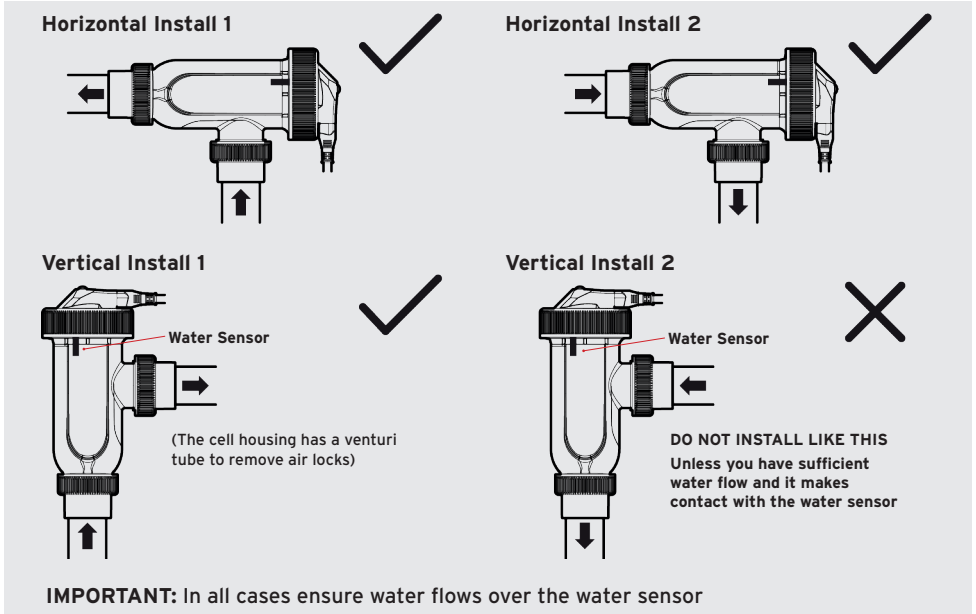


- 7** Plug the pool pump into the socket at the base of the Henden Compact Salt & Mineral Chlorinator.

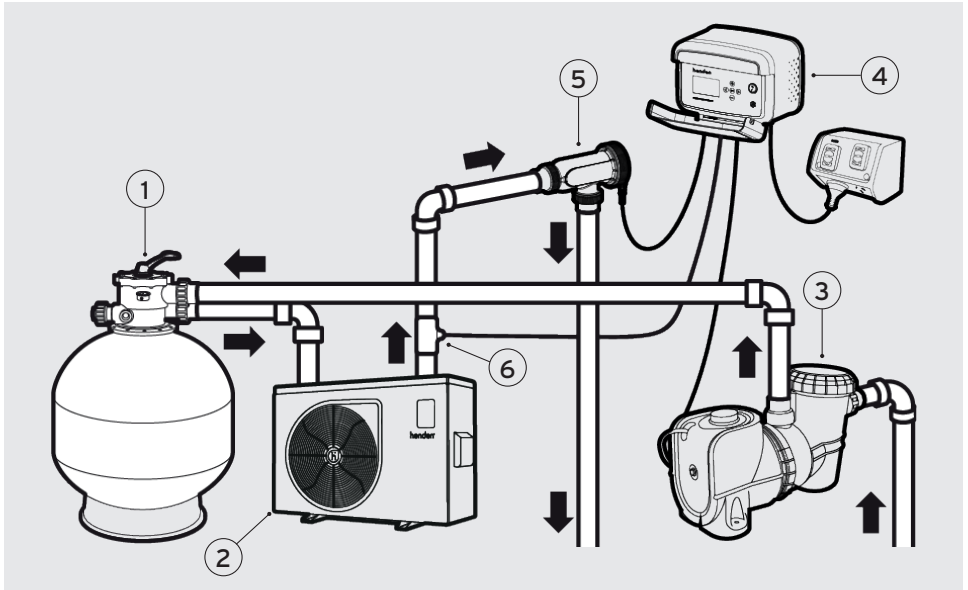


ALTERNATIVE CELL POSITIONING

Henden recommends positioning the cell in accordance to drawing above. However, the cell can also function in alternative positions. Alternative positioning and installation notes can be seen below:

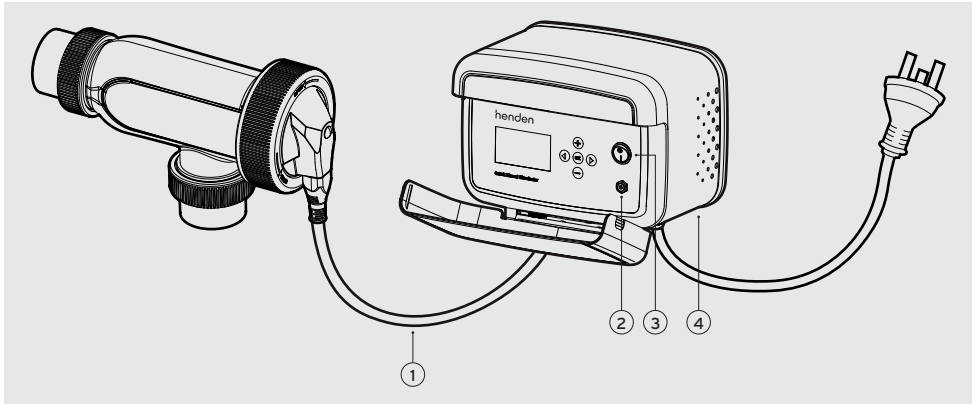


POOL PAD DIAGRAM



- 1** Filter
- 2** Heat Pump
- 3** Pool Pump
- 4** Henden Compact Salt & Mineral Chlorinator
- 5** Cell Housing
- 6** Flow Switch (if installed)

HENDEN COMPACT SALT & MINERAL CHLORINATOR CONTROLS



- 1** Cell lead - The proprietary Cell Lead comes complete with moulded gold plated/brass connectors and is connected to the cell via a watertight plug top.
- 2** Circuit Breaker - Only operates the Cell circuit and not the pump circuit. A circuit breaker is an automatically operated electrical switch designed to protect an electrical circuit from damage caused by overcurrent, overload, or short circuit. It can be reset by pressing the button in after it has tripped. It may be damaged if you supply excessively high salt levels through the cell.
- 3** Power Switch - This switch position determines whether the power is turned ON or OFF when supplied from the AC Socket.
O - Pressing the switch in at the "O" position turns the unit OFF in all models.
I - pressing the switch in at the "I" position turns the Power ON in all models.
- 4** AC Socket (Pump Outlet) - Allows the pump to be electrically operated and controlled by the Henden Compact Salt & Mineral Chlorinator.

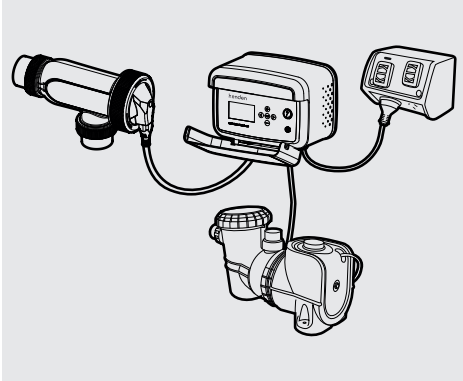


Warning: If you fail to control the pump this way, you must install a flow switch mechanism to control the electrical supply to the Henden Compact Salt & Mineral Chlorinator. This will prevent gas build-up if the pump stops or a valve is closed.

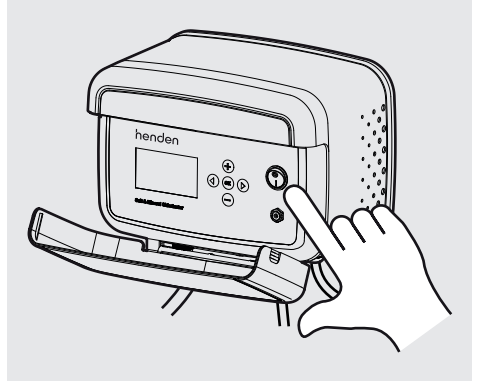
FIRST TIME START UP

Start-up procedure

- 1 Turn the 10-amp wall outlet supply switch to "ON".



