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Safety instructions

Use of Products

The **Hygea 2** is for the use of cleaning Dental Instruments prior to sterilisation designed for indoor use by a professional user.

Electrical

Connect to a 220-240 VAC fully earthed supply via a 3pin plug.

It can be dangerous to operate an ultrasonic bath without an earth connected.

The mains plug is fitted with a 5A fuse. **NEVER FIT A FUSE OF A HIGHER RATING.**

Ensure that excess mains cable is stored neatly.

The main disconnect is the power on/off switch at the rear of the unit.



General use

Ensure that the bath contains liquid before you switch it on.

Always fill with cold water. This will ensure that the **Hygea 2** always runs its automatic de-gas cycle (see pg 31 for the importance of degassing).

Always use a basket or instrument cassette and basket carrier to support items to be cleaned.

Not doing so may damage the bath and invalidate your warranty.

Do not place fingers or other parts of the body in the bath.

For best cleaning results use a detergent, at a suitable dose, recommended for use in ultrasonic cleaning baths. Never use toxic, flammable, acidic, caustic or corrosive solutions in the bath.

Refer to this **Hygea 2 Operator Instruction** manual for full guidance on the correct use of the bath.

The user should familiarise themselves with this *Operator Instructions* manual before operating the equipment and should apply to Ultrawave or its agent for advice on cleaning techniques or detergents.

Ultrawave will not be responsible for damage or injury caused by incorrect use of the equipment.

Installation

The following parts and accessories are included with the **Hygea 2**:

- 1 x **Hygea 2** ultrasonic bath
- 1 x basket carrier
- 3 x instrument basket trays
- 1 x 2m length of drain hose
- 1 x hose connector elbow
- 1 x **Sonozyme 3** detergent starter pack
- 1 x memory card
- 1 x USB card reader
- 1 x **Hygea 2** Administrator instruction manual
- 1 x **Hygea 2** Operator instruction manual
- 1 x Certificate of Test
- 1 x Warranty Registration card

How to install?

Screw the hose connector into the drain valve located on the right hand side of the unit.



Locate the unit close to a drain or sink.

Connect the mains lead into a suitable mains socket.

Connect one end of the drain hose to the hose connector, and locate the other end over a drain or sink.

The **Hygea 2** is now ready to use.

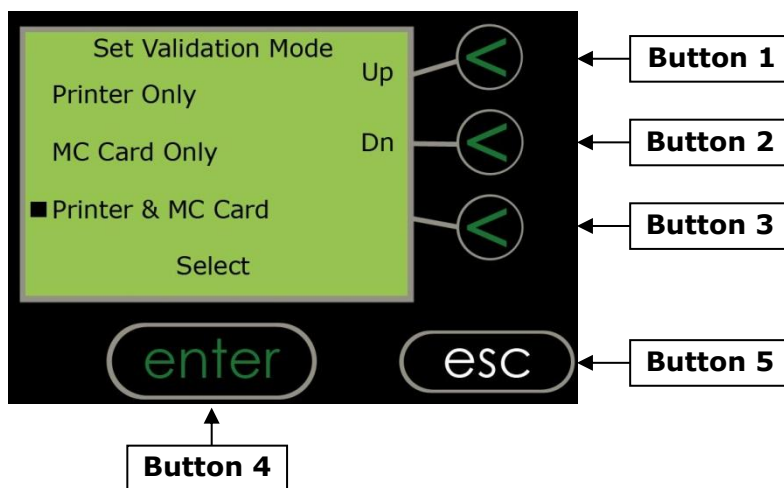
Administrator instructions

The **Hygea 2** is installed with Split Level Security software, allowing 2 classes of access: Administrator mode and Operator mode.

The following instructions detail the use of Administrator mode. The details for Operator mode can be found in the *Operator Instruction Manual*.

To enter Administrator mode:

- Ensure the mains supply is switched off.
- Press button 4 and button 5 simultaneously.
- Keep both buttons depressed whilst you turn the unit on at the mains switch at the rear of the unit, on the left hand side above the electrical mains lead.
- The following screen will appear:



The bath is now ready to be programmed.

In order to exit Administrator mode, switch the machine off and then on again (without any control panel buttons depressed).

Any changes you have made will be saved in the **Hygea 2** memory.

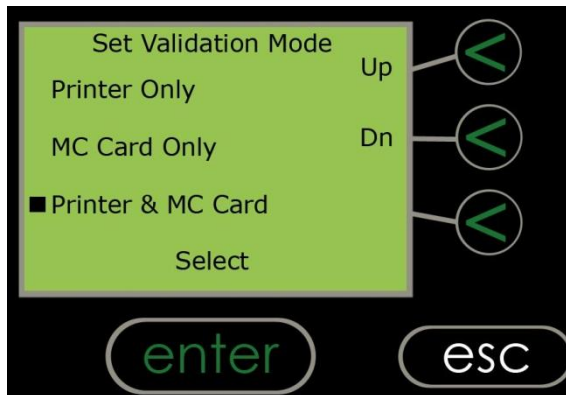
Screen 1: Setting the validation mode

The **Hygea 2** provides validation and traceability of every cleaning cycle. Validation can be achieved by two means:

- Hard copy print out to integral printer
- Digital copy to supplied MC Card

Screen 1, allows the Administrator to specify what method of validation is required:

- Printer only (this mode will provide a printed ticket of the cycle data)
- MC Card only (this mode can be used if a ticket is not required – remove the paper from the printer)
- Printer & MC Card (this mode will provide both a print out and save the data to the MC Card, providing the MC card is inserted before your Hygea 2 is switched on.)



