

WOODLEY

EQUIPMENT COMPANY LTD.



InSight DB Quick User Guide

Out of Hours Telephone Support

Tel: 01204 695 045

Mon-Fri 5pm-8pm
Weekends & Bank Holidays 9am-1pm

(Excluding Christmas Day, Boxing Day & New Years Day)

QUANTUM VET DIAGNOSTICS

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Preparing the QC reagent

1. Remove vial from the refrigerator and allow to warm at room temperature for 5 minutes
2. Carefully open and remove the bung from a vial of serum and a vial of serum diluent.



3. While holding the serum vial steady on the bench, carefully pour all the diluent into the serum vial. Do not shake excess diluent out of the diluent vial, as this has been accounted for in the dispense.
4. Close the serum vial, swirl gently -DO NOT shake. Let the vial stand on bench for 20 minutes then swirl again and gently invert 10 times.
5. The control is now reconstituted and ready to be analysed or frozen for prolonged storage.

QC Storage:

Store at 2-8°C before and after reconstitution. Reconstituted control may be stored at -20°C.

Using a clean pipette dispense the remaining QC material into 4 separate serum tubes, LABELLED WITH DATE AND LOT NUMBER, and freeze for later use.

Thaw frozen controls quickly using warm water (37°C), invert gently after thawing.

QC Stability:

Open vial reconstituted stability is up to 10 days if stored at 2-8°C, or 2-3 weeks if stored at -20°C once reconstituted.

Frozen controls must be used within 8 hours of thawing.