- 2 Flick the power button on the Henden Compact Salt & Mineral Chlorinator to turn ON.



FIRST TIME START UP

Initial start-up

The below message will appear on the display screen when the Henden Compact Salt & Mineral System starts up.

```
EMBEDDED SOFTWARE  
<VER: CLxx.xx>  
CHECKING SYSTEM  
MODEL: 25g/hr
```

Setting the date and time

START UP SET CLOCK allows you to program the exact time of the day.

```
START UP SET CLOCK  
ACTUAL TIME: HH:MM  
[+] or [-] to change  
[OK] SAVE
```

- 1 Select the mode: START UP SET CLOCK. HH digits will flash.
- 2 Press [+] to increase the time, and [-] to decrease the time.
- 3 Press [OK] to save the selected hour HH and MM.
- 4 Press [<] to return to the previous menu screen.

Setting filter times

START UP FILTER TIME allows you to program your daily run times.

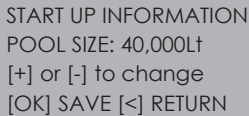
```
START UP FILTER TIME  
Period: 2 CYCLES/DAY  
[+] or [-] to change  
[OK] SAVE [<] RETURN
```

- 1 Select the mode: START UP FILTER TIME.
- 2 2 CYCLES/DAY will flash, press [+] or [-] to change the selection.
- 3 Select the period of running from the following options:
 - > 2 CYCLES/DAY-The unit runs from 6 a.m. to 10 a.m. and 4 p.m. to 8 p.m.
 - > 1 CYCLE AM - The unit runs from 8 am to 4 pm.
 - > 1 CYCLE PM - unit runs from 8 pm to 4 am.
- 4 Press [OK] to save the selected period.
- 5 Press [<] to return to the previous menu screen.

FIRST TIME START UP

Setting the pool size

START UP INFORMATION allows you to customise the unit to your pool size.



```
START UP INFORMATION
POOL SIZE: 40,000Lt
[+] or [-] to change
[OK] SAVE [<] RETURN
```

- 1 Select the mode: START-UP INFORMATION.
- 2 Press [+] or [-] to change the selection in 1,000-litre increments.
- 3 Hold [+] or [-] to change pool size in 5,000-litre increments. A reading of 40,000lt or similar flashes to show volume can be changed.
- 4 Press [OK] to confirms your selection.

Handy tip: If you do not know your pool size, you can press [OK] and set this later or contact your local pool Professional for further assistance.

- 5 Press [<] to return to the previous menu screen.

MENU GUIDE

Reading the display screen

The DEFAULT DISPLAY SCREEN (DDS) shows the actual output % of the unit.

- 1 Press [+] or [-] to increase the Output setting, the screen will update. This should always remain at 100% unless SPA MODE has been selected.
 - > The (•) symbol indicates normal operation.
 - > T1 and T2 indicate that the unit is operating in the First Filter Cycle and the Second Filter Cycle of the day.
 - > The Mode shows AUTO, which can be changed to ON, OFF, or AUTO in the Power/Mode Menu.
 - > The time shows as HH: MM in 24-hour clock format.
 - > The cell status is shown as FWD when the cell is in the forward direction and REV when it is in the reverse direction.
 - > The pump AC socket status is displayed, either ON or OFF.
 - > Any power failures return you to the DDS, and the last saved MODE is active.

OUTPUT: 100% (•) T1
Mode: AUTO HH:MM
Cell: FWD Pump: On
[OK] ENTER MENU

Programming the Henden Compact Salt & Mineral Chlorinator

Navigating the menus:

- > Menus are opened by pressing the [OK] button.
- > Any inactivity in any display for longer than 60 seconds results in the display returning to the Default Display Screen (DDS).
- > Pressing [+] takes you to the last menu, and using the [-] or [OK] enters the first three menus.
- > Pressing [<] returns you to the previous menu screen.
- > Pressing [+] or [-] scrolls up or down, and [OK] enters the flashing menu.

MAIN MENU
Simply use buttons
[+] or [-] to change
[OK] ENTER [<] EXIT

NOTE: To extend the life of the LCD display, the display will become dim after 10 minutes of inactivity. Any time you press the keypad, the LCD will become bright again and automatically dim once any activity has stopped after 10 minutes.

FILTER TIMES

Your Henden Compact Salt & Mineral Chlorinator comes with a built-in digital timer. Times are displayed in 24hr format.

- 1 Press the [OK] button in the MAIN MENU.
- 2 Scroll to Filter Times then press [OK].
- 3 To run the chlorinator in MANUAL ON (i.e., always ON): Set the Mode Setting to ON and the T1 & T2 ON & OFF Times set to 00:00; alternatively, use the External Control Mode

Filter Time Settings

- 1 Enter the Filter menu from the main menu, the display will show the following screen.

```
HH:MM - DUAL CYCLE
[+] to change cycle
[OK] confirms cycle
[<] BACK
```

- 2 Press [+] to change the timer to the Single Timer Cycle (T1).

```
HH:MM - SINGLE CYCLE
[+] to change cycle
[OK] confirms cycle
[<] BACK
```

- 3 Pressing [OK] to confirm the selected cycle and enter the Timer Program.

```
TIMER 1: ON TIME
START TIME: HH:MM
[+] or [-] to change
[OK] SAVE [<] RETURN
```

- 4 Press [+] to change back to Dual Timer Cycle (T2).
- 5 Pressing [OK] to confirm the selected cycle and enter the Timer Program.
- 6 To program the actual time of the day, press [>] as per the instructions above.

Timer 1: On Time (HH)

- 1 HH digits flash, press [+] to increase the time, and [-] to decrease the time.

```
TIMER 1: ON TIME
START TIME: HH:MM
[+] or [-] to change
[OK] SAVE [<] RETURN
```

- 2 Press [OK] to confirm the selected hour HH.
- 3 Press [<] to returns to the previous display.

FILTER TIMES

Timer 1: On Time (MM)

- 1 MM digits flash, press [+] to increase the time, and [-] to decrease the time.
- 2 Press [OK] to confirm the selected minute MM.
- 3 Press [<] to returns to the previous display.

Timer 1: Off Time (HH)

- 1 HH digits flash, press [+] to increase the time, and [-] to decrease the time.
- 2 Press [OK] to confirm the selected hour HH.
- 3 Press [<] to returns to the previous display.

Timer 1: Off Time (MM)

- 1 MM digits flash, press [+] to increase the time, and [-] to decrease the time.
- 2 Press [OK] to confirm the selected minute MM.
- 3 Press [<] to returns to the previous display.

Timer 2: On Time (HH)

- 1 HH digits flash, press [+] to increase the time, and [-] to decrease the time.

```
TIMER 2: ON TIME  
START TIME: HH:MM  
[+] or [-] to change  
[OK] SAVE [<] RETURN
```

- 2 Press [OK] to confirm the selected hour HH.
- 3 Press [<] to returns to the previous display.

Timer 2: On Time (MM)

- 1 MM digits flash, press [+] to increase the time, and [-] to decrease the time.
- 2 Press [OK] to confirm the selected minute MM.
- 3 Press [<] to returns to the previous display.

FILTER TIMES

Timer 2: Off Time (HH)

- 1 HH digits flash, press [+] to increase the time, and [-] to decrease the time.

TIMER 2: OFF TIME
OFF TIME: HH:MM
[+] or [-] to change
[OK] SAVE [-<] RETURN

- 2 Press [OK] to confirm the selected hour HH.

- 3 Press [<] to returns to the previous display.

Timer 2: Off Time (MM)

- 1 MM digits flash, press [+] to increase the time, and [-] to decrease the time.

- 2 Press [OK] to confirm the selected minute MM.

- 3 Press [<] to returns to the previous display.

EXTRA PUMP TIMES

- 1 Press the [OK] button in the MAIN MENU.

- 2 Scroll to EXTRA PUMP TIMES.

- 3 Press [OK] to enter the display below. This allows you to set a single pump run event [1. PUMP SINGLE RUN] or a permanent additional pump running time [2. PUMP ON TIMERS].

1. PUMP SINGLE RUN
2. PUMP ON TIMERS
[+] or [-] to change
[OK] ENTER [-<] RETURN

- 4 Use the [+] or [-] buttons to select the function required and press [OK] to enter or [<] to return to the previous menu.