Use the "Up" and "Down" functions by pressing buttons 1 and 2, to select the required mode. When the correct mode is selected, press Select to store the request.

For more information on validation and using the MC Card, see page 19.

Screen 2: Setting the organisation

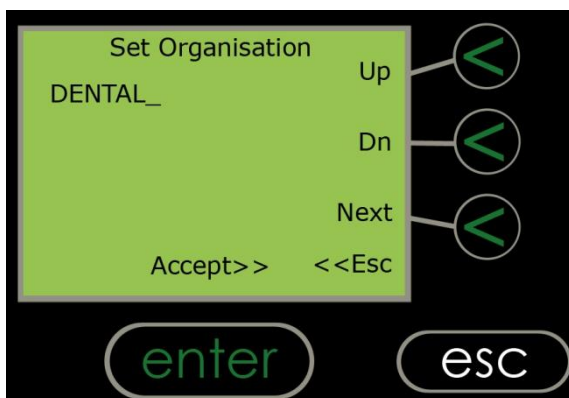
Use this screen to specify the organisation, clinic or practice where the bath will be used.

Use the “Up” and “Down” functions, by pressing buttons 1 and 2 to scroll through the alphabet.

When the correct letter is selected, use the “Next” function, by pressing button 3, to move to the next character.

The available characters are the 26 letters of the alphabet and “space”.

The organisation name is limited to 2 lines of 16 characters each.



Once the organisation name has been entered, press “Accept”, button 4, to save the settings.

Screen 3: Setting the operator names

Use this screen to set up the operator names. Up to 20 can be saved. The designator "OPxx" will indicate where the operator is on the list.

Use the "Up" and "Down" buttons to scroll through the alphabet. When the correct letter is selected, use the "Next" button to move to the next character.

The available characters are the 26 letters of the alphabet and "space".

The operator name is limited to 6 + 1 characters.

Once the name has been added, press "Accept" to save the settings and move to the next operator name.

To return to the previous operator, press the "ESC" button.



Repeat this process for up to 20 names.

Screen 4: Printing a list of operator names

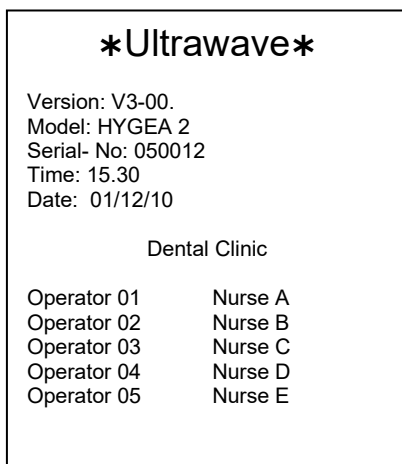
Use this screen to print out a list of operator names, once programming has been completed.

The following screen will appear when you press "Accept" after entering the 20th operator name:



Choose whether you want a printout using the "Yes" button or the "No", "ESC" button. (**Note:** Remove the MC Card before printing as this will then save as invalid cycle on the MC Card).

If "Yes" is chosen, a list of names will be printed in the following format:



Screen 5: Setting the time

The **Hygea 2** is factory pre-set with United Kingdom time, and automatically changes from GMT to BST on the designated days.

If the time should be incorrect, use this screen to amend it.

Use the "Up" and "Down" buttons to scroll through the numbers.

When the correct number has been selected, use the "Next" button to move to the next character.

Once the correct time has been entered, press the "Accept" button to save the settings.



Screen 6: Setting the date

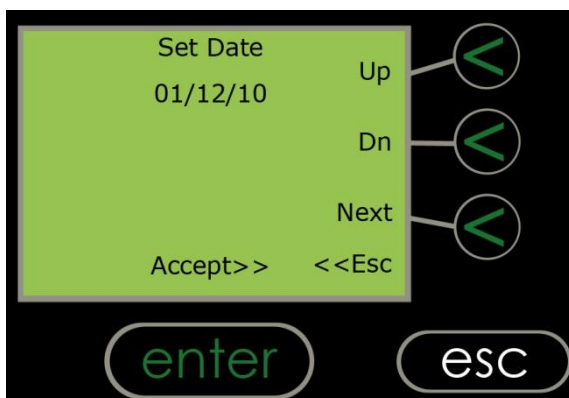
The Hygea 2 is factory pre-set with the correct date.

If the date is incorrect, use this screen to amend it.

Use the "Up" and "Down" buttons to scroll through the numbers.

When the correct number has been selected, use the "Next" button to move to the next character.

Once the correct date has been entered, press the "Accept" button to save the settings.



Screen 7: Setting the process temperatures

The **Hygea 2** has three process temperature settings:

Min temperature: this is the minimum temperature at which the bath will operate. If the liquid falls below this temperature, the bath will not operate until the liquid rises to the min. temperature again. The **Hygea 2** automatically starts heating the liquid if it is below the min. temperature.

Normal temperature: this is the optimum operating temperature. If the liquid temperature falls more than 2°C below “normal”, the electrical water heater will switch on until the liquid reaches the “normal” temperature.

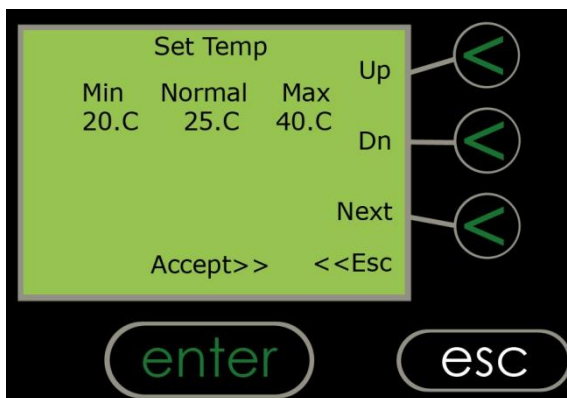
Max temperature: this is the maximum temperature at which the bath will operate. If it rises above this temperature it will not operate. To overcome this problem, drain the tank and refill with cooler liquid.