Login to System

Windows

Username: Quantum

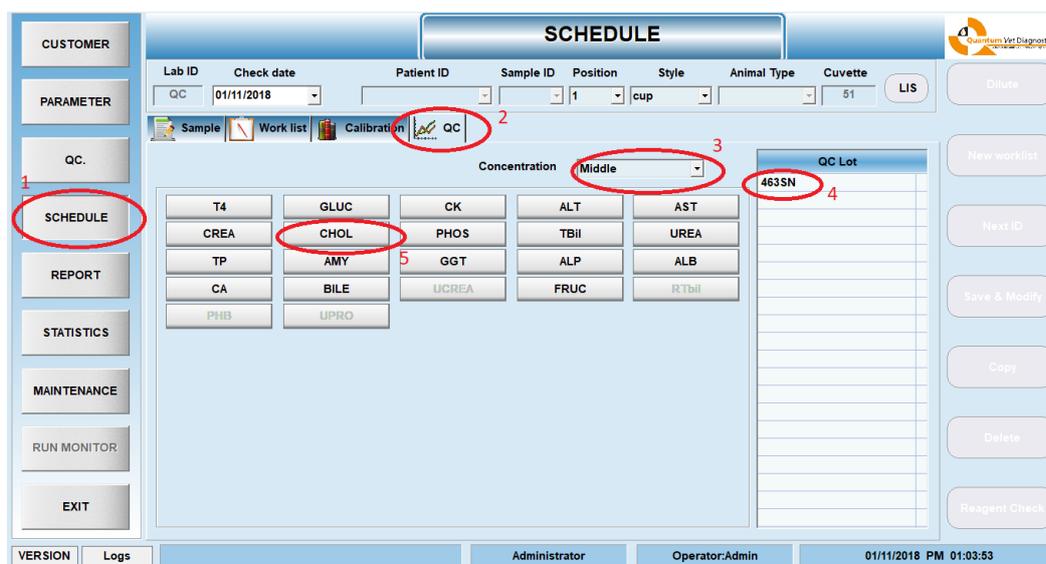
Password: Quantum

Analyser operating system

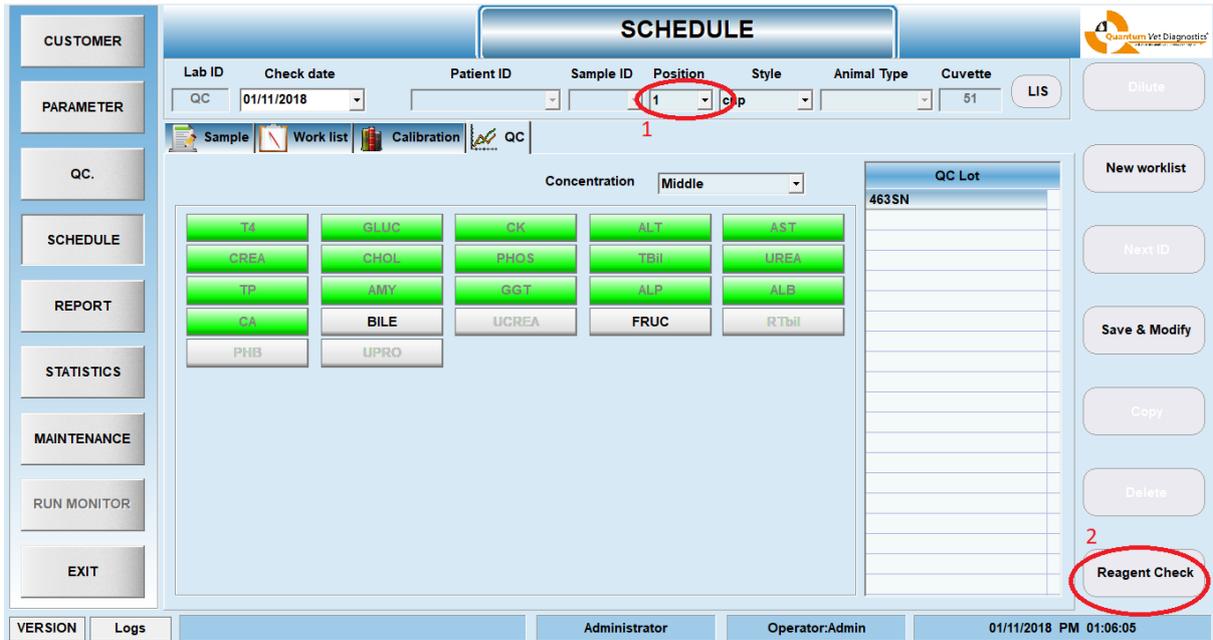
Login ID: Admin

Password: 123

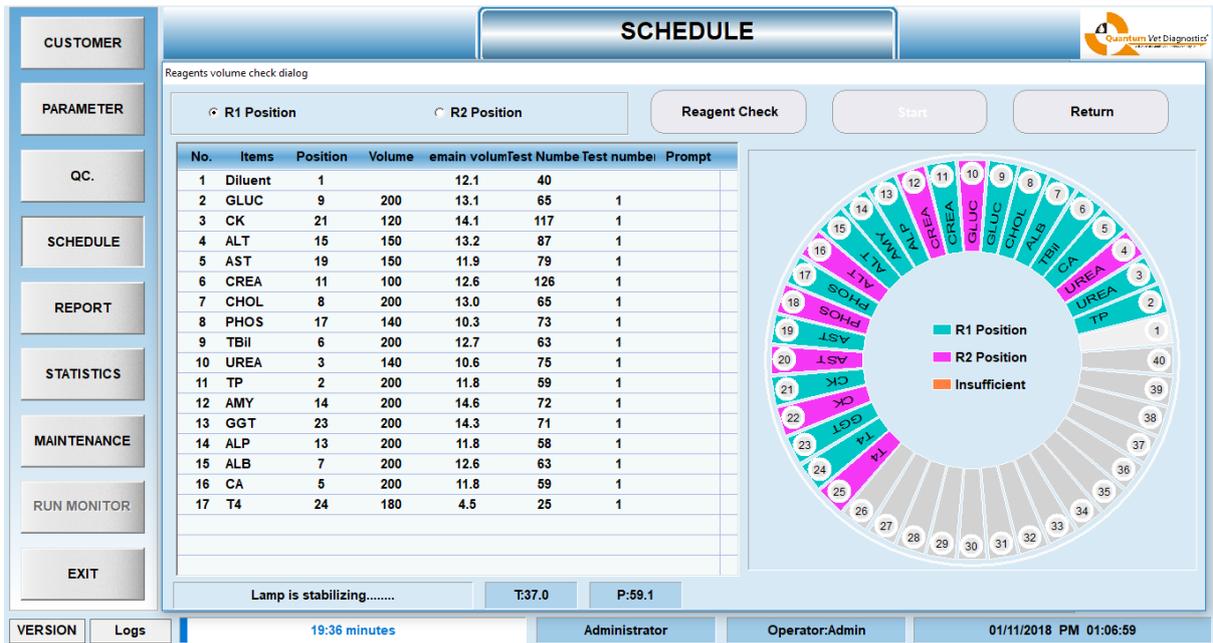
Running a QC sample



1. Click on Schedule
2. Click on the QC tab
3. Select appropriate QC level – Woodley Mid level QC is <Middle>
4. Select appropriate QC Lot
5. Select desired parameters



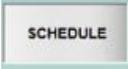
1. Place QC material into sample cup and position on sample tray, ensure sample position in tray matches sample position on screen.
2. Click Reagent check

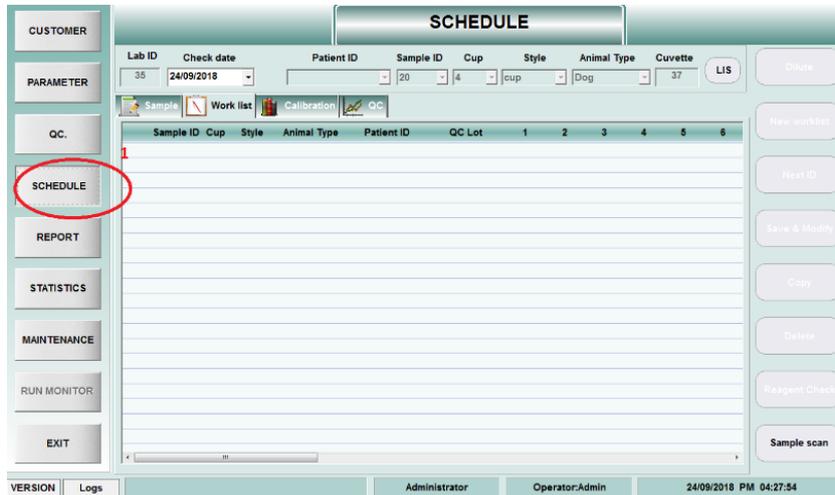


1. Run reagent check if reagents have been changed or topped up
2. OR Click start.

Running a patient sample

Ensure all caps removed from reagent bottles

From the main run screen click on  ...



The screenshot shows the 'SCHEDULE' screen with the following fields and controls:

- Lab ID: 35
- Check date: 24/09/2018
- Patient ID: (empty)
- Sample ID: 20
- Cup: 4
- Style: cup
- Animal Type: Dog
- Cuvette: 37

The left-hand menu has the following buttons: CUSTOMER, PARAMETER, QC, SCHEDULE (circled in red), REPORT, STATISTICS, MAINTENANCE, RUN MONITOR, EXIT.

