



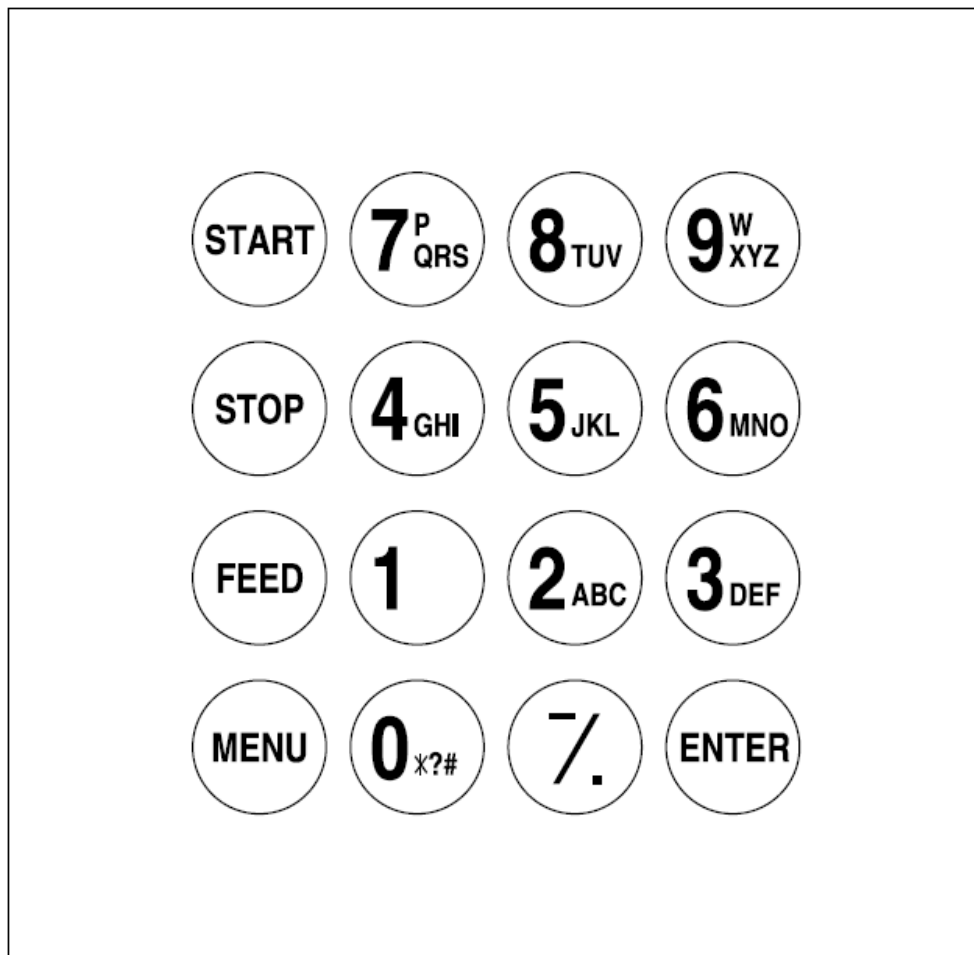
Spotchem EL Quick Reference Guide

Quick Reference Guide Contents

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1. Spotchem EL Function Buttons



START: Starts measurement. Select 'Yes' from the Yes/No option.

STOP: Stops measurement. Select 'No' from the Yes/No option. Cancels entry.

FEED: Feeds the built-in printer with paper while pressed.

MENU: Switches the page on each menu display.