EXTRA PUMP TIMES

Pump Single Run

Use to circulate water in the pool without chlorine production by the Chlorinator.

- 1 Press [OK] on the display above at [1. PUMP SINGLE RUN]. A message will appear to make you aware that the cell does not work during this time.

PUMP SINGLE RUN
NOTE: Cell is not ON
during this time
[OK] ENTER [<] RETURN

- 2 Press [OK] to ENTER the PUMP SINGLE RUN, pressing [<] allows you to exit and return to the previous display.

- 3 Press [OK] on the PUMP SINGLE RUN menu to adjust the pump run.

PUMP SINGLE RUN
Setting: 08:00:00hrs
[+] or [-] to change
[OK] START [<] RETURN

- 4 Use [+] or [-] to adjust the PUMP RUN TIME from 1 to 24 hours in one-hour increments.

- 5 Once the time is set, press [OK] to START the pump. Pressing [<] allows you to exit and return to the service menu without saving any changes.

NOTE: The CELL will be OFF during this time even if T1 and T2 times are calling for the cell to be ON.

- 6 The display screen will show the PUMP RUN TIME LEFT in real time. To stop this function, press [OK]. The display will return to the DDS and the chlorinator will return to its previous operating mode.

PUMP RUN TIME LEFT
Time Left: 08:00:00hrs
[+] or [-] to change
[OK] STOP

NOTE: The default run time is 8 hours.

EXTRA PUMP TIMES

Pump On Timers

Typically used if you have a heat pump or energy-efficient pump and need to run the pump for longer hours than the cell.

- 1 Press [OK] on display [2. PUMP ON TIMERS] takes you to the display below.

```
PUMP ON TIMERS
This runs PUMP only
outside T1, T2 times
[OK] ENTER [<] RETURN
```

NOTE: The pump will run outside of T1 and T2 times, and the cell will be OFF when outside of these times. Overlapping P1/P2 and T1/T2 times means the pump will be ON for all P1/P2 times, and the cell will only be ON for the T1/T2 times.

- 2 Press [OK] on the above display to enter the [PUMP P1: ON TIME] display below.

```
PUMP P1: ON TIME
START TIME: HH:MM
[+] or [-] to change
[OK] SAVE [<] RETURN
```

- 3 The HH digits will flash, press [+] to increase the time, and [-] to decrease the time. Pressing [<] allows you to return to the previous menu without saving any changes.

```
PUMP P1: ON TIME
START TIME: HH:MM
[+] or [-] to change
[OK] SAVE [<] RETURN
```

- 4 Press [OK] to confirm the selected hour HH. Follow the same steps to set the minutes MM.

- 5 Pressing [<] returns you to the previous display. Pressing [OK] returns you to the previous menu.

- 6 After Selecting [OK] in display [PUMP P1: ON TIME], the unit will display the [PUMP P1: OFF TIME].

```
PUMP P1: OFF TIME
STOP TIME: HH:MM
[+] or [-] to change
[OK] SAVE [<] RETURN
```

EXTRA PUMP TIMES

Pump On Timers cont.

- 7** The HH digits flash, and press [+] increase the time and [-] to decrease it.

```
PUMP P1: OFF TIME  
STOP TIME: HH:MM  
[+] or [-] to change  
[OK] SAVE [<] RETURN
```

- 8** Press [OK] to confirm the selected hour HH. Continue and follow the same steps to set the minutes. Pressing [<] returns you to the previous display.

- 9** The following screen will display to set the [PUMP P2: ON TIME].

- 10** The [PUMP P2: ON TIME] display will show, the same steps can be followed as above to set the PUMP P2: ON and OFF times.

```
PUMP P2: OFF TIME  
STOP TIME: HH:MM  
[+] or [-] to change  
[OK] SAVE [<] RETURN
```

- 11** Press [OK] at the end of setting [PUMP P2: OFF TIME} MM will take you back to the DDS. Pressing [<] returns you to the previous display.

NOTE: By default, the P1 and P2 ON & OFF times are 00:00. If the P1 or P2 times are set to 00:00, nothing happens. The system ignores 00:00.

CHLOR OUTPUT

CHLOR OUTPUT automatically controls the Chlorine output for your Henden Compact Salt & Mineral Chlorinator. This feature is convenient when you want to run the pump for longer hours (e.g., with a variable-speed pump or if you wish to do additional filtration). In this case, chlorine levels need to be decreased.

- 1 Press [+] or [-] anytime in the DDS to increase or decrease the setting in 1% increments.

You can also access Chlor Output by following the below steps.

- 1 Press the [OK] button in the MAIN MENU.
- 2 Scroll to CHLOR SETTING.

NOTE: The default setting is set to 100%.

SALT TEST

The SALT TEST menu function allows you to measure your swimming pool's salt or mineral level. A reading will appear on the screen; allow at least 30 seconds for an accurate reading.



Warning: Before performing a salt test, ensure the cell is clear of any calcium deposits, as this will insulate the electrodes and impact your readings.

1

Press the [OK] button in the MAIN MENU.

2

Scroll to Salt Test then press [OK].

```
SALT TEST MODE
SALT: OK
[<] to END
```

3

A salt measurement is taken, and a range is displayed. An approximate TDS reading is indicated immediately after, and these measurements will alternatively scroll until the [<] button is pressed and the display returns to the DDS.

```
SALT TEST MODE
Approximate TDS
Level is: XXXXX ppm
[<] to END
```

NOTE: The ideal TDS reading should be "OK" and approximately 3500-4000 ppm and between 1500-1800ppm for the Low Salt models.

If "HIGH" or "LOW" is displayed we suggest taking a sample to your local pool Professional for a more accurate result and further assistance. The SALT TEST measurement is meant to be a guide only, as many factors can impact the result.

```
SALT TEST MODE
SALT: HIGH
Consult a Pool Shop
[<] to END
```

```
SALT TEST MODE
SALT: LOW
Consult a Pool Shop
[<] to END
```


CHLOR BOOST

CHLOR BOOST sets your Henden Compact Salt & Mineral Chlorinator to operate for 8 hours and automatically sets the chlorine setting to 100%. This allows for an injection of extra sanitising time. If there is any fault during CHLOR BOOST, the bottom line will alternate between "CHLOR BOOST to END" and the fault message.

- 1 Press the [OK] button in the MAIN MENU.
- 2 Scroll to CHLOR BOOST then press [OK].

CHLOR BOOST TIME
Setting: 08:00:00hrs
[+] or [-] to change
[<] to END
- 3 The unit automatically defaults to 08:00 hours of ON time, and the timer starts counting down immediately.
- 4 The first two digits 08 will flash while adjusting.
- 5 Press [+] or [-] to increase or decrease in increments of 01:00 hour whilst running.
- 6 When completed, the unit will return to the DDS in the last selected POWER/MODE state.
- 7 Exit the CHLOR BOOST function by pressing [<]. This will return the unit to the DDS and its previous setting.

BACKWASH

Entering the backwash menu assists you in operating your pump and filter during the backwash process.



Warning: Important information before performing a backwash.

- > Never operate the filter lever while the pump is running; you may damage the seal, and leaks may occur.
- > The pump will start and stop as you require.
- > Ensure all the valves, valve handles, lids, baskets, etc. Are in the in the correct positions as per the requirements of the manufacturers of that equipment.

1

Set the multiport valve to Backwash.

```
BACKWASH MODE
Set MPVvalve to Back-
Wash and press
[OK] NEXT [<] EXIT
```

3

To increase the backwash time, use the [+].

```
BACKWASH MODE
[+] Add 1min to TIME
[-] Stop Pump [OK] NEXT
TIME LEFT: 02:00min
```

2

Press [OK] to start the pump for 2 minutes, TIME LEFT will be displayed automatically, counting down in 1-second increments.

4

To stop the pump, press the [-] button and then the [+] button to restart.

5

Press [OK] to finish when the dirty water in the waste pipe or sight glass is clear.

BACKWASH

- 6** RINSE MODE will then be displayed.

RINSE MODE
Set MPV Valve to Rinse
position and press
[OK] NEXT [<] EXIT

- 7** Press [OK] to stop the pump, and RINSE MODE is displayed.