The main area contains a table with columns: Sample ID, Cup, Style, Animal Type, Patient ID, QC Lot, 1, 2, 3, 4, 5, 6. A red '1' is next to the first row.

Buttons on the right: Dilute, New worklist, Next ID, Save & Modify, Copy, Delete, Reagent Check, Sample scan.

Footer: VERSION, Logs, Administrator, Operator:Admin, 24/09/2018 PM 04:27:54

1. If not already displaying, click on the sample tab.
2. Input patient unique identifier into Patient ID field.
3. Ensure patient sample is in the correct cup position.
4. Sample style will automatically default to cup.
5. Choose correct animal species from the drop-down box.



The screenshot shows the 'SCHEDULE' screen with the following fields and controls:

- Lab ID: 35
- Check date: 24/09/2018
- Patient ID: (circled in red)
- Sample ID: 20
- Cup: 1
- Style: cup
- Animal Type: Dog
- Cuvette: 37

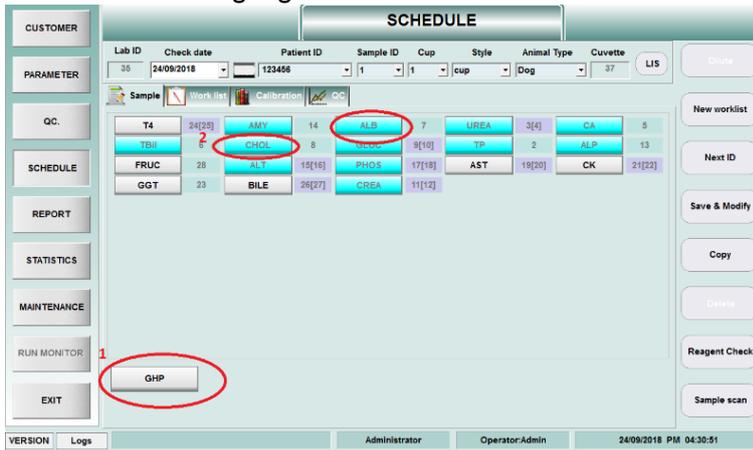
The left-hand menu has the following buttons: CUSTOMER, PARAMETER, QC, SCHEDULE (circled in red), REPORT, STATISTICS, MAINTENANCE, RUN MONITOR, EXIT.

The main area contains a table with columns: Sample ID, Cup, Style, Animal Type, Patient ID, QC Lot, 1, 2, 3, 4, 5, 6. Red circles highlight the Patient ID, Sample ID, Cup, Style, and Animal Type fields.

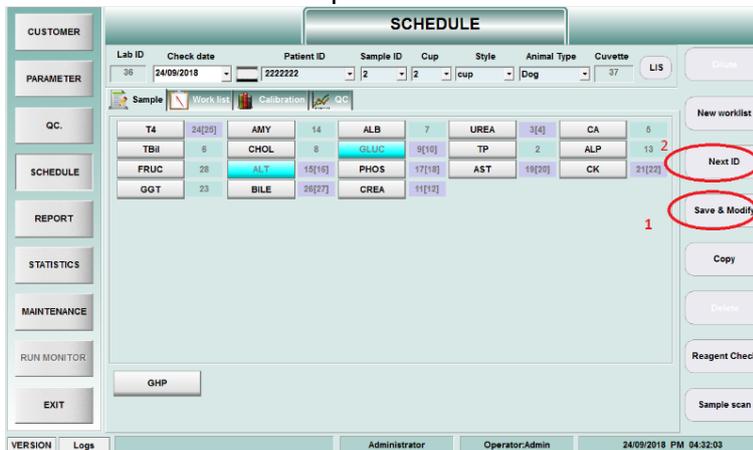
Buttons on the right: Dilute, New worklist, Next ID, Save & Modify, Copy, Delete, Reagent Check, Sample scan.

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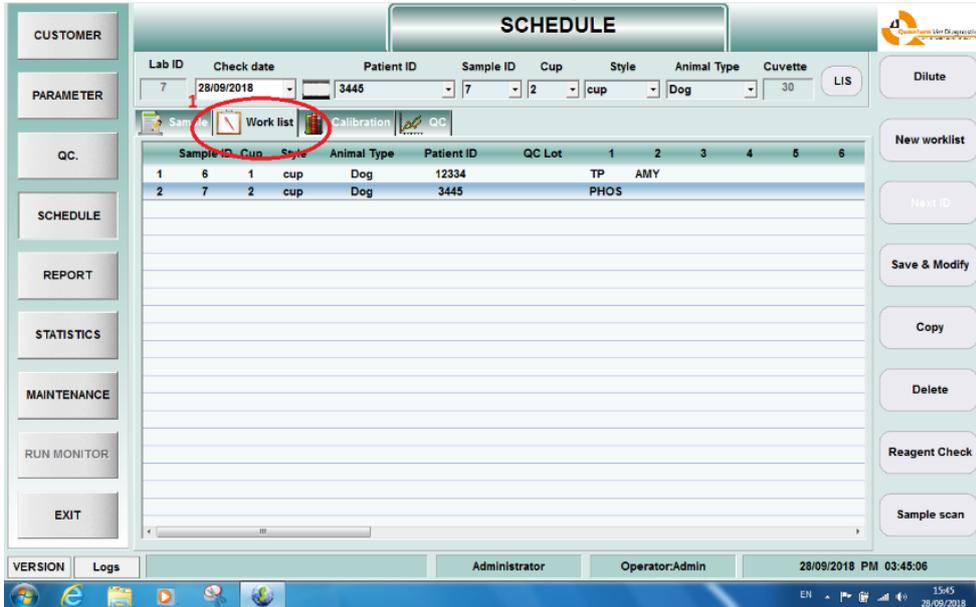
1. Select appropriate tests required, this can be either from profiles
2. Or individual test parameters. In the case of a mistake clicking the field again will remove highlighted tests.