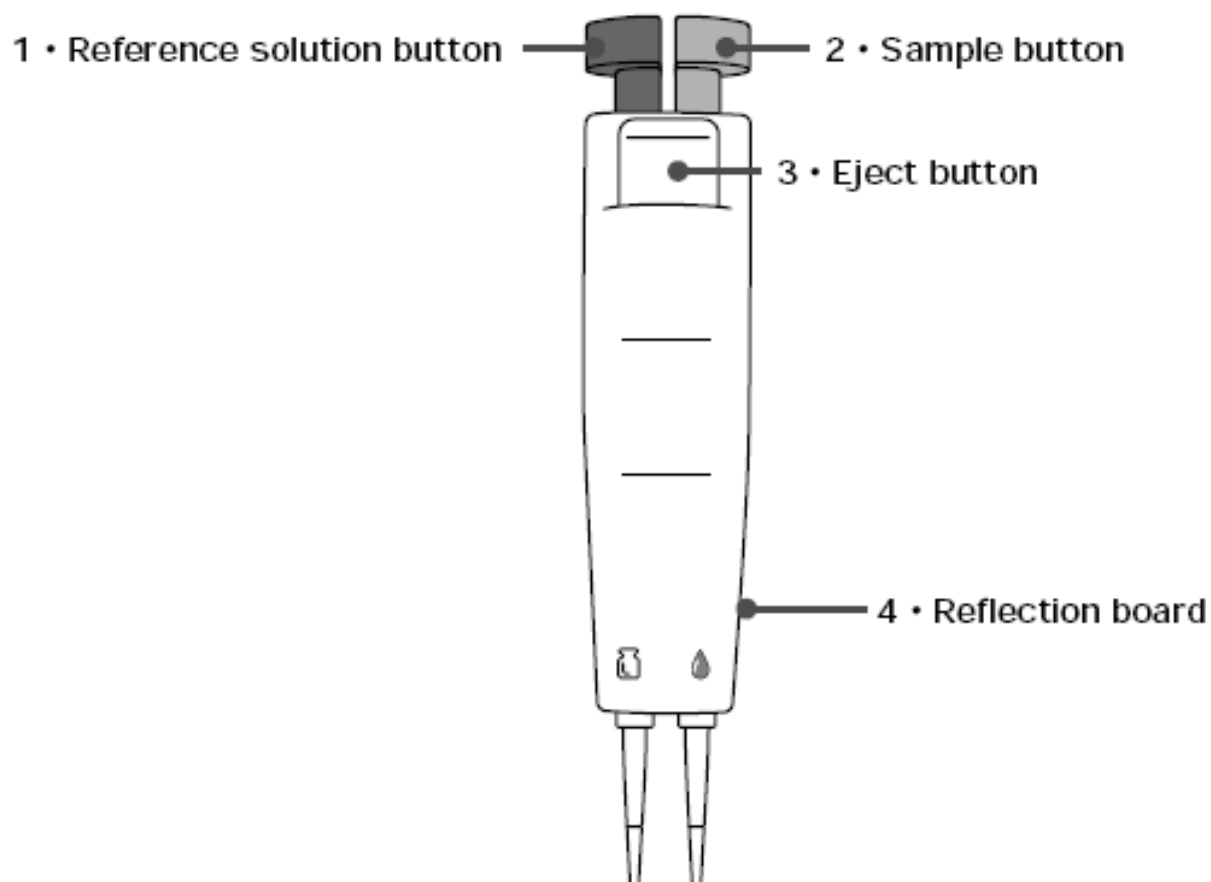
0-9: Selects the menu number. Enter numerical values and ID.

-/. Selects item, moves cursor, switches the page on the display and enters minus sign and decimal point.

ENTER: Determines the entry.



2. Twin Pipette Function





3. How to Calibrate

Each pack of reagent E-Plates is supplied with a calibration card which must be swiped in the magnetic card reader prior to testing. This process only needs to be carried out once for each pack of plates tested.

1. From the main menu select '3. Calibration' then '1. CARD'.
2. Insert the card into the magnetic card reader on any stripe number and swipe down. Once read, repeat by swiping the same stripe number a second time.



3. Swipe the remaining stripes two times each until the each stripe number is displayed.

Insert a Card.
The Same stripe 12

4. Once each stripe number has been swiped and read twice by the card reader the calibration procedure is complete and 'insert a card' is displayed.

Insert a Card.
(STOP)

5. Press the stop key 2 times to return to the main menu.
6. The calibrated E-Plates can now be used for testing.



4. Preparing a Sample

Whole blood, serum, plasma or urine samples can be used.

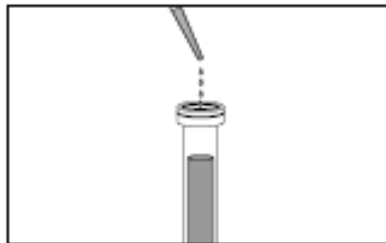
Whole blood- Transfer fresh whole blood from a plain syringe into a Spotchem EL orange topped blood tube or other heparinised blood tube and mix thoroughly before testing.



Serum- Use serum from a serum gel or plain blood tube. Allow at least 20 minutes after sample collection prior to centrifugation to ensure blood is clotted.