The **Hygea 2** is factory pre-set with the following:

- **Minimum temperature** **20°C**
- **Normal temperature** **25°C**
- **Maximum temperature** **40°C**

(note setting the Max above 40°C may cause proteins to coagulate and “bake on” to the instruments)

Use the “Up” and “Down” buttons to scroll through the numbers. When the correct number has been selected, use the “Next” button to move to the next character.



Once the correct temperatures have been entered, press the “Accept” button to save the settings.

Screen 8: Setting the cycle time

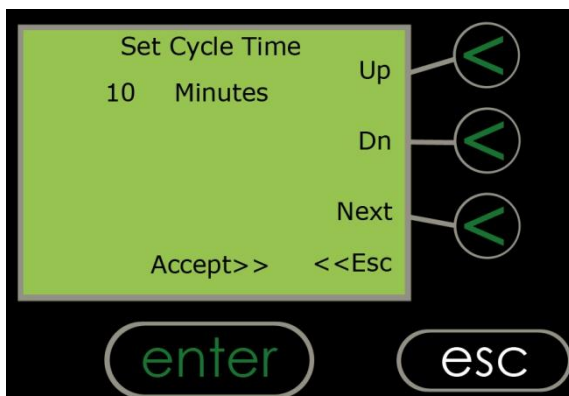
The **Hygea 2** is factory pre-set with a cycle time of 10 minutes. Independent testing has shown a cycle of this length sufficient to clean heavily contaminated instruments.

Use this screen to amend the cycle time. The cycle time can be set from 0-99 minutes.

Use the “Up” and “Down” buttons to scroll through the numbers in order to increase or decrease the time.

When the correct number has been selected, use the “Next” button to move to the next character.

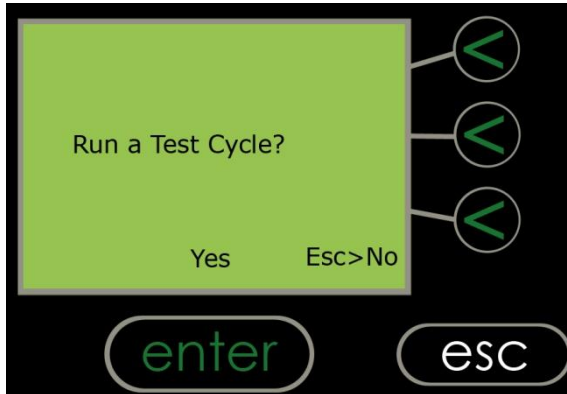
Once the correct cycle time has been entered, press the “Accept” button to save the settings.



This completes the Administrator programming of the **Hygea 2**.

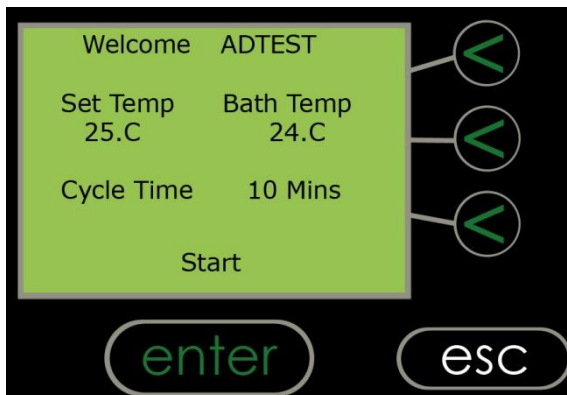
Running a test cycle

When performing periodic testing, there will be a requirement to run a cycle with the lid open. The last screen in the Administrator mode allows this to be done by disabling the lid sensor.

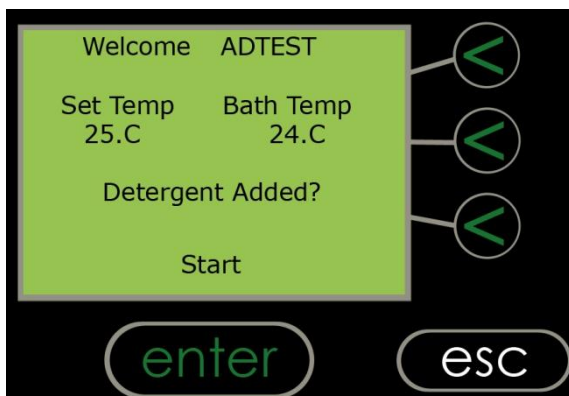


Press the "Yes" button to start a cleaning cycle using the parameters that have been programmed.

The following screen will then be displayed, illustrating the Set Temp, the actual Bath temp and the length of the cycle.



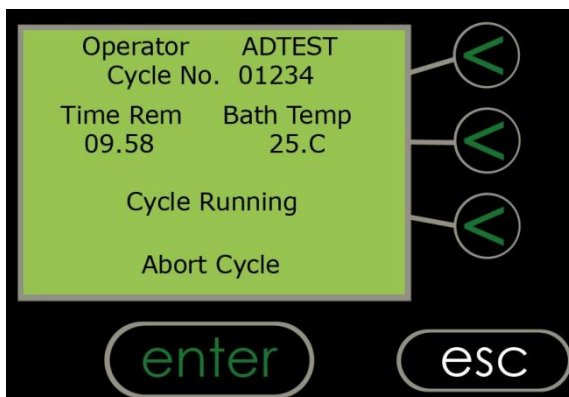
The following screen will then be displayed, prompting the addition of detergent to the water:



Press the "Start" button to confirm that the liquid contains detergent. (Note: all testing should be carried out with detergent added.)