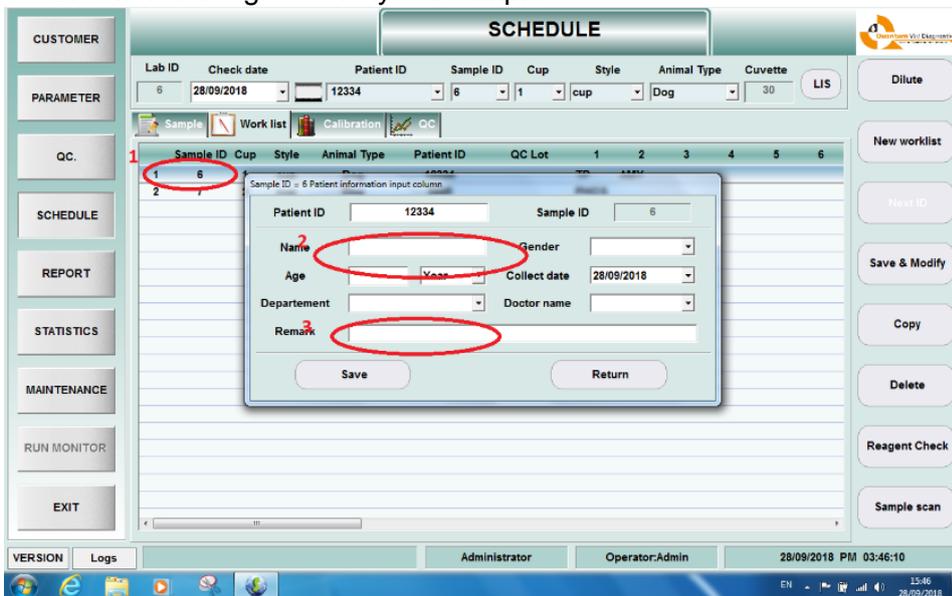
1. Once all tests are input click Save and Modify
2. Click next ID to input additional tests



1. Click the worklist tab to see the completed worklist



1. Double click the individual patient line to enter additional patient information
2. ie name...
3. Remarks eg. Haemolysed sample



1. Click on reagent check to make analyser recheck remaining reagent volumes for the selected tests, useful if reagent bottles have been changed
2. OR – click Start to begin analysis of samples

Reagents volume check dialog

R1 Position R2 Position

1 Reagent Check 2 Start Return

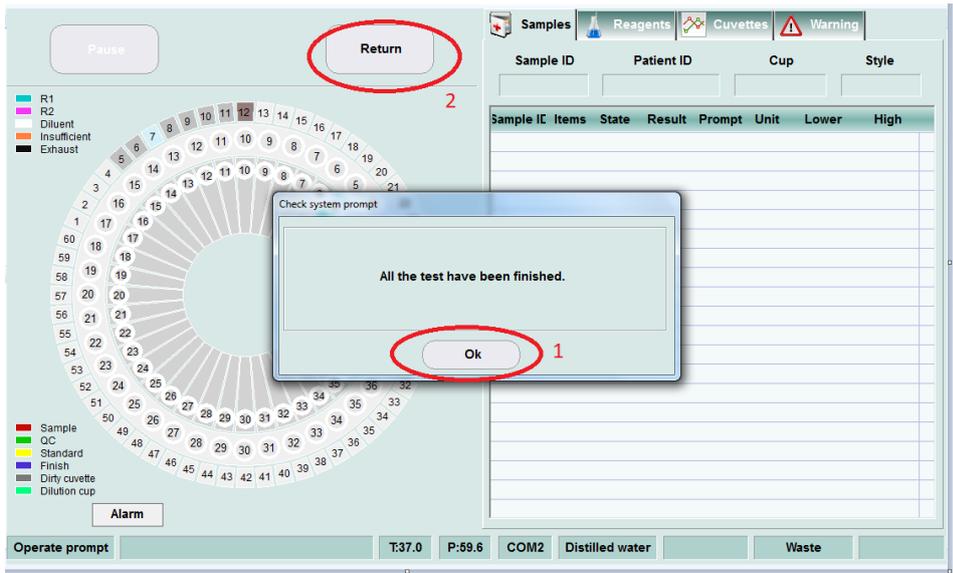
No.	Items	Position	Volume	main volun	est Numbe	est numbe	Prompt
1	Diluent	1		11.0	36		
2	TP	2	200	10.8	54	1	
3	CHOL	8	200	13.8	69	1	
4	ALP	13	200	1.9	9	1	
5	GLUC	9	200	14.1	70	2	
6	TBil	6	300	5.1	17	1	
7	AMY	14	200	2.0	9	1	
8	ALB	7	240	10.0	41	1	
9	UREA	3	200	10.3	51	1	
10	CA	5	200	14.4	71	1	
11	ALT	15	150	10.8	71	2	
12	PHOS	17	140	1.7	11	1	
13	CREA	11	100	13.5	134	1	