Plasma- Use plasma from a spun blood sample taken into lithium heparin anticoagulated blood tube.

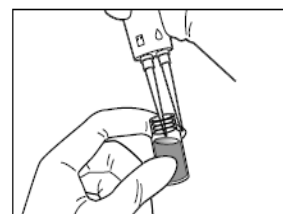
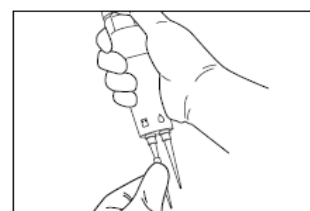
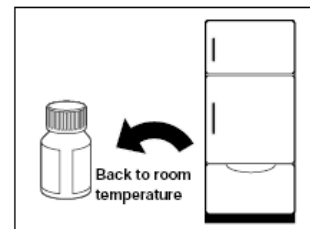
Urine- Dilute urine sample 1:1 with distilled water prior to testing.





5. Running a Sample

1. Ensure calibration has been performed for the specific box of E-Plates in use (refer to section 2.)
2. Remove the required number of E-Plates and the reference solution from the refrigerator and allow to reach room temperature
3. Put new pipette tips on the twin pipettor
4. Draw up the reference solution. Press the reference solution button and insert into the tip to the bottom of the reference solution, then slowly release
5. Draw up the sample. Press the sample button and insert into the tip into the sample, then slowly release
6. Wipe the pipette tips using a tissue to remove excess sample or reference solution
7. Press 'START' key or no. 1 key 'Measure'
8. Press '2. INFO' key then -/. key to change sample type (WB, Serum, plasma, urine) then 'ENTER'
9. Press no. 1 key 'ID'
10. Enter up to 4 digit number ID and press ENTER
11. ID screen is displayed. Enter up to 13 digits using numbers or letters and press ENTER
12. Set the E-Plate in the analyser
13. When the message 'Apply sample' is displayed set the pipette in the analyser and position the pipette tips in the centre of the wells



Standby 2000-06-10
ID(1) INFO(2)

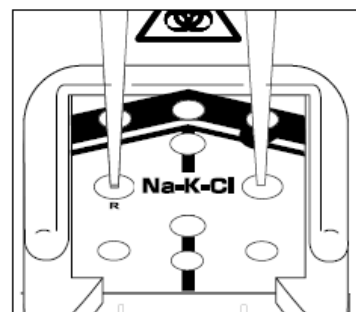
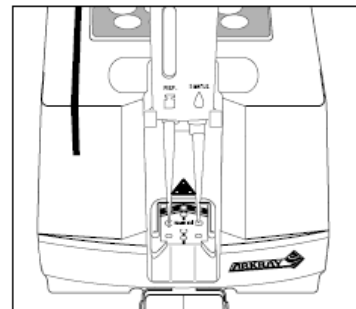
No. < >

ID< >





14. Slowly push the reference solution and sample pipette buttons simultaneously
15. Hold for one second then remove pipette keeping both buttons held down
16. Press eject button to remove pipette tips and discard in a sharps waste bin
17. When the pipette is removed, the E- Plate is automatically taken into the EL for analysis. After 60 seconds measurement is complete and the results the results are printed on the internal printer.





6. How to Reconstitute a Biochemistry Control Vial

Reconstitution Procedure:

1. Remove vial from the refrigerator and allow to warm at room temperature for 5 minutes.
2. Remove the stopper and add 5ml DIL SIM diluent to the vial.
3. Replace stopper and swirl vial gently. **DO NOT** shake.
4. 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. 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.

If you require assistance please contact your Woodley Equipment Sales Representative or Woodley Equipment Company Technical Support on 01204 669033 and press option 1.



7. Running a QC

Woodley Equipment Company recommends a Quality Control (QC) should be analysed on the Spotchem EL at the start of each working week.

Why Run a QC?

- To assess the quality and performance of the practice laboratory.
- To ensure that results generated by the Spotchem EL are correct.
- QC monitors staff, equipment, reagents and result reporting.

Running A QC

1. Reconstitute the control material (refer to section 5)
2. Mix QC and then run sample (refer to section 4)
3. Once testing is complete, print out and compare your results with those on the control assay sheet supplied with the control vial.
4. Sign the QC log sheet under the appropriate date.