RINSE MODE
[+] Add 1min to TIME
[-] Stop Pump [OK] NEXT
TIME LEFT: 1:00min

- 8** Rotate the filter multi-port valve to the rinse position, ensure the handle locks in place and once ready, then press [OK] to enter the RINSE MODE cycle.

- 9** Pressing [<] allows you to exit, and this takes you to BACKWASH COMPLETED.

- 10** Press the [OK] button to start the pump for 2 minutes. TIME LEFT automatically starts counting down in 1-second increments.

- 11** Press [OK] to finish RINSE MODE once dirty water in the waste pipe or sight glass is clear, and enter BACKWASH COMPLETE.

BACKWASH COMPLETED
Set MPV Valve to Filter
position and press
[OK] NEXT [<] EXIT

- 12** Press [OK] to stop the pump, BACKWASH COMPLETED is displayed. Rotate the filter multi-port valve to the filter position, ensure the handle locks in place and once ready.

BACKWASH COMPLETED
Final check on all
valves/lid positions
[<] to EXIT

- 13** Press [<] to finish the backwash and exit to the default display screen.

SERVICE MENU

The service menu allows you to undertake several operations, including adjusting mode settings, setting the clock, changing pump protection times, changing cell cleaning times, using an external controller, updating display settings, changing pH controller settings, and updating Spa settings.

Mode Setting

- 1 Press [OK] from the DDS to enter the MAIN MENU.

```
MAIN MENU
Simply use buttons
[+] or [-] to change
[OK] ENTER [<] EXIT
```

- 2 Scroll to SERVICE MENU using the [+] or [-] buttons.

```
5 Chlor Boost
6 Backwash
7 Service Menu
[+] UP [-] DN [OK] Enter
```

- 3 To access the MODE SETTING, scroll through the SERVICE MENU using the [+] or [-] buttons until you reach MODE SETTING.

- 4 Press [OK] to enter the display shown below.

```
MODE SETTING
Setting: AUTO
[+] or [-] to change
[OK] SAVE [<] BACK
```

- 5 Push [+] or [-] to adjust the MODE SETTING from AUTO to OFF and to ON.

- 6 Press [OK] to save the required mode and return to the previous screen.

- 7 Press [<] to return to the DDS.

Clock Settings

CLOCK SETTING allows you to program the exact time of the day.

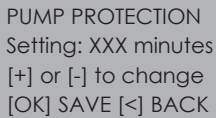
- 1 Press [OK] from the DDS to enter the MAIN MENU.
- 2 Scroll to SERVICE MENU using the [+] or [-] buttons.
- 3 To access CLOCK SETTING, scroll through the SERVICE MENU using the [+] or [-] buttons until you reach CLOCK SETTING then press [OK].
- 4 HH digits will flash, press [+] to increase the time, or [-] to decrease the time.
- 5 Press [OK] to confirm the selected hour HH.
- 6 Press [<] to exit to the DDS.
- 7 MM digits will flash, press [+] to increase the time, or [-] to decrease the time.
- 8 Press [OK] to confirm the selected minute MM.
- 9 Press [<] to return to the previous display.

CLOCK SETTING
ACTUAL TIME: HH:MM
[+] or [-] to change
[OK] SAVE [<] BACK

Pump Protect

PUMP PROTECT is designed to protect your pump if there is no flow of water. This means the time the pump is allowed to run after the water sensor on the Cell detects there is no flow of water. The pump will be turned off from 3 to 10 minutes after detecting no water flow.

- 1 Press [OK] from the DDS to enter the MAIN MENU.
- 2 Scroll to SERVICE MENU using the [+] or [-] buttons.
- 3 To access the PUMP PROTECT, scroll through the SERVICE MENU using the [+] or [-] buttons until you reach PUMP PROTECT then press [OK].
- 4 Press [+] or [-] to adjust when the pump is turned off.



PUMP PROTECTION
Setting: XXX minutes
[+] or [-] to change
[OK] SAVE [<] BACK

- 5 Press [OK] to save the required protection time.

NOTE: The default setting is 3 minutes.

Auto Cell Cleaning

Innovative self-cleaning technology allows the polarity of the OXI Cell plates to change direction every 4-16 hours (depending on your setting). The polarity change causes the calcium to dislodge, keeping the OXI Cell plates clean.

NOTE: Occasional cleaning of the plates may be necessary.

The default setting is every 7 hours, and this can be adjusted from as low as 4 hours (for high calcium areas) to as high as 16 hours.

In areas where the water's calcium hardness is low (less than 200 ppm), cell cleaning may not be necessary.

When calcium levels exceed 200 ppm, regular cell inspection is necessary, and cleaning in an acid solution may be required.

- 1 Press [OK] from the DDS to enter the MAIN MENU.
- 2 Scroll to SERVICE MENU using the [+] or [-] buttons.
- 3 To access AUTO CELL CLEANING, scroll through the SERVICE MENU using the [+] or [-] buttons until you reach AUTO CELL CLEANING then press [OK].

CELL CLEANING TIME
Setting: XX hours
[+] or [-] to change
[OK] SAVE [<] BACK

External Controller

Used to set the Chlorinator to remain ON all the time, such as when using an external controller, you can do so in this menu setting.

- 1 Press [OK] from the DDS to enter the MAIN MENU.
- 2 Scroll to SERVICE MENU using the [+] or [-] buttons.
- 3 To access EXTERNAL CONTROLLER, scroll through the SERVICE MENU using the [+] or [-] buttons until you reach EXTERNAL CONTROLLER then press [OK].
- 4 Press [+] or [-] to adjust the setting from OFF to ON.
- 5 Press [OK] to save the required setting.
- 6 The DDS will now display EX at the top right corner, indicating that the external control function is activated.

```
EXTERNAL CONTROLLER
Setting: OFF
[+] or [-] to change
[OK] SAVE [<] BACK
```

```
OUTPUT: 100% (●) EX
Mode: ON HH:MM
Cell: FWD Pump: ON
[OK] ENTER MENU
```

NOTE: The default setting is OFF.

Brightness

- 1 Press [OK] from the DDS to enter the MAIN MENU.
- 2 Scroll to SERVICE MENU using the [+] or [-] buttons.
- 3 To access BRIGHTNESS, scroll through the SERVICE MENU using the [+] or [-] buttons until you reach BRIGHTNESS then press [OK].
- 4 Press [+] or [-] to adjust the BRIGHTNESS.
- 5 Press [OK] to save the selection.

NOTE: The default setting is 60%.

BRIGHTNESS MODE
Setting: 60%
[+] or [-] to change
[OK] SAVE [<] BACK

pH

pH Control

The default setting on your Henden Compact Salt & Mineral Chlorinator is for the acid dosing system to be OFF. pH CONTROL MODE must be turned on to operate a pH System.

- 1 Press [OK] from the DDS to enter the MAIN MENU.
- 2 Scroll to SERVICE MENU using the [+] or [-] buttons.
- 3 To access pH, scroll through the SERVICE MENU using the [+] or [-] buttons until you reach pH then press [OK]. Next, Select pH CONTROL MODE and press [OK].
- 4 Press [+] or [-] to adjust the pH MODE settings from OFF to ON and ON to OFF.
- 5 Press [OK] to SAVE the selection.

pH CONTROL MODE
pH Mode: ON
[+] or [-] to change
[OK] SAVE [<] BACK

pH

pH Run Time

pH1 Run Time is programmed automatically when setting up the swimming pool's volume in the chlorinator. The system calculates the minutes per day your pH controller should run based on the pool's volume, and this can be manually changed.

```
pH CONTROL MODE
pH1 Run Time
pH2 Demand or Prime
[+] UP [-] DN [<] BACK
```

To adjust the pH Run Time:

- 1 Press [OK] from the DDS to enter the MAIN MENU.
- 2 Scroll to SERVICE MENU using the [+] or [-] buttons.
- 3 To access pH Run Time, scroll through the SERVICE MENU using the [+] or [-] buttons until you reach pH Run Time then press [OK].
- 4 The LCD will now show 'On Time: ---- min/day'. Press [+] or [-] to adjust the ON Time in min/day. This can be adjusted from 0 to 120 minutes per day.
- 5 Press [<] to return to the previous pH CONTROL MODE menu.
- 6 Press [OK] to save the required run time and return to the main menu.

```
pH1 RUN TIME
ON Time: 20 min/day
[+] or [-] to change
[OK] SAVE [<] BACK
```

NOTE: Saving this Run Time will result in saving the time as the new daily default running time of the unit.

pH

pH Demand or Prime

If using sulphuric/low fuming type acid, consult a pool professional for dosage times.