T:37.0 P:55.2

VERSION Logs Administrator Operator:Admin 24/09/2018 PM 04:32:42

Wait for all tests to complete and

1. All tests finished message will appear, click OK
2. Click Return when analyser has finished cleaning the cuvettes.

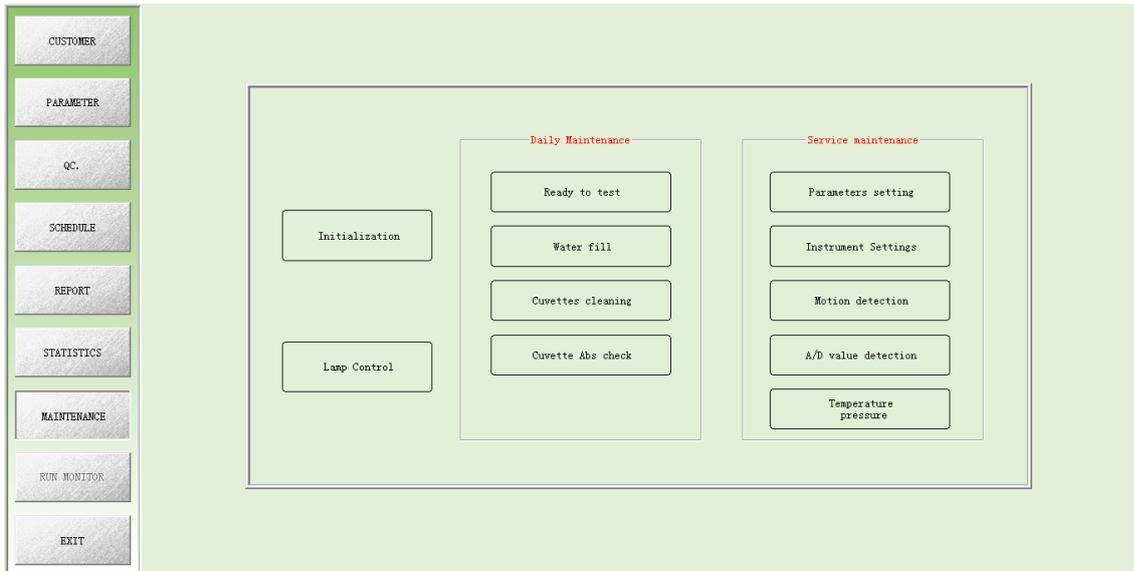


Maintenance

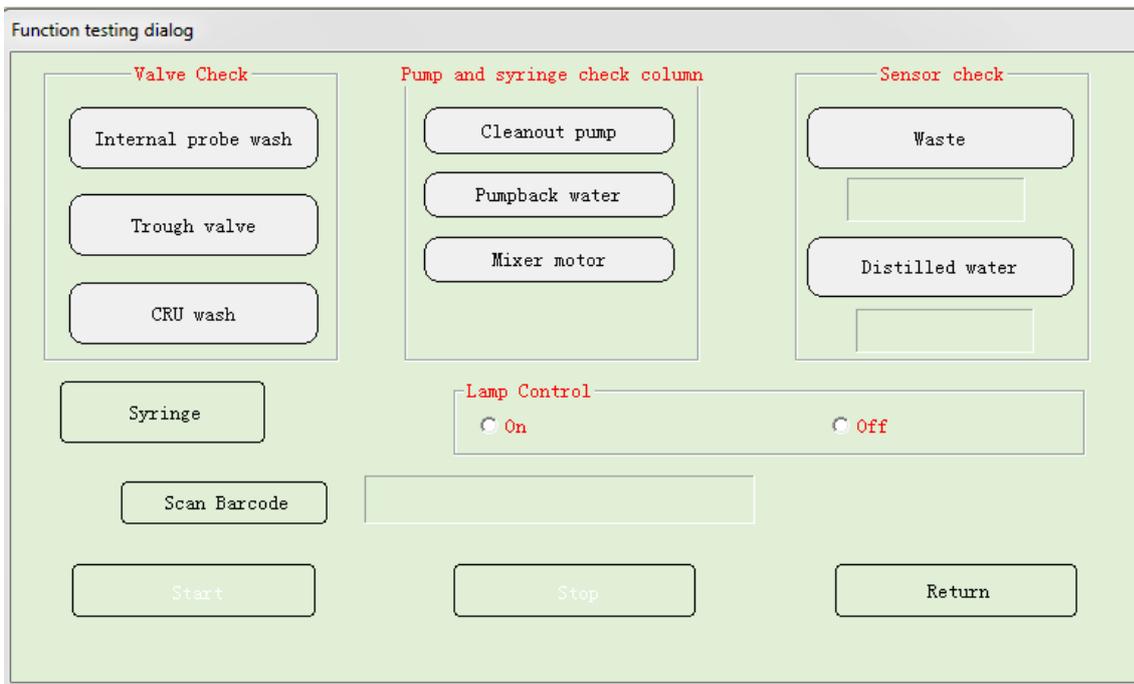
To ensure reliability, good performance and service life of the system, regular maintenance is required.

Method and instruction for operating and maintaining

- 1) Perform Initialisation after power on.
- 2) Check and make sure the pump pipe is at the bottom of the DI water container, and can pump enough water for analysis. Empty waste and ensure waste pipe is inside the waste container
- 3) return reagent carousel to fridge after shutdown.
- 4) Check whether the probe is blocked or not periodically by clicking Maintenance→ Motion detection.



Then you can see the following interface:



Please click Reagent valve, Needle valve, Water valve respectively, if no water comes out from Reagent/ sample needle, insert fine wire to remove clog.

8) If you find that wash unit does not drain the cuvettes completely or no water is injected in, please contact support.

9) A flaw or stain on the light-pass surface of the cuvettes will influence the measurement of absorbency, please replace it with a new one.