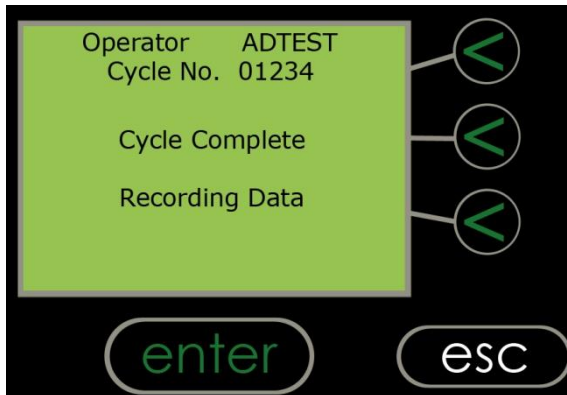
The **Hygea 2** will then run a cycle, during which the lid can be opened.

During the cleaning cycle, the following screen will be displayed. The time remaining will count down and the actual bath temperature is displayed.



The cycle can be aborted at any time by the operator, by pressing the "Abort Cycle" button.

Once the cycle is complete, the following screen will be displayed and the data will be recorded.



After the data is recorded, there will be a prompt to produce another printed record. If this is required, press Yes, if not press No.



This completes the Test Cycle process and the Administrator programming.

Periodic testing and validation

It is a requirement of decontamination guidelines that the **Hygea 2** ultrasonic bath is periodically tested and validated to ensure optimum performance as outlined in HTM01-05 and HTM2030.

The following pages outline Ultrawave (the manufacturer's) guidelines for the periodic testing of the **Hygea 2** ultrasonic bath. The frequency and nature of these tests are recommended as the minimum protocols that should be followed in order to ensure optimum performance of the bath and to adhere to applicable regulations and guidelines. In some cases, more frequent testing schedules may be stipulated.

1. Weekly tests (carried out by the operator)

Cleaning efficacy test using the Brownes STF Load Check Indicator strips and holders (available from Ultrawave).

2. Monthly tests (carried out by the operator)

Ultrasonic activity test using the Hygea Ultrasonic Activity Meter (available from Ultrawave). If there is no access to the Activity Meter, this test should be replaced by the aluminium foil ablation test.

3. Quarterly tests (carried out by the operator/Estates department)

Ultrasonic activity test using the aluminium foil ablation test (available from Ultrawave).

4. Annual Validation Tests (carried out by Ultrawave approved engineer)

A combination of tests ensuring correct and accurate operation of all components of the **Hygea 2** (including automatic control tests, cleaning efficacy, ultrasonic activity tests, PAT test, diagnostic test etc.)

Note: Each test should also include the test(s) itemised above as the less frequent tests. e.g. When conducting the quarterly test, the weekly and monthly tests should also be carried out as part of the same routine.

Contact the Ultrawave Service department (0845 330 4238 or service@ultrawave.co.uk) to discuss Service Contract and periodic testing options packages.

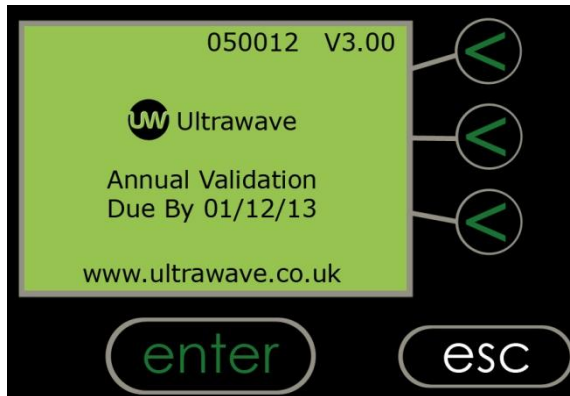
All components needed to carry out periodic testing, including a complete **Validation Kit**, can be purchased from Ultrawave.

Validation Testing Reminder

The **Hygea 2** ultrasonic bath is installed with software which provides a reminder when the annual **Validation Testing** is due.

This **Validation Testing** should occur at least once every 12 months. Therefore after, 11 months in operation, a reminder will appear on the LCD display warning that the annual validation testing is due.

The **Validation Testing** reminder will display as below:



When this reminder appears, simply contact Ultrawave or its agent to schedule this **Validation Testing**. It is a requirement of National guidelines and recommendations that this complete **Validation Testing** is done at least once every 12 months.

Hygea 2 Cycle validation

The **Hygea 2** provides validation and traceability of every cleaning cycle. Validation can be achieved by two means:

- Hard copy print out to integral printer
- Digital copy to supplied MC Card

Screen 1 in Administrator mode, allows the Administrator to specify what means of Validation is required (see page 5).

If the hard copy print out is chosen, then at the end of each cycle, the integral printer in the Hygea 2, will print a ticket showing the details of that cycle:

Ultrawave	
Version: V3-00.	
Model: HYGEA 2	
Serial- No: 050012	
Time: 15.30	
Date: 01/12/10	
Dental Clinic	
Op: 01	Nurse A
Cycle-No:	01234
Set-Parameters:	
Min-Temp:	20.C
Set-Temp:	25.C
Max-Temp:	40.C
Cycle-Time:	10.M
Cycle-Parameters:	
Cycle-Start-Temp:	25.C
Min-Temp:	25.C
Max-Temp:	26.C
Cycle-Finish-Temp:	26.C
Cycle-Time:	10.00M
Ultrasonic-Action:	PASS
Cycle PASS	

Once the ticket is printed, simply tear off and store as necessary.