The 'pH2 DEMAND or PRIME' quantity can be manually adjusted from 0 - 500 ml. The default reading is always 100 ml. This function is useful for Priming tubes after an acid drum change or adding the required acid from your acid demand test.

pH2 DEMAND OR PRIME
Acid Demand: 100ml
[+] or [-] to change
[OK] SAVE [-] BACK



Enter the exact amount from your test result in ml (e.g., 500 ml), and the system automatically adds four times that amount, thereby allowing for the 1:3 ACID: WATER mix ratio in the acid drum.

To select the 'pH DEMAND or Prime' function:

- 1 Enter the main menu by pressing the [OK] button and scrolling to 'pH Control Mode' (Menu 14).
- 2 Select 'pH2 Demand or Prime'. Press [+] or [-] to adjust the quantity of acid required in millilitres (ml).
- 3 Press [OK] to save the required quantity, the peristaltic pump starts turning, and a time-based 'min' reading starts counting down.
- 4 You can lower the time by pressing the [-] button if the lines are primed.
- 5 Press [-] to return to the previous pH CONTROL MODE menu.
- 6 Press [OK] to save the required run time and return to the main menu.

pH2 DOSE TIME LEFT
Time Left: 40 min
[-] to lower Time
[OK] SAVE [-] BACK

NOTE:

1. If the lines are primed, you can stop the peristaltic pump by pressing [-] while in the 'pH2 DOSE TIME LEFT' menu, lower the 'Time Left:' to 0 min.

2. If you hold down the [>] button on the unit, acid dosage can be cancelled.

pH

pH Control

To turn OFF the acid dosing:

- 1 Press the [OK] button on the main menu and scroll to pH CONTROL MODE (Menu 14).
- 2 Press [OK] on the 'pH mode: ON' menu from 'pH Control Mode'.
- 3 Use the [+] or [-] button to change the selection from ON to OFF and press [OK] to save.

NOTE: The pH software includes a feature that adjusts the pH run time based on the chlorinator output setting. For instance, for a 50K pool, the pH run time is set to 20 minutes. At 50% output, the run time decreases to 10 minutes; in SPA mode, at 10% output, it's further reduced to 2 minutes. If your chlorinator output is 75%, the runtime will be 15 minutes. However, if you adjust the runtime, this will become the new default runtime, and the unit will not change the output by itself.

Contrast

- 1 Press [OK] from the DDS to enter the MAIN MENU.
- 2 Scroll to SERVICE MENU using the [+] or [-] buttons.
- 3 To access CONTRAST, scroll through the SERVICE MENU using the [+] or [-] buttons until you reach CONTRAST then press [OK].
- 4 The contrast can be set from 20% to 100%.
- 5 Pressing [+] or [-] to make the CONTRAST adjustment.
- 6 Press [OK] to save the required CONTRAST and return to the DDS.

CONTRAST MODE
 Setting: 50%
 [+] or [-] to change
 [OK] SAVE [<] BACK

NOTE: The default setting is 50%.

Spa Mode

SPA MODE allows your unit to be adjusted to suit your spa.

- 1** Press [OK] from the DDS to enter the MAIN MENU.
- 2** Scroll to SERVICE MENU using the [+] or [-] buttons.
- 3** To access SPA MODE, scroll through the SERVICE MENU using the [+] or [-] buttons until you reach SPA MODE then press [OK].
- 4** Press [+] or [-] to adjust the SPA MODE settings from OFF to ON and ON to OFF.
- 5** When SPA MODE is selected, the DDS will change to the following:
- 6** Press [OK] to save the required settings and return to the DDS.

```
OUTPUT: 10% (●) T1
MODE: SPA HH:MM
Cell: FWD Pump: ON
[OK] ENTER MENU
```

```
SPA MODE
Setting: OFF
[+] or [-] to change
[OK] SAVE [<] BACK
```

NOTE: Selecting the OFF setting leaves the OUTPUT SETTING at 100% while selecting ON changes it to 10%.

System HW & SW

This menu provides information about the Henden™ Compact Salt & Mineral Systems' hardware and software settings and should be accessed by a pool technician.

SPECIFICATIONS

Specifications

MODEL	INPUT VOLTS (VAC)	INPUT AMPS* (AAC)	INPUT POWER (WATTS)	OUTPUT VOLTS (VDC)	OUTPUT AMPS* (ADC)	FREQUENCY (HZ)	WEIGHT (KG)
15gm	220-240	0.53	120	25.0	2.8-3.2	50/60	6.30
25gm	220-240	0.70	157	25.0	3.8-4.2	50/60	6.35
35gm	220-240	0.86	192	25.0	4.8-5.2	50/60	7.40
25gm low salt	220-240	0.70	157	25.0	3.8-4.2	50/60	6.60
35gm low salt	220-240	0.86	192	25.0	4.8-5.2	50/60	7.65

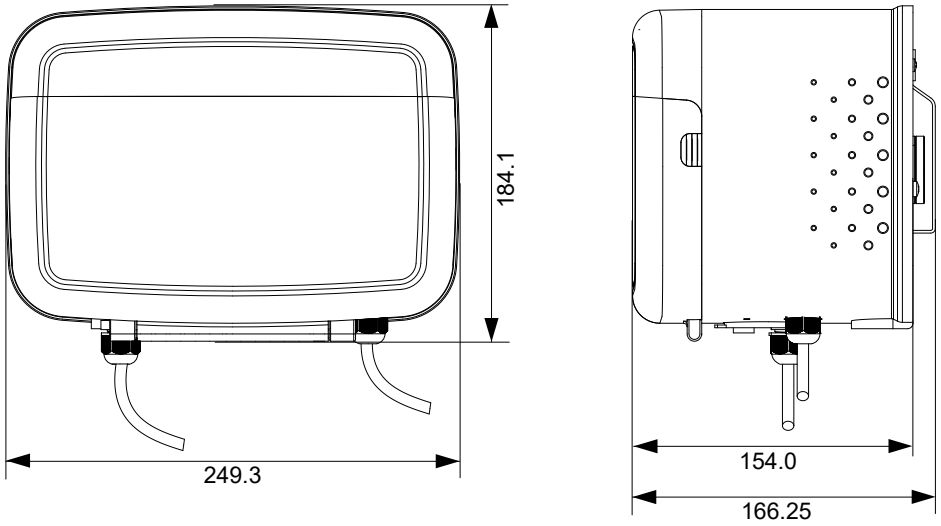
Chlorine Production

MODEL	CHLORINE OUTPUT	PER HOUR			PER 8 HOURS	
		CAL.HYPO EQUIVALENT (65%)	CAL.HYPO EQUIVALENT (65%)	CAL.HYPO EQUIVALENT (65%)	CAL.HYPO EQUIVALENT (65%)	CAL.HYPO EQUIVALENT (65%)
15gm	15g	23g	120ml	120g	184g	960ml
25gm	25g	38g	200ml	200g	304g	1600ml
35gm	35g	54g	280ml	280g	432g	2240ml
25gm low salt	25g	38g	200ml	200g	304g	1600ml
35gm low salt	35g	54g	280ml	280g	432g	2240ml

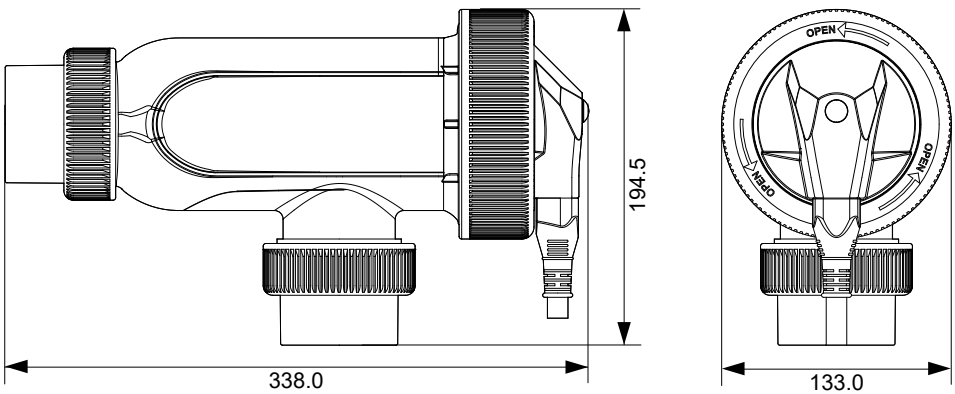
SPECIFICATIONS

Product Dimensions

Henden Compact Salt & Mineral Chlorinator Power Supply



Henden Electrolytic Cell Housing with Unions



CHLORINATOR MAINTENANCE

The Henden Compact Salt & Mineral Chlorinator requires some simple/basic maintenance.