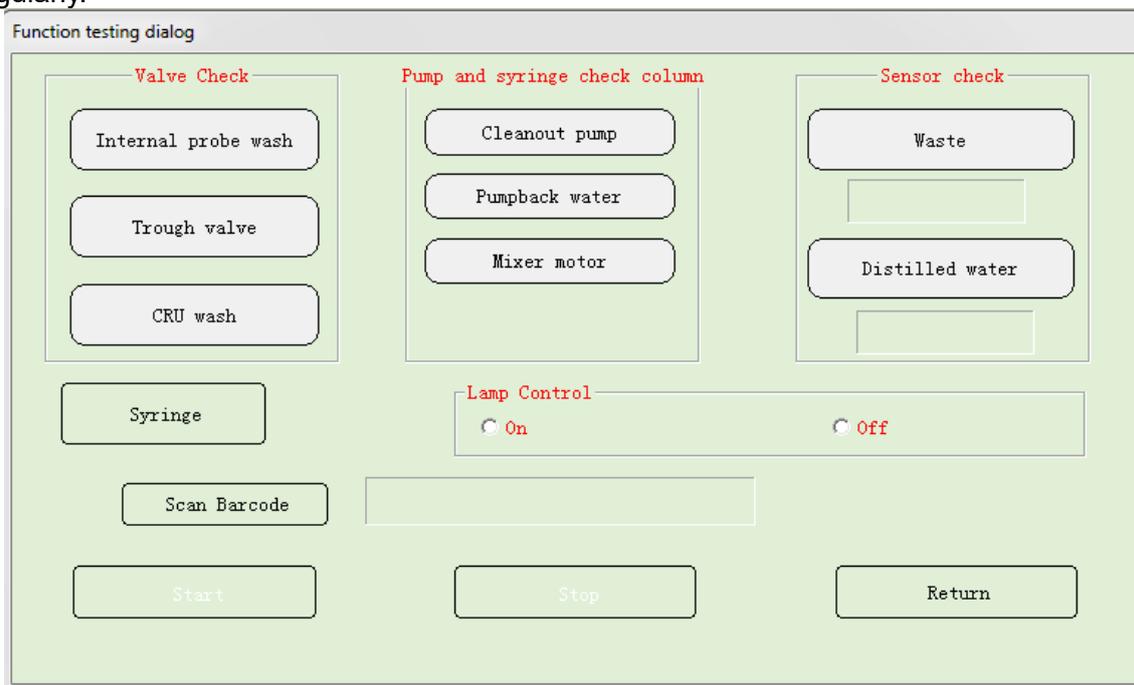
10) Run QC material regularly to ensure system is working in specification.

11) Do not switch the instrument power on and off frequently, it should cause damage to the power module.

12) Stabilized voltage supply should be used when the net voltage is not steady or on the low side.

14) Cap the reagent bottles in the disk when the instrument is in the idle status and uncap it before test.

15) Check the electrical valves under the menu of “Motion Detection” of “Maintenance” regularly.



Please click Reagent valve, Needle valve, Water valve respectively, if the sound “pa” can be heard, then the valves are in good condition; otherwise, please contact support.

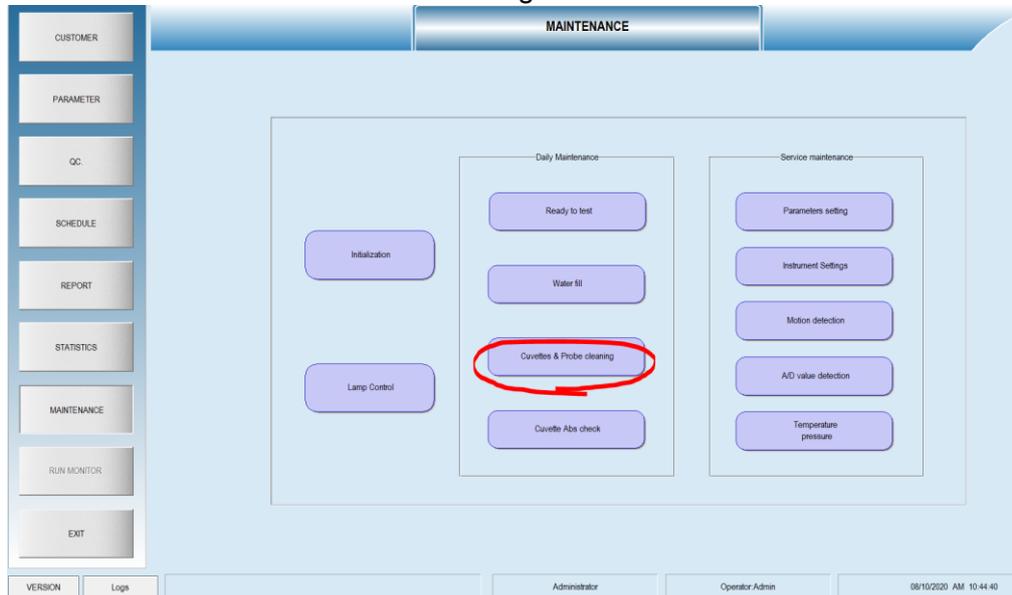
16) Click “Mixer motor” to check if mix needle is rotating, otherwise contact support.

17) Do not press “SPACE” and “Enter” on computer keyboard during testing; otherwise, test will stop immediately.