Using the Ultrawave Cycle Validation Software

If the MC card Validation mode is selected, cycle information is saved to the inserted MC card and data can be saved in an electronic format. The following pages explain how to use the MC card and the Ultrawave Cycle Validation Software.

1. Setting the Validation Mode

This is done in Screen 1 of the Administrator mode menu (see page 5). In order to enable digital cycle validation set the Validation Mode to MC Card only or Printer & MC Card.

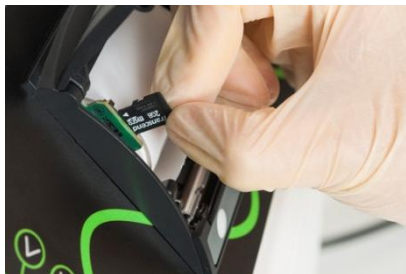
2. Inserting the MC Card

In order for data to save to the MC card, the card must be inserted into your Hygea 2 before it is switched on. The MC card port is located inside the printer cover on the left hand side of the control panel.

Open the printer cover by pulling the clear cover towards you.



Insert the MC Card



3. Installing the Ultrawave Cycle Validation Software

Ultrawave recommend that the cycle data saved on the MC Card is transferred to a PC at the end of every clinical session (twice a day).

The supplied MC Card is already installed with the Ultrawave Cycle Validation Software. Cycle data should be saved to this where it can be stored as a digital record.

Note: Please ensure that you have user rights to install the software. If not please contact your network or IT administrator.

Also ensure that 'Microsoft .Net 3.5 Framework' is installed as well as the associated updates.

In order to install the Software, the MC Card should be inserted into the PC using the USB card reader. Insert the MC Card into the applicable port on the reader and then insert the reader into a USB port on your PC.



When the MC Card is first inserted, the Autorun program should start, allowing installation of the Cycle Validation Software.

If the Autorun software does not start, simply go into My Computer, find the applicable drive containing the MC card and run Setup.exe.

Follow on the on screen prompts to install the Ultrawave Cycle Validation software.

4. Using the Ultrawave Cycle Validation Software

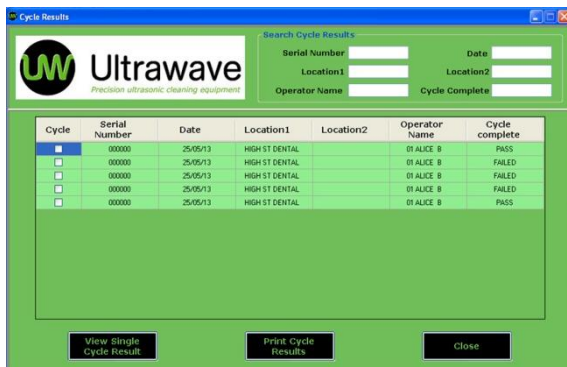
When the Cycle Validation Software is installed and opened the below screen will display:



There are two options available:

1. View the Cycle Results stored on the PC (this allows the operator to see previous cycle data that has already been saved to the program)
2. Copy Cycle Results from MC Card (this allows the operator to copy the data from the MC Card to the PC)

If option 1 is chosen, and data is already saved to the PC, the data will display in the below format.

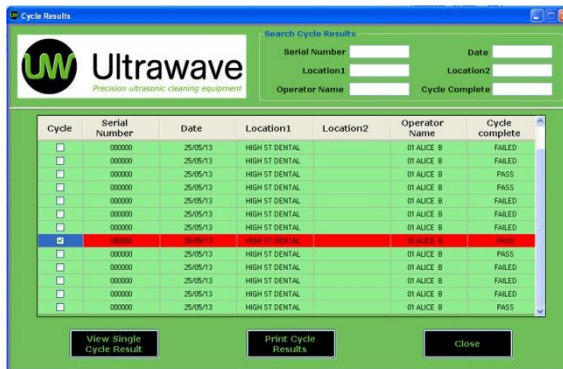




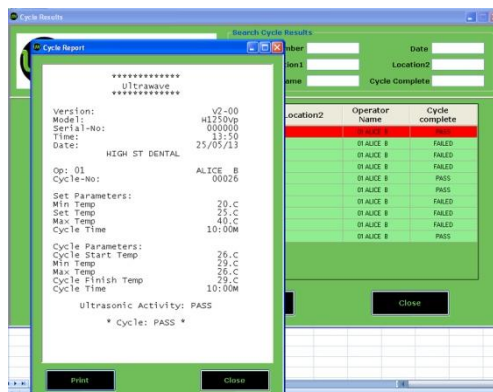
If you wish to copy new cycle data to the software, click on the Copy Cycle Results from MC Card button. You will need to ensure that the MC card is inserted into the card reader and this inserted into the USB port on your PC.

When the button is pressed, a pop up will display asking if you wish to delete the cycle data off the MC card. Ultrawave recommend that this data is deleted to prevent duplication.

When the data is stored in the programme, the individual cycle information results can be viewed. Select one cycle by clicking the tick box in the Cycle column on the left hand side.

