

Sharp minds

March 2008

WriteView EL-W531 – The sums are stacking up!

One year on and tens of thousands of sales later the replacement for the EL-531WB, the *WriteView* EL-W531, has become a firm favourite for secondary school students.

The Sharp *WriteView* EL-W531 has advanced display features that allow the user to show fractions, square roots, surds, logarithms to any base, including base e, powers, reciprocals, trigonometric ratios, hyperbolic functions etc. All displayed just as they are written and used in textbook layout. Additionally, there are powerful statistical analysis functions, random number features and the ability to work in different base number arithmetic.

In addition to this, the *WriteView* EL-W531 has two unique Sharp innovations:

The first is the **Change Key** – which converts answers between irrational number, fraction and decimal form where possible. The second is a set of four **User Defined keys**, D1 to D4. These allow the user to assign a combination of key strokes that define

an existing keyboard function to each of the keys D1–D4 as a function that can be achieved in a single touch.



With its 96 x 32 pixel 4-line display, 297 available functions, teachers and students support material including a comprehensive operating manual and PC emulation software, the *WriteView* EL-W531 is a powerful education tool. You can win 30 of them for your students – see back page.



Key Features of *WriteView* EL-W531:

- Display shows textbook notation
- 297 functions
- 96 x 32 pixel display
- Constant/chain calculation and last answer recall
- Change key for easy switch between fractions /decimal/ irrational form display
- D1–D4 user defined function keys
- Multi-line playback
- 3 digit punctuation
- Drill function
- PC emulation software for class teaching (not sold with product but available for teachers from EDU dealers)



FREE! A full range of resource materials for WriteView calculators

The WriteView EL-W531 and the new EL-W506 are being supported with a comprehensive set of resource materials to help both teachers and students take full advantage of the advanced capabilities of each machine.

Each resource pack for the WriteView EL-W531 and EL-W506 includes: teacher and student worksheets with problems and worked examples, points for discussion and ideas for extended study. Their purpose is to engage with students and encourage them to develop their understanding of mathematics.

To receive your FREE WriteView Resource Pack please contact your local dealer.

Sharp Discontinues EL-531WB & EL-506WB Models

Sharp has discontinued the EL-531WB & EL-506WB models from the current range and replaced both models with the WriteView EL-W531 & EL-W506.

Both new models are more advanced in technological features and boast the 4-line display which enables students to view calculations just as you would see them written in a text book.

WriteView EL-W531 FAQ's

Q: What size is the display?

A: The four line display is 96 x 32 pixels in size. Answers can be displayed without the pixel information of the original problem being lost at the top of the screen.

Q: Do User Assigned keys D1-D4 mean the calculator is programmable?

A: No. The keys D1-D4 are only a method of one-key access to 2-key or 3-key functions already standard on the calculator.

Q: Is the PC Emulation program easy to use?

A: Yes. The program shows on the PC screen a very clear, stylised image of the EL-W531. The keys of the image perform exactly as the real calculator, which on an interactive whiteboard, make touch key demonstrations very easy.

Q: Can I capture EL-W531 screen displays for use in lesson handouts, homework exercises and worksheets?

A: Yes. A simple display capture button in the PC Emulation program stores all required screen displays in a dedicated folder. Images can be copied from this folder as needed into other user software e.g. Word.

Q: Can the PC Emulation program be run simultaneously on more than one PC?

A: Yes. Once you have the program it can be loaded and run on as many PCs as you require. The program is there to be used and SHARP have deliberately made the software supportive to teachers' needs, without restrictions.

Q: To use fractions, must the fraction button be keyed first?

A: No. You can press the fraction button either before or after the numerator is entered.

Q: Can answers easily be changed between fraction and decimal notation?

A: Yes. One key does it all. The CHANGE key.

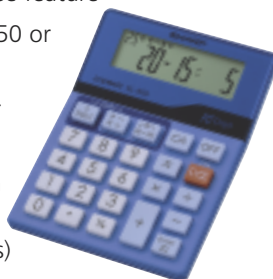
Q: What random numbers features does the machine have?

A: There is a choice: positive random fractions or random integer numbers 1-6 (simulating dice-rolling) or random numbers 0 or 1 (coin tossing) or random integers between 0 and 99.

Sharp launches new range to primary schools

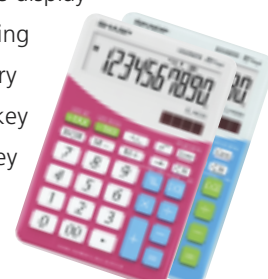
EL-S50BBL

- Drill and practise feature
- Selectable 25, 50 or 100 questions
- Correct answer support
- Mode selection (calculator or maths exercises)
- Suitable for Key Stage 1



EL-M332BBL/BPK

- 10 digit large display
- Decimal setting
- 3 key memory
- Conversion key
- Right shift key
- Tax keys
- Change sign



Sharp Launches *WriteView* EL-W506 – And the success story continues

Following the success of the *WriteView* EL-W531 Sharp launches its latest calculator using *WriteView* display technology – the *WriteView* EL-W506, the display that shows calculations and answers in text book layout – fractions, square roots, surds, logarithms to any base, powers, reciprocals, trigonometric ratios...

The new *WriteView* EL-W506 incorporates all the technological advances of the *WriteView* EL-W531 plus a host of new features. The EL-W506 has a massive total of 556 functions!

Innovative new keys:

Change key which converts answers between irrational number, fraction and decimal form.

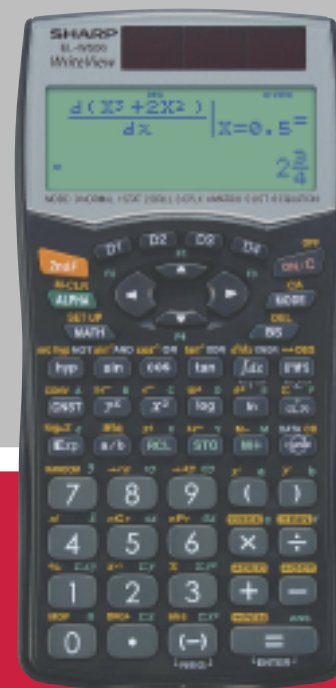
User defined keys D1–D4: the ability to assign a combination of key strokes to the keys D1–D4 to achieve single touch functions.

Functions Keys F1–F4: the ability to store created expressions on any of these 4 keys.