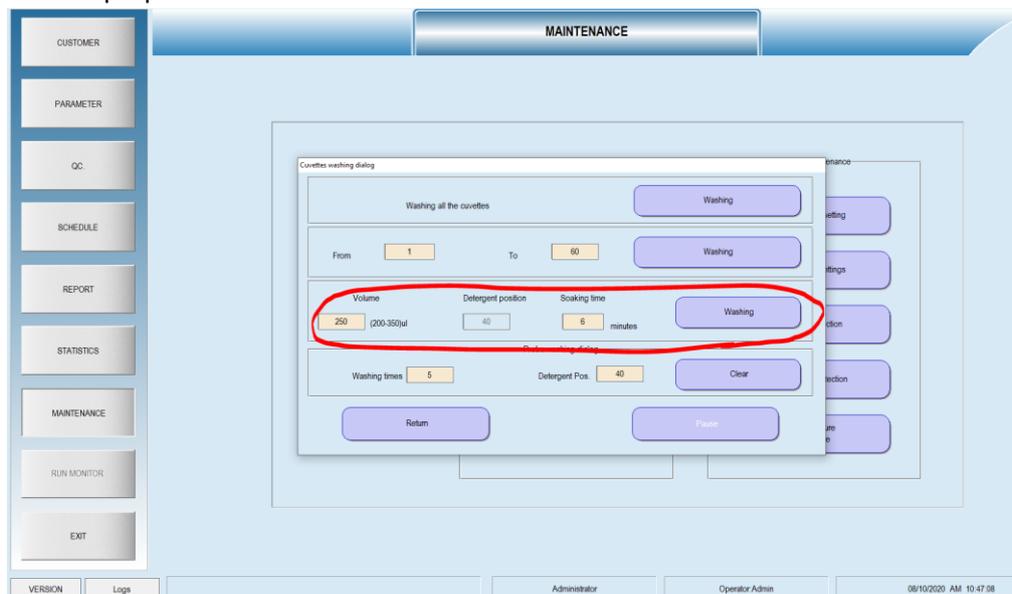
Weekly Maintenance

Cuvette clean cycle

1. Access maintenance options from main menu
2. Select Cuvette & Probe Cleaning



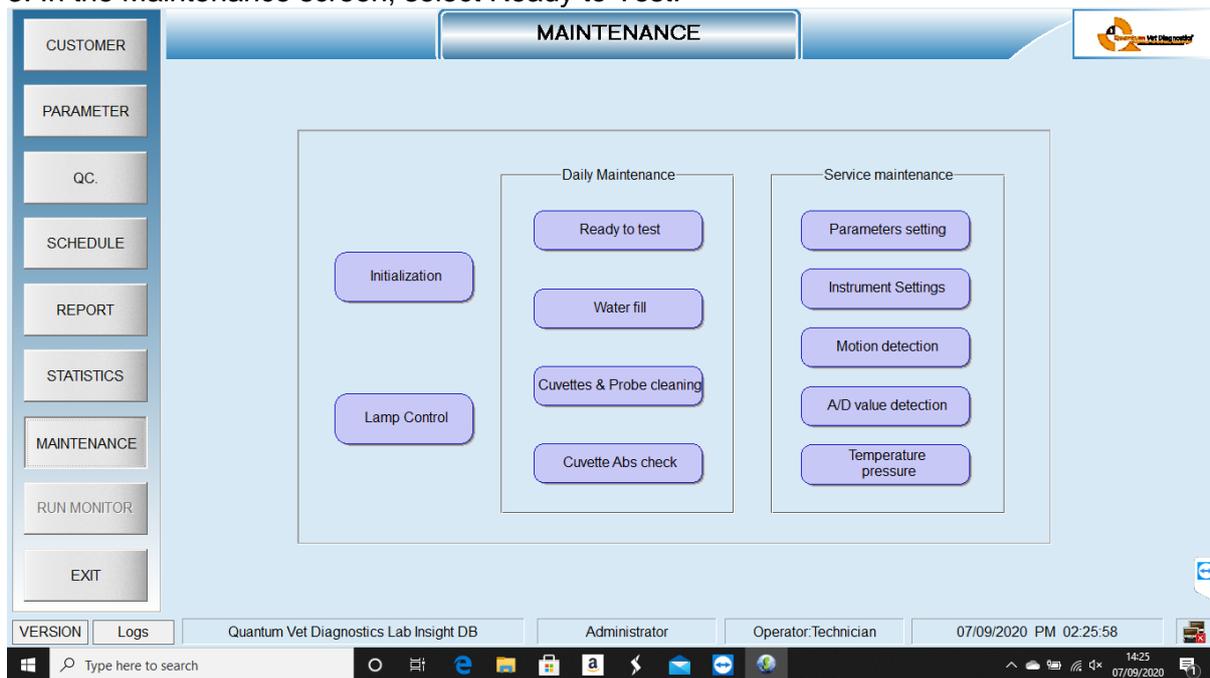
3. Ensure Volume is set to 250ul and Soaking time is set to 6 mins
4. Place full bottle of Cleaning solution in position 40.
5. Click on Washing.
6. The analyser will now begin to fill each reaction cuvette with 250ul of cleaning solution, this will remain in the cuvettes for approximately 6 mins, after this the analyser will empty and rinse the cuvettes. The full process takes approximately 20mins.
7. At the end of the process the analyser is ready to test samples without any further preparation.