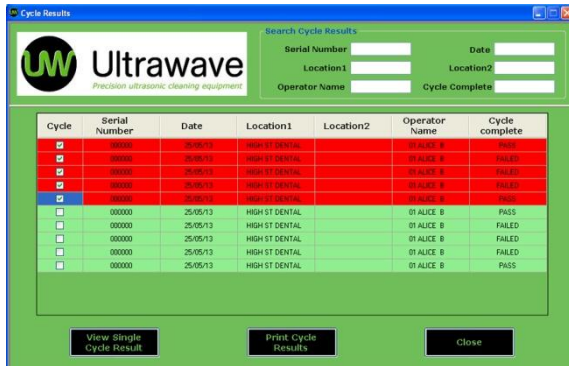


Then press the View Single Cycle Result button to see a ticket showing the data associated with this cycle.



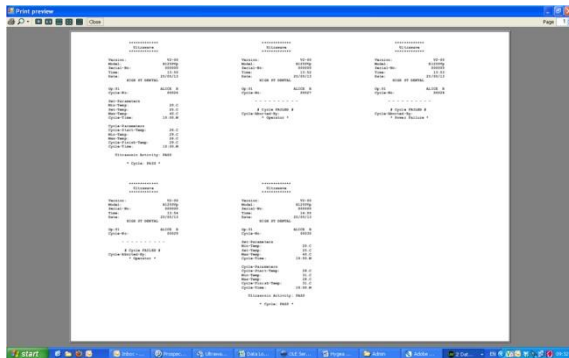
If required, this can then be printed by pressing the print button.

It is also possible to print data from multiple cycles. This can be done by clicking on multiple cycles in the left hand column.



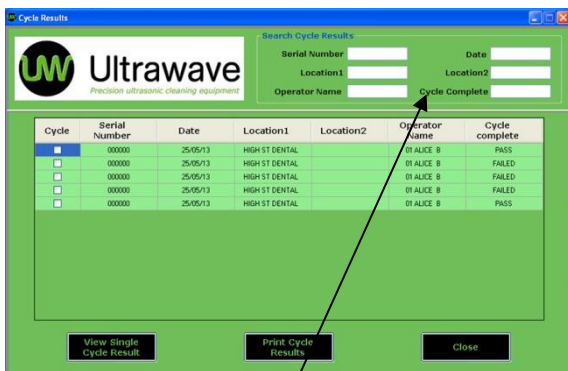
Cycle	Serial Number	Date	Location1	Location2	Operator Name	Cycle complete
☒	000000	25/05/13	HIGH ST DENTAL		01 ALICE B	PASS
☒	000000	25/05/13	HIGH ST DENTAL		01 ALICE B	FAILED
☒	000000	25/05/13	HIGH ST DENTAL		01 ALICE B	FAILED
☒	000000	25/05/13	HIGH ST DENTAL		01 ALICE B	FAILED
☒	000000	25/05/13	HIGH ST DENTAL		01 ALICE B	PASS
☐	000000	25/05/13	HIGH ST DENTAL		01 ALICE B	PASS
☐	000000	25/05/13	HIGH ST DENTAL		01 ALICE B	FAILED
☐	000000	25/05/13	HIGH ST DENTAL		01 ALICE B	FAILED
☐	000000	25/05/13	HIGH ST DENTAL		01 ALICE B	FAILED
☐	000000	25/05/13	HIGH ST DENTAL		01 ALICE B	PASS

In order to print the data from multiple cycles, click the Print Cycle Results button. The following print preview page will then display from which the a hard copy of the cycle data can be printed:



The Ultrawave Cycle Validation Software allows the operator to search for individual cycle data.

In order to use the Search function, simply type the search field in the applicable search box located in the top right of the screen.



Cycle	Serial Number	Date	Location1	Location2	Operator Name	Cycle complete
☐	00000	25/05/13	HIGH ST DENTAL		DI ALICE B	PASS
☐	00000	25/05/13	HIGH ST DENTAL		DI ALICE B	FAILED
☐	00000	25/05/13	HIGH ST DENTAL		DI ALICE B	FAILED
☐	00000	25/05/13	HIGH ST DENTAL		DI ALICE B	FAILED
☐	00000	25/05/13	HIGH ST DENTAL		DI ALICE B	PASS

Search fields

The following fields can be used to search for cycle data:

- Serial Number of the machine
- Location/Clinic/Practice
- Operator name
- Date
- Cycle complete (PASS or FAIL)

When you have finished using the Cycle Validation Software simply press the Close button and then Exit and the cycle date will be stored.

Hygea 2 good practice

The need to degas: In order to allow optimum ultrasonic activity, the gases present in ordinary tap water need to be driven out of the cleaning solution.

The time needed to degas the liquid varies depending on the amount of gas present in the liquid and the quantity of water in the tank. Ultrawave recommends a degas period of at least 10 minutes.

During the degas cycle, you will see bubbles of gas forming on the inside of the bath, and slowly rising to the surface. Degassing is complete when you can no longer see these bubbles.

Another indication of increased “cold-boiling” at the liquid surface indicates that the liquid is degassed.

Once the liquid is degassed, the bath is immediately useable and will run the cleaning cycle.

The effect of heat: Heating the liquid in the bath will aid the cleaning process.

Normally a temperature of between 30 to 60°C is sufficient to accelerate the process. However, when cleaning medical instruments, the **maximum temperature should be set to 40°C**. Setting the Max above 40°C may cause proteins to coagulate and “bake on” to the instruments.

Ultrasonic activity itself will heat up the liquid at a rate of approximately 10-15°C per hour if in continuous use.

Baskets and Instrument Cassettes: Instruments should be placed in a Hygea 2 basket or Hygea 2 Instrument Cassette.

The basket or instrument cassette should then be placed in the Hygea 2 basket carrier.

Use the basket carrier clip to secure the load before placing the basket carrier in the Hygea 2.