In the event of a QC failure 1. Reprocess the sample 2. If it's still out of limits, repeat with a fresh QC 3. Contact your Woodley Sales Representative or Woodley Equipment Company Technical Support on 01204 669033 and press option 1.



8. Maintenance

Daily Maintenance

1. Clean the Plate Tray

Discard used plates from the plate tray.

Weekly Maintenance

2. Clean the Plate Table

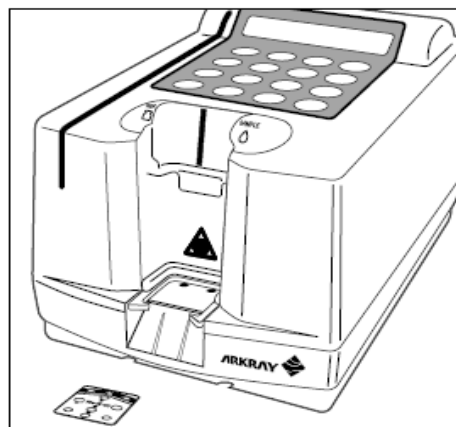
Clean when the plate table becomes dirty. To prepare the EL for cleaning select '2. Submenu 3. Maintenance 2. Table' then switch the analyser off. Wipe with a cotton bud or cloth .



Annual Maintenance

1. Clean the Probe

First clean the plate tray. To prepare the EL for probe cleaning select '2. Submenu 3. Maintenance 3. check measure' Set the check plate into the plate table then press the 'START' key.



The analyser reads the check plate barcode automatically and the plate moves to the optical block. The check measurement starts and the results are printed (below).

SE-1520 V1.00 1999-07-01 10:25
Probe test
Good

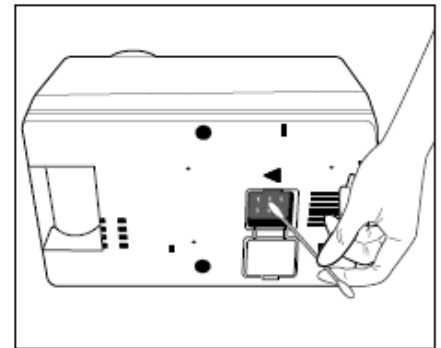
e.g.: Normal printing

SE-1520 V1.00 1999-01-17 11:34			
Probe test			
Error			
	Probe1	Probe2	Probe3
Level1	o	o	o
Level2	o	x	o
Level3	x	x	x

e.g.: Abnormal printing

If an abnormality occurs the probe pins need to be cleaned. To prepare the EL for probe cleaning select '2. Submenu 3. Maintenance 1. Probe' then switch the analyser off.

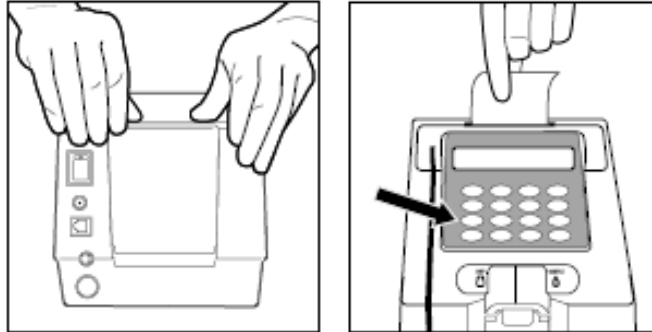
Place the analyser on its side and remove the maintenance cover. The probe pins are now exposed. Clean with a cotton bud to remove any dust or hair.



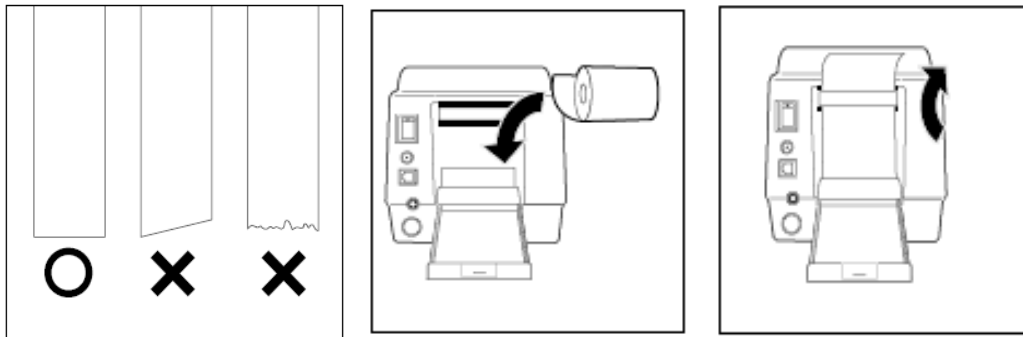


9. How to change printer paper

Open the printer cover. If paper remains, cut it with scissors and press FEED to remove.