DO NOT cover the Henden Compact Salt & Mineral Chlorinator with towels or similar. There are vents that could be closed, and these need air to keep the unit cool.

To extend the life of your unit we always recommend installation in an undercover area away from the elements.

Placing the unit in a closed shed or similar environment with chemicals, fertilisers, and other corrosives could damage it and void your warranty.

Always keep the Henden Compact Salt & Mineral Chlorinator off whilst backwashing your sand filter. Please remember to turn it on once the backwash is done and return the unit to AUTO mode.

At least once a year, check that the plug connections on the Cell and the base of the unit are tight and in sound condition.

INSPECTING AND CLEANING THE CELL ELECTRODE

Reverse Polarity cells should not normally require cleaning. However, in areas with extremely hard water, all calcium may not be removed. A calcium deposit might form on the lower areas of the cell, the sensor, or the sides of the cell plates. This will affect the operation of your chlorinator; however, you can use Cell Cleaner to clean the Cell.

All salt chlorinator cells must be cleaned before scale/calcium builds up to the point where the electrode gaps in the Cell are bridged. If the Cell has an excessive calcium deposit, this may damage the electrode coating, as the bridging causes a rubbing on the place coating, affecting the operation.

- 1 Check the Cell to prevent the accumulation of pool debris that, for any reason, may have bypassed the pool filter, particularly after backwashing.
- 2 Check that the O-ring is clean, greased with silicone grease (DO NOT use petroleum-based jelly), and securely located in the Cell Housing.
- 3 Switch the unit from "AUTO" to "OFF," as this will prevent the pump and unit from turning on.
- 4 Unscrew the Cell Locking Ring and remove the electrode for inspection. If calcium build-up is present, immerse the electrode in Cell Cleaner.
- 5 Create a solution by mixing 1-part hydrochloric acid with ten parts water. If excessive build-up is present, a stronger solution may be used to remove the calcium. Using five parts of water will make a more aggressive solution but will not damage the Cell.
- 6 Allow the cleaning solution to dissolve the calcium deposits for about 10 minutes.
- 7 Dispose of the cleaning solution at an approved Council Depot and never into storm water or sewage drains.

Handy tip: Returning this mix to your pool only returns the calcium you just removed, so you may be better off reusing the solution until exhausted than disposing of it. Always store this solution in a safe method as advised on the container.



Warning: Eye Protection, mask and gloves should be worn when cleaning the cell.

INSPECTING THE HENDEN COMPACT SALT & MINERAL CHLORINATOR

Little or no maintenance is usually required.

- 1** Ensure the Henden Compact Salt & Mineral Chlorinators 3-pin plug plugs into a suitable weatherproof RCD-protected 10amp outlet.
- 2** Ensure that the pump plugs into the 3-pin AC Socket at the bottom of the Henden Compact Salt & Mineral Chlorinator.
- 3** Check all plugs and cords for damage. If damaged, the manufacturer, their agent, or a similarly qualified person should replace it to avoid a hazard.
- 4** If the chlorinator is to be hard-wired, then a qualified electrician must complete the installation.

The Henden Compact Salt & Mineral Chlorinator has air vents to keep internal components cool in hot weather. The Henden Compact Salt & Mineral Chlorinator has a unique oil spray applied to the inside of the unit during production to stop the insects from entering the unit. To help keep the insects away, periodically apply a surface spray on the wall or post the unit is mounted. **DO NOT** spray directly into the Henden Compact Salt & Mineral Chlorinator, and make sure the power is off when you use a spray. Allow adequate time for the spray to dry before turning the power on again.

TROUBLESHOOTING

If you suspect your Henden Compact Salt & Mineral Chlorinator is not performing or running as it should be, here are some handy troubleshooting tips that may assist you.

PROBLEM	POTENTIAL CAUSE	REMEDY
FAULT MESSAGE DISPLAYS.	There are numerous causes.	See the display screen on the Compact Salt & Mineral Chlorinator for the reason, then go to that section in this troubleshooting guide.
HIGH SALT WARNING.	Salt too high or short on cell plates.	Check that the cell is free of foreign materials (e.g., wire, metal, touching plates, etc.).
INTERNAL TEMPERATURE HIGH.	No airflow in the area around the Henden Compact Salt & Mineral Chlorinator or excessively high salt.	Ensure the Henden Compact Salt & Mineral Chlorinator is mounted in a well-ventilated area free of chemicals and fertilisers. Check Salt guide.
LOW SALT or CLEAN CELL or FAULTY CELL.	Low salt level.	Check salt level.
	The build-up of calcium on the Cell plates.	Calcium acts as an insulator and needs to be removed. See Cleaning of Cell Electrode.
	The water temperature is low.	Winter water temperatures can be extremely low. For every one °C below 28°C, the output can drop 2-3%.
	Insufficient water flow through the Cell.	Check the water flow and ensure a full chamber of water is passing over the Cell. You may need to backwash your filter.
	The Cell could be damaged or at the end of its life.	Damaged coating will reduce cell life and reduce output. If all conditions are correct, then the Cell could be at the end of its life.
	Level low in one direction but OK in the other.	The Cell may need cleaning or have run its life in one direction.
NO CURRENT FLOW - NO OUTPUT.	Faulty CONTROL or MAIN PCB.	Faulty PCB - contact for service.
WATER FLOW FAULT.	Low water flow.	Possible closed valve, pump fault, burst pipe.
	No water flow.	Water does not cover the water sensor.
	Low-speed pump not supplying sufficient water to cell housing.	Increase the speed of the pump until the housing is filled.
	Chlor Output is less than 5%.	Check Chlor Output setting.

TROUBLESHOOTING

PROBLEM	POTENTIAL CAUSE	REMEDY
NOT OPERATING AT ALL - DISPLAY SCREEN IS NOT ON.	Not plugged into the power point or the power point not turned on.	Check that the Henden Compact Salt & Mineral Chlorinator POWER CORD goes into the wall outlet and the outlet is turned on.
	Plugged into the power point and turned on, but still no power.	Test wall outlet with a working appliance.
	The wall outlet is working, but still no power.	Check CIRCUIT BREAKER at bottom of Henden Compact Salt & Mineral Chlorinator. Press the white button to reset if tripped.
	Pressed and reset, but still no power.	If you have checked all the above, then there is an internal fault - contact for service.
	CIRCUIT BREAKER stays out in a tripped state.	Faulty CIRCUIT BREAKER - contact the service department.
NOT OPERATING AT ALL - COMES ON AND TURNS OFF.	CIRCUIT BREAKER resets but trips again.	Excessively high salt - check salt and lower it if needed. Short across Cell plates - remove the Cell and check the plates for any metal lying across the plates. Faulty rectifiers, transformer, or Cell cable call for service.
EVERYTHING DIS-PLAYS OK, BUT NOT TURNING ON.	Incorrect MODE SETTING settings.	Check the MODE SETTING setting is in ON or AUTO.
	Yes, it works now.	Check TIMER settings in FILTER TIMES Mode.
	No, it does not work.	Check for a fault message if LCD module is on. If only the LCD Module is ON, but nothing works - contact for service.
SIGNS OF MELTING OR BURNING OF THE CELL CONNECTOR PLUG.	Moisture entry into the cell plug.	If melted, then it will need replacing otherwise clean it with WD40 or similar. Return for service if melted.