Detergents: Ultrasonic baths require the presence of a cleaning detergent to work effectively. Ultrawave recommends **Sonozyme 3** or **Ultraclean M2** for use with the **Hygea 2**. Add one sachet of **Sonozyme 3** to the water each time the bath is refilled or between 50 and 200ml of **Ultraclean M2**.

Cleaning time: The **Hygea 2** cycle time is preset to 10 minutes. This is changeable by the machine administrator. Independent tests have shown that a cycle of this length is sufficient to clean heavily contaminated instruments.

If the instruments are not clean at the end of a cycle, then repeat the cleaning cycle, or increase the cycle time as explained on page 12.

Rinsing: After the instruments are removed from the **Hygea 2** they should be rinsed with clean running water prior to the next stage in the decontamination process.

Rinsing the instruments ensures that any contaminants present in the water at the end of the cycle do not re-adhere to the instruments when the baskets are removed from the **Hygea 2**.

Portable Appliance Testing should be conducted with water in the bath.

Detergent

In order to provide the best cleaning results, a cleaning detergent must be used with the ultrasonic bath.

Ultrawave recommend two detergents for use in the **Hygea 2**:

Sonozyme 3

Sonozyme 3 is a poly-enzymatic detergent for cleaning and pre-disinfection of surgical instruments. Specifically designed for use in the **Hygea 2**, **Sonozyme 3** is packaged in “tear and dose” sachets for easy application.

The pre-measured detergent is the ideal dose for the **Hygea 2** and ensures that the correct amount of detergent is used each time. The liquid detergent means instant and complete solubility within the water even at lower temperatures.

Supplied in boxes of 120 sachets, a new sachet of **Sonozyme 3** should be added to the **Hygea 2** every time the bath is refilled. It is recommended that this occurs twice daily.

Ultraclean M2

Ultraclean M2 is a general purpose, non-enzymatic detergent suitable for use on all medical instruments.

Packaged in a 1 litre bottle, between 50 and 200ml of **Ultraclean M2** should be added to the **Hygea 2** every time the bath is refilled. It is recommended that this occurs twice daily.

The Safety Data Sheets for these detergents are available on the Ultrawave website www.ultrawave.co.uk. [Visit the Downloads section of the Product Support area of the site]

For more information, contact us via e-mail at admin@ultrawave.co.uk or call on +44 (0) 845 330 4236.



Cleaning the Hygea 2

It is important to keep your bath clean. Not only will contaminated liquid reduce the performance of the bath, it may also damage it. Change the cleaning liquid regularly.

Your cleaning process will determine how often to change the liquid – the more soiled your items, the more often you will need to change the liquid. Change the cleaning liquid at least daily.

The base of the bath generates the ultrasonic activity by vibrating at very high speeds. If any contaminants are in contact with the bath, they act as an abrasive, causing wear on the metal surface. In extreme cases, the bath will develop holes and start to leak.

Portable Appliance Testing should be conducted with water in the bath.

There are no user serviceable parts inside. All service and repair should be referred to qualified Ultrawave approved engineers only.

Service contracts for your **Hygea 2** ultrasonic bath are available from Ultrawave or its agents.

Warranty

The warranty on the Ultrawave **Hygea 2** ultrasonic bath applies to defects appearing within 36 months of the date of sale because of faulty material or manufacture. Genuine defective items returned to Ultrawave or its agent's premises will be replaced or repaired free of charge at their discretion.

The warranty is extended to 5 years on the bonding process. If the transducers or bonding material are exposed to liquid or cleaning chemical, the warranty will be invalidated.

The warranty does not apply to:

- normal wear and tear.
- damage caused by misuse.
- non-observance of maintenance, service or connection instructions.
- damage caused by the use of toxic, flammable, acidic, caustic or corrosive chemicals or fluids not recommended by Ultrawave.

The user should familiarise themselves with this instruction booklet before operating the equipment and should apply to Ultrawave or its agent for advice on cleaning techniques or chemicals.

Ultrawave will not be responsible for damage or injury caused by incorrect use.

To confirm the warranty of your **Hygea 2**, complete the enclosed warranty card and return to Ultrawave or send an e-mail with the details of the machine including the serial number to admin@ultrawave.co.uk. Statutory rights are not affected.

WEEE Compliance

Ultrawave are complying with the WEEE regulations by contracting-out our obligations to a Producer Compliance scheme. Once it is deemed that this **Hygea 2** is no longer effective, please contact us to arrange collection by our compliance scheme provider, who will pick up the machine from your premises.

Troubleshooting

Ultrawave have a dedicated Service team who are able to resolve any problems that occur with your **Hygea 2**. However, on many occasions, it is possible that the problem can be rectified by the operator.

The unit fails to turn on (no display is shown)	Check that the unit is plugged in and that mains electricity is present.
The screen displays: "FLUID LEVEL LOW OR NO DETERGENT"	Fill the Hygea 2 with water so that it is between the MIN and MAX level indicated inside the tank. If you are using "pure" water (eg. De-I or RO) ensure that the detergent has been added.
The screen displays: "LID OPEN Please Close Lid""	Close the lid. If the lid is already closed, there may be a problem with the lid sensor. Attempt to run another cycle to see if the problem reoccurs.
The screen displays: "SONICS LOW"	The Hygea 2 is fitted with an ultrasonic power feedback circuit, which monitors the ultrasonic activity in the bath during a cleaning cycle. If the ultrasonic power drops below a certain level, the cycle will abort and this message will display. This is not necessarily caused by a problem with the machine. If this message displays, press enter to acknowledge the error and run another cycle to see if the problem persists.
The screen displays: "OVER TEMP"	Drain and refill with fresh cold water The Hygea 2 is fitted with a temperature sensor that automatically sets off an audible alarm if the liquid gets too hot. Ultrasonic activity itself will heat up the liquid at a rate of approximately 5-10°C per hour. If the Hygea 2 is operated continuously, it may eventually set off the audible alarm because the liquid is too hot.