Tubing decontamination – Monthly maintenance

To protect the water supply lines from the build-up of bacterial contamination they should be decontaminated monthly:

1. Empty the water supply tank and leave a small amount of 1:1 dilution of weak bleach and water in the bottom, swirl gently to coat inside of tank with bleach.
2. Prepare a separate container with 1l of a 1:1 dilution of Weak Bleach and water in it. Put the pickup/ transfer tubing from the water supply tank into the tank containing the weak bleach solution.
3. In the Maintenance screen, select Ready to Test:



Repeat three times to distribute bleach throughout the analyser, leave to soak for 15 minutes

4. Thoroughly rinse the original water tank with water, then with deionised water. Refill with deionised water then put the pickup tubing in
5. Run Ready to Test 5 times to ensure all the bleach is removed from the system

DB Control & Maintenance Log

MONTH:.....

REVIEWED BY:.....

DATE:.....

Quality Control

Weekly Procedures	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5
QC tested by:					

NOTE: Process a QC at least once a week, compare your results with results printed on the WML control data sheet.

In the event of a QC failure 1. Reprocess the sample 2. If still out of limits, repeat with a fresh QC 3. Inform your Woodley Sales Representative or Woodley Equipment Company Technical Support on 01204 695045 and press option 1.

Maintenance

Daily procedures	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
Morning Duties																																	
Install refrigerated reagents																																	
Replenish system water																																	
Empty liquid waste																																	
Run Initialisation/ Ready to Test																																	
Evening Duties																																	
Remove reagents to fridge																																	
Exit Software/ Water Fill																																	
Switch off analyser /PC																																	
Remove condensation																																	

Weekly Procedures	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5
Clean cuvettes (quick user guide)					
Check Cuvettes					

Monthly Procedure	
Tubing decontamination (see quick user guide)	

This maintenance log is not intended to indicate when a procedure should be undertaken; it is a record of when it has been undertaken. To confirm that a procedure has been completed please initial the appropriate box. If you require assistance with any of the above procedures please contact your Woodley Equipment Company Sales Representative or Woodley Equipment Company Technical Support on 01204 669033 and press option 1

Replenishing the reagents.

- Reagent bottles can be changed anytime between runs whenever the system is idol.
- Take care that the same lot number or reagents is in use or there may need to be a factor change
- If a new bottle of reagents is installed always run <Reagent Check> before beginning the batch start, this will allow the system to update the inventory.

Position	Reagent	
1	Diluent – DI water	
2	Total Protein	
3	Urea R1	
4	Urea R2	
5	Calcium	
6	Total Bilirubin	
7	Albumin	
8	Cholesterol	
9	Glucose R1	
10	Glucose R2	
11	Creatinine R1	
12	Creatinine R2	
13	ALP	
14	Amylase	
15	ALT R1	
16	ALT R2	
17	Phos R1	
18	Phos R2	
19	AST R1	
20	AST R2	
21	CK R1	
22	CK R2	
23	GGT	
24	T4 R1	
25	T4 R2	
26	Bile Acids R1	
27	Bile Acids R2	
28	Fructosamine	
29		
30		
31		
32		
33	Urine Creatinine R1	
34	Urine Creatinine R2	
35	Urine Protein	
36		
37		
38		
39		
40	Wash solution	

Result flags and meanings

Result Flag	Description	Meaning and Action
R1L	Insufficient R1 reagent	Sample probe has detected reagent R1 shortage. Check and replenish R1 reagent
R2L	Insufficient R2 reagent	Sample probe has detected reagent R2 shortage. Check and replenish R2 reagent
SL	Insufficient sample	Sample probe has detected sample shortage. Check and replenish the sample.
RR	Retest results	Analyser will automatically retest this result- This happens if the result has triggered pre-set limits for a re-test.
RC	Results from retest	This is the result of a retested parameter
AD	Results from a diluted sample	Initial result triggered a dilution and retesting. This is the final multiplied retested result, ie the result that should be reported
RR-R1L	Retest results but insufficient R1 reagent	Retest was triggered but there was insufficient R1 to complete the test. Check and replenish R1 reagent
RR-R2L	Retest results but insufficient R2 reagent	Retest was triggered but there was insufficient R2 to complete the test. Check and replenish R2 reagent
RR-SL	Retest results but insufficient sample	Retest was triggered but there was insufficient sample to complete the test. Check and replenish the sample.
LIN	Results above limit of linearity	Each test has an upper limit that it can reliably measure up to. This flag means that the limit is exceeded. The analyser will automatically perform a dilution and perform a retest, the result of this test will be flagged with AD – see above.
LIN1	The Reaction curve has substrate exhaustion	The reaction curve is not straight because the amount of analyte in the sample is too high for the reagent to reliably measure the value. The sample will be automatically diluted and retested, the result of this test will be flagged with AD – see above.
LIN2	LIN2 is for Kinetic assay. The test absorbance higher than limit value when reaction is increasing and test absorbance lower than limit value when reaction is decreasing.	The reaction curve is too steep because the amount of analyte in the sample is too high for the reagent to reliably measure the value. The sample will be automatically diluted and retested, the result of this test will be flagged with AD – see above.
AD-R1L	Diluted retest but insufficient R1 reagent	Automatic dilution was triggered but there was insufficient R1 to complete the test. Check and replenish R1 reagent
AD-R2L	Diluted retest but insufficient R2 reagent	Automatic dilution was triggered but there was insufficient R2 to complete the test. Check and replenish R2 reagent
AD-SL	Diluted retest but insufficient sample	Automatic dilution was triggered but there was insufficient sample to complete the test. Check and replenish sample.

RGT-L	Reagent blank value is lower than setup limit	The analyser has detected that the starting colour of reagent is wrong, please contact customer support.
RGT-H	Reagent blank value is higher than setup limit	The analyser has detected that the starting colour of reagent is wrong, please contact customer support.