TROUBLESHOOTING

PROBLEM	POTENTIAL CAUSE	REMEDY
OUTPUT READING IS LESS THAN 100%.	Low salt level.	Check salt level.
	The build-up of calcium on the Cell plates.	Calcium acts as an insulator and needs to be re-moved. See Cleaning of Cell Electrode.
	The water temperature is low.	Winter water temperatures can be extremely low. For every 1°C below 28°C the output can drop 2-3%.
	Insufficient water flow through the Cell Housing.	Check the water flow and ensure a full chamber of water is passing over the Cell. You may need to backwash your filter.
	The Cell could be damaged or at the end of its life.	Damaged coating will reduce cell life and reduce output. If all conditions are correct, then the Cell could need replacing.
	Level low in one direction but OK in the other.	The Cell may need cleaning or the Cell may have run its life in one direction.
	The continuous build-up of calcium.	See troubleshooting.
Henden Compact Salt & Mineral Chlorinator only works in one Direction. No out-put in one direction	Faulty rectifiers, transformer, or PCB.	Return unit for service.
The timer is not functioning correctly in AUTO.	Incorrect settings.	Make sure POWER/MODE is set to AUTO. Refer to this manual for instructions on setting the timer.
The pool pump outlet not functioning correctly, or the pump always on.	The pump not plugged into the base of the chlorinator.	Check that the pump is plugged into the bottom of the Henden Compact Salt & Mineral Chlorinator and not directly into the wall outlet. Make sure you are set in AUTO mode and not MANUAL for normal running.
Cell not cleaning excessive calcium build-up on Cell or Henden Compact Salt & Mineral Chlorinator not changing direction.	Excessively high calcium, change of direction time set too high or faulty PCB.	See Calcium Hardness test and adjust the water accordingly. Change the Cell Cleaning times. Manually try changing direction by holding both [<] and [>] buttons in for 3 sec (you must be in the default display screen for this to work). Failure of this to work could indicate a faulty PCB - return for service.

TROUBLESHOOTING

PROBLEM	POTENTIAL CAUSE	REMEDY
Cell not cleaning excessive calcium build-up on Cell or Henden Compact Salt & Mineral Chlorinator not changing direction.	Excessively high calcium, change of direction time set too high or faulty PCB.	See Calcium Hardness test and adjust the water accordingly Change the Cell Cleaning times. Manually try changing direction by holding both [<] and [>] buttons in for 3 sec (you must be in the default display screen for this to work). Failure of this to work could indicate a faulty PCB - return for service.
Low or No Chlorine Output.	The unit is not working correctly.	Go through Troubleshooting.
	The stabiliser is too low.	Check Stabiliser guide.
	The unit is not set correctly.	Basic settings such as Output Control and Timer running hours must be checked. Go through all settings and balance water accordingly.
	The salt level is too low.	Check Salt guide.
	pH is too high.	Check the pH guide.
	Cell at the end of its life.	If full output is not reached, then it could be a failing Cell.
The timer loses time when the mains power is removed.	Battery life expired.	In the unlikely event of this occurring, return for service.

WATER CHEMISTRY

The Henden Compact Salt & Mineral Chlorinator is designed for use with swimming pool water balanced in accordance with the Langelier Saturation Index with a pH range of 6.8-7.8. As previously advised, for best performance and operation of your Henden Compact Salt & Mineral Chlorinator, certain water balances must be maintained within your swimming pool.

CHEMICAL	DESCRIPTION	MEASUREMENT INTERVAL
Chlorine	The Henden Compact Salt & Mineral Chlorinator produces chlorine from a mild salt solution within the water.	Once a week
Salt	The correct salt or mineral level allows for the most efficient production levels and electricity consumption. Although salt or mineral is not consumed by the unit, it is lost during backwashing, pool overflow, splashing and on bathers that use it.	4-6 Weeks

WATER CHEMISTRY

IDEAL LEVEL	WARNINGS	HANDY TIPS
<p>Ideal Chlorine (Free Chlorine) Levels: 2-3ppm (2-3mg/L) and no more than 4ppm (4mg/L).</p>	<p>The Henden Compact Salt & Mineral Chlorinator is not designed to chemically maintain the pool water and keep it balanced</p>	<p>Adjust the chlorine output by pressing [+] in DDS to increase the required output set point in 1% increments up to 100%. Pressing [-] will decrease the output in 1% increments to 0%. Running the unit for longer or shorter hours can achieve the same result.</p>
<p>Salt or Mineral Levels: 3500-4000 ppm (3500 ppm ideal) and no more than 4500 ppm.</p> <p>For the LOW SALT Models, the ideal TDS reading is 1500-1800 ppm (1500 ppm ideal).</p> <p>The salt or mineral level SHOULD NOT go below 3000 ppm or 1200 ppm for the LOW SALT models.</p>	<p>NEVER ADD SALT DIRECTLY TO THE SKIMMER BOX. This high salt concentration will pass through your filtration, pump, and pool equipment.</p> <p>Low salt levels (<1000ppm) will destroy the coating on the Cell and void the warranty.</p> <p>The Henden Compact Salt & Mineral Chlorinator will operate with good stability on higher salt or mineral levels, but running at the correct level is still advisable to prevent damage. Salt or mineral levels above 5000 ppm or 2500 ppm in the Henden Compact Salt & Mineral Chlorinator LOW SALT models may overload the unit and cause excessive heat.</p>	<p>The colder the water, the lower your output, but this does not mean you need more salt or minerals. There will always be less chlorine demand in colder water.</p> <p>We recommend 3.5kg of Ultrafine salt per 1000 litres of pool water, and a 50,000-lit new pool needs approximately 175 kilograms of salt. For the LOW SALT Models, we recommend 1.5kg of ultrafine salt per 1000 litres of pool water. The unit can operate on mineral/magnesium chloride salts, and you should allow an extra 20-30% more product to achieve the correct TDS for your unit to run efficiently.</p> <p>Salt should always be added to the pool's shallow end and allowed to dissolve. Do not let the salt settle on the pool floor, which may damage the surface. Use your pool brush to mix the salt into the water.</p> <p>Running the pump will mix the water and help the salt to dissolve.</p> <p>Use Ultrafine Salt or Premium Salt to maintain optimum salt levels.</p>

WATER CHEMISTRY

CHEMICAL	DESCRIPTION	MEASUREMENT INTERVAL
pH	The pH level of pool water is a measure of its acidity.	Once a week
Total Alkalinity	Total Alkalinity should not be confused with pH, although the two are closely related. Total Alkalinity determines the speed and ease of pH change and is measured in ppm.	4-6 Weeks
Calcium Hardness	The measurement of how hard or soft your pool water is, and measures the amount of dissolved calcium and magnesium in your swimming pool.	3 Months
Stabiliser	The importance of pool stabilisers cannot be overemphasised. It is essential in helping retain chlorine in your pool.	4-6 Weeks

WATER CHEMISTRY

IDEAL LEVEL	WARNINGS	HANDY TIPS
<p>Ideal pH Levels: Concrete Pools: 7.4 - 7.6 Fibreglass/Vinyl Pools: 7.0 - 7.2</p> <p>A pH of 8.0 makes oxidation only about 26% efficient, so keeping your pH in range is critical.</p>	<p>An incorrect pH level can damage the surface finish and walls of your pool.</p>	<p>A correct pH level must be maintained to prevent problems such as black spots, staining, cloudy water, and other problems.</p> <p>You can add hydrochloric acid to lower the pH when it is high.</p> <p>You can add pH Increaser - sodium bicarbonate (soda ash) to increase the pH when pH is low.</p>
<p>Ideal Total Alkalinity Levels: Concrete Pools: 80 - 150ppm Fibreglass/Vinyl Pools: 80 - 120ppm</p>	<p>Low Total Alkalinity can cause unstable pH levels. This causes an inability to keep the pH constant and may cause staining, etching, and corrosion of metals. High total alkalinity will constantly cause high pH levels.</p>	<p>When total alkalinity is high, you can add hydrochloric acid (a little at a time) to lower it. When it is low, you can add a pH In-creaser, sodium bicarbonate, to raise it.</p> <p>You should use a test kit that includes a test for Total Alkalinity.</p>
<p>Ideal Calcium Hardness Levels: Concrete Pools: 250 - 300ppm Fibreglass/Vinyl Pools: 150 - 190ppm</p>	<p>In addition to pH and Total Alkalinity, Calcium Hardness must be kept in balance so that your pool water does not become too corrosive or end up scaling the surface of your pool. These conditions are symptoms of unbalanced swimming pool water.</p>	n/a
25-50ppm	<p>Only add chemicals in the method and quantities as indicated on the packaging provided or advised by your local pool Professional.</p>	<p>Chlorine is rapidly dissipated by sunlight, and using Stabiliser will reduce this dissipation dramatically. Without Stabiliser, running the unit for longer hours may be necessary.</p>

WARRANTY

Henden Compact Salt & Mineral Chlorinator Warranty

Reece Australia Product Quality Guarantee

You have purchased a quality product from Reece Australia Pty Ltd ABN 84 004 097 090 ("Reece Australia").