To prevent jams prepare the paper by cutting the top off the roll to make a straight edge. Place a new roll of paper in the holder. Insert edge into slot and paper roll will feed automatically. Press FEED to prepare the paper for printing. Close the cover.





10. Spotchem EL Quality 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 Spotchem 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 669033 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
Empty/clean plate tray																															

Weekly Procedures	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5
Clean plate table					

Annual Procedures	Date Performed
Clean probe pins	

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.**



11. Spotchem EL Maintenance Schedule

Maintenance Schedule	Maintenance
Daily Maintenance Customer Maintenance	Empty and clean plate tray
Weekly Maintenance Customer Maintenance	Clean plate table
Annual Maintenance Customer Maintenance	Clean probe pins

12. Spotchem Normal Veterinary Reference Ranges EL

Parameters	Dog	Cat	Rabbit	Horse	Cow	Pig	Sheep	Linear Range	Units
Sodium	136 – 156	144 - 162	129 – 150	132 – 146	132 – 153	139 – 152	136 – 154	50 – 250	mmol/L
Potassium	3.4 – 5.4	3.0 – 5.0	3.5 – 5.6	2.4 – 4.7	3.9 – 5.8	4.9 – 7.1	4 – 6	1.0 – 15.0	mmol/L
Chloride	110 - 115	117 - 123	90 - 120	99 - 109	97 - 111	100 - 105	98 - 115	50 – 200	mmol/L

13. WOODLEY EQUIPMENT COMPANY LTD

Spotchem EL INSTALLATION & TRAINING DOCUMENTATION

Name of Practice:

Address:

Primary Contact:

Phone:

Installation and Training Topics

Name of Installer/Trainer:

Name of Trainee:

Date of Installation and Training:

The above mentioned trainee has undergone a period of formal training
and has demonstrated competence in the following areas:

		YES ✓
1. Instrument Overview		
a.	Power supply	_____
b.	Power switch	_____
c.	LCD display screen	_____
d.	Function buttons	_____
e.	Internal printer	_____
f.	External connection ports	_____
g.	Plate tray and plate table	_____
h.	Card reader	_____
i.	Pipette	_____
j.	Accessories	_____
2. Instrument Menu		
a.	Measure	_____
b.	Submenu	_____
c.	Calibrate	_____
3. Plates		
a.	E-Plates	_____
b.	Reference fluid	_____
c.	Calibration card	_____

- d. Expiry dates _____
- e. Storage temperature (2-8oC) _____
- f. Warm to room temperature before use _____
- g. E-Plate and reference fluid handling _____

4. Sample processing

- a. Calibration _____
- b. Correct sample material & sample volume _____
- c. Correct pipetting procedure _____
- d. Define sample type _____
- e. Load E-Plate _____
- f. Process a sample _____
- g. Access, review and print results internally _____
- h. Identify sampling errors & take appropriate action _____
- i. Dilute if testing urine _____

5. Control processing

- a. Correct control material and assay sheet _____
- b. Correct control reconstitution _____
- c. Correct control storage _____
- d. If refrigerated, remove 20 minutes before processing _____
- e. If frozen, thaw appropriately _____
- f. Expiry date _____
- g. Open-vial stability time _____
- h. QC recommendations _____
- i. Correct procedure in the event of a control failure _____
- j. Importance of keeping control records _____

6. System Maintenance

- a. Empty and clean plate tray _____
- b. Clean plate table _____
- c. Clean probe pins _____

7. Troubleshooting

- a. Demonstrate adequate knowledge of potential sampling problems and system errors _____
- b. Troubleshooting accordingly _____

The trainee named above is deemed to be fully competent in the procedures described and able to complete Spotchem EL tests

Signed Trainer:

Name in Full:

Signed Trainee:

Name in Full:

Date:

This completed and signed documentation serves as a certificate of Spotchem EL installation and training