The screen displays: "UNDER TEMP"	The cleaning solution is not yet at the minimum temperature. Wait until the cleaning solution has reached the minimum operating temperature.
The screen displays: "NO MC CARD PRESENT"	If the Validation Mode selected is to write to the MC Card, then the Hygea 2 will detect if the card is present. If the MC Card is not present, and "MC Card Only" is selected as the Validation Mode, then the cycle will not begin. If "Printer & MC Card" is selected, then the cycle will run, but data will only be stored on the printed validation ticket. Refer to the Administrator Instruction Manual for information on adjusting the Validation Mode.
The screen displays: "MC Card Fault"	In MC card only mode, MC card must be inserted for a cycle to start. If this MC card was removed during the cycle, this message will appear.
The screen displays: "POWER FAILURE"	"Power Failure" is to be expected if the power is turned off during a cycle. It is important that you do not turn off the main electricity supply to your Hygea 2 when it is running a cleaning cycle.

If any of these problems persist, the Ultrawave Service Department can be contacted on +44 (0) 845 330 4238 or service@ultrawave.co.uk.

There are no user serviceable parts inside the Hygea 2.

Service Record

Ultrawave recommend that your **Hygea 2** is tested, validated and serviced at least once every 12 months. This record must be maintained by the engineer conducting these tests

A complete validation and testing log book can be obtained from Ultrawave. For details of testing, validation, servicing and Service contracts contact Ultrawave or its agent.

There are no user serviceable parts inside. All service and repair should be referred to qualified Ultrawave engineers only.

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Next service due			

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Compliance with the Control of Noise at Work regulations

The Control of Noise at Work Regulations 2005 (the [Noise Regulations](#)^[1]) came into force for all industry sectors in Great Britain on 6 April 2006. The Control of Noise at Work Regulations 2005 replace the Noise at Work Regulations 1989.

The aim of the Noise Regulations is to ensure that workers' hearing is protected from excessive noise at their place of work, which could cause them to lose their hearing and/or to suffer from tinnitus (permanent ringing in the ears).

The level at which employers must provide hearing protection and hearing protection zones is now 85 decibels (daily or weekly average exposure) and the level at which employers must assess the risk to workers' health and provide them with information and training is now 80 decibels. There is also an exposure limit value of 87 decibels, taking account of any reduction in exposure provided by hearing protection, above which workers must not be exposed.

To help you calculate your workers' exposure, Ultrawave Ltd publish the noise generated by your ultrasonic cleaner on the Certificate of Test. The figure is that experienced by a worker standing in the operating position.

The full text of the [Control of Noise at Work Regulations 2005](#)^[2] and the full text of the [Noise at Work Regulations 1989](#)^[3] can be viewed online.

Guidance on the 2005 Regulations can be found in the free HSE leaflet '[Noise at Work](#)'(INDG362 (rev 1))^[4] and in HSE's priced book 'Controlling Noise at Work' (L108) (ISBN 0 7176 6164 4) available from [HSE Books](#)^[5] or from bookshops.

[1] <http://www.hse.gov.uk/noise/regulations.htm>

[2] <http://www.opsi.gov.uk/si/si2005/20051643.htm>

[3] http://www.opsi.gov.uk/si/si1989/Uksi_19891790_en_1.htm

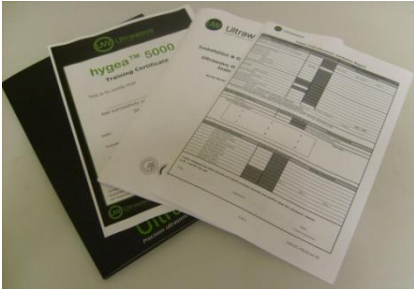
[4] <http://www.hse.gov.uk/pubns/indg362.pdf>

[5] <http://www.hsebooks.co.uk>

Hygea 2 Accessories

The following items are available from Ultrawave or its agents for use with the **Hygea 2**.

	Sonozyme 3 detergent Enzymatic detergent packaged in boxes of 120 “tear and dose” sachets.
	Ultraclean M2 detergent A non-enzymatic detergent packaged in boxes of 6 x 1 Litre bottles.
	Hygea Ultrasonic Validation Kit A complete Validation kit, providing all the material required for weekly, monthly and periodic testing.
	Hygea Ultrasonic Activity Meter An Activity Meter which indicates the level of ultrasonic activity in the tank. Ideal for monthly performance measurement.

	Hygea Valet instrument cassettes Dental instrument cassettes for easy transfer and storage of dental examination instruments.
	Aluminium foil Aluminium foil for quarterly validation of the Hygea 2.
	Load check indicator test strips and holders Brownes strips and holders for weekly testing of the Hygea 2.
	Service Contracts and Validation Testing Ultrawave can offer full Service and Validation packages for the the Hygea 2, to ensure the machine is performing at the optimum level and the testing requirements as stipulated in guidelines and recommendations are met.

For information on any of these products or services, visit
www.ultrawave.co.uk.

Alternatively please contact Ultrawave on +44 (0) 845 330 4236 or
admin@ultrawave.co.uk .



Notes

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Ultrawave

Notes

This image shows a single sheet of white paper with horizontal blue ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