Warranty Terms & Conditions

These Warranty Terms and Conditions ("Warranty") constitute your agreement with Reece Australia and will apply to your service order. The benefits given by this Warranty are in addition to all consumer guarantees and other rights and remedies prescribed by the Australian Consumer Law and any other applicable laws.

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.

In addition to your rights and remedies under the Australian Consumer Law, Reece Australia provides consumers with a Warranty which covers faults in product construction, materials and assembly in the following applicable warranty periods:

RESIDENTIAL APPLICATION*	WARRANTY		
	Power Supply	Cell	Labour
Henden Compact Salt & Mineral Chlorinator 15g	3 Year	3 Year	1 Year
Henden Compact Salt & Mineral Chlorinator 25g	3 Year	3 Year	1 Year
Henden Compact Salt & Mineral Chlorinator 35g	3 Year	3 Year	1 Year
Henden Compact Salt & Mineral Chlorinator 25g (low salt)	3 Year	3 Year	1 Year
Henden Compact Salt & Mineral Chlorinator 35g (low salt)	3 Year	3 Year	1 Year

COMMERCIAL APPLICATION*	WARRANTY		
	Power Supply	Cell	Labour
Henden Compact Salt & Mineral Chlorinator 15g	1 Year	1 Year	1 Year
Henden Compact Salt & Mineral Chlorinator 25g	1 Year	1 Year	1 Year
Henden Compact Salt & Mineral Chlorinator 35g	1 Year	1 Year	1 Year
Henden Compact Salt & Mineral Chlorinator 25g (low salt)	1 Year	1 Year	1 Year
Henden Compact Salt & Mineral Chlorinator 35g (low salt)	1 Year	1 Year	1 Year

*Residential Application defined as: Any structure containing water to a depth greater than 300 mm and used primarily for swimming, wading, paddling or the like, including a bathing or wading pool, or spa pool.

*Commercial Application defined as any other use of the product other than defined in the domestic application is considered to be a commercial application.

WARRANTY

Warranty Periods

The Warranty Periods commence from the date the customer purchased the product from Reece Australia. Within the Warranty Periods, products which are found upon inspection by an authorised Reece Australia representative or an associated licenced technician supplied by either Reece Australia or a relevant supplier (“Service Agent”) to be defective in construction, material, or assembly, will be repaired or exchanged with an equivalent product at no cost to the customer.

Parts of products found upon inspection by a Service Agent to be defective in construction, material, or assembly, will be replaced at no cost to the customer. The labour for the replacement of products and parts to which this Warranty applies will be carried out by a Service Agent. Where the Service Agent is unable to identify any fault in the product, Reece Australia may require the consumer to provide proof that the product is defective.

Warranty Conditions

This Warranty applies only if the following conditions are met:

- › The Compact Salt & Mineral Chlorinator has been installed by a fully qualified technician.
- › The Compact Salt & Mineral Chlorinator has been installed for and subjected to domestic residential use only subject to local building a municipality guideline.
- › The Compact Salt & Mineral Chlorinator is appropriately protected from the weather, with adequate ventilation. In line with this, no water has been allowed to enter the Compact Salt & Mineral Chlorinator.
- › Failure is due to a fault in the manufacture of the project. In this case, proof of purchase, date of purchase and serial number is required.
- › Proof of purchase (including the date of purchase) is provided
- › The consumer has operated and maintained the product in accordance with the operating instructions.
- › The Compact Salt & Mineral Chlorinator is designed for use with swimming pool water balanced in accordance with the Langelier Saturation Index with a pH range of 6.8-7.8. The chlorine level should not exceed 4ppm and the salt level should not exceed 4500ppm, or 2500 for Ultra-Low Salt Models.

WARRANTY

This Warranty does not cover faults caused by:

- > Failure to adhere to the conditions above.
- > Normal wear and tear.
- > Damage by foreign objects.
- > Damage caused by, but not limited to, corrosion, scaling, or stress.
- > External damage caused by exposure to pool chemicals.
- > Inadequate or complete lack of maintenance.
- > Installation or part installation by the purchaser or any person other than a tradesperson licensed to install this product.
- > Correct salt levels are not always maintained.
- > Faults or substandard performance caused by any product or part which has not been supplied by or purchased from Reece Australia.
- > Faults or substandard performance caused by vermin, misuse, negligence, vandalism, storm, flood, fire, earthquake, force majeure, war, foreign matter entering the Henden Compact Salt & Mineral Chlorinator (e.g. detritus; dirt and moisture) or any other outside agency.
- > Adverse operating conditions beyond the manufacturer's control, such as improper voltage or water pressure, excessive ambient temperature, or any condition that adversely affects the performance of the equipment, will render this warranty invalid.

This Warranty does not cover 'ex display' products where the ex-display products have not been checked and certified for sale by the manufacturer prior to purchase.

For the avoidance of doubt, defective items become Reece Australia's property.

WARRANTY

Claim Procedure

In order to claim the Warranty, you must cease using the product when a fault arises, contact the Reece Australia branch where the product was purchased to report the issue and follow Reece Australia's directions regarding what to do next. The relevant Reece Australia branch de-tails can be found on your purchase invoice. You must also provide the product serial number.

Reece Australia's general contact details are as follows:

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/manufacture address: The Reece Group, 57
Balmain Street, Cremorne, VIC, 3121, Australia.

If applicable, all replacement products will be available for collection at no cost to the customer at the nearest Reece Australia branch to the customer's location, or elsewhere as agreed between the customer and Reece Australia.

Labour

Warranty for installation labour is twelve (12) months from date of purchase. Any product found to be faulty due to installation/labour fault shall be covered under warranty and will be repaired or replaced by Reece Australia at their cost for a period of twelve (12) months from date of installation.

All replacement parts / components will be supplied direct by Reece Australia. Should the buyer purchase parts / components from their own supplier the company may at their own discretion reject or reimburse the cost to which the company can purchase the part for.

WARRANTY

Costs

The customer will be responsible for any ancillary costs associated with making a warranty claim, such as:

- › Any travel outside of the area normally serviced by Reece Australia or any associated repair agent authorised by Reece Australia
- › All costs related to gaining access to unsafe (e.g. high) or restricted locations
- › Any and all arrangements required to create safe access for the Service Representative to service the product; this includes making clear access to and from the unit (e.g. moving furniture etc.)

Excessive labour costs due to job conditions that make the equipment unusually inaccessible or otherwise difficult to source is NOT covered under this policy. The equipment must be readily accessible to the service men, that no special scaffolding, ladders or lifting equipment other than that which is normally carried in a service vehicle is required, and that the conditions or working meet the requirements of local authorities having justification on conditions of work and safety.

A service fee may be charged to the customer if an aftersales service call is attended, and the fault is deemed to be a result of incorrect installation, or the points outlined below. Please note the site environment and associated product must be accessible and safe workplace for the service agent.

If applicable, Reece Australia will also provide information regarding how to claim back any expenses the consumer may incur.

Exclusions

Except to the extent required by law, all consumer guarantees, representations, warranties, terms and conditions in relation to the products (whether implied or otherwise) are hereby excluded to the maximum extent permitted by law.

To the fullest extent permitted by law, Reece excludes all liability for damage or injury to any person, damage to any property, and any indirect consequential or other loss or damage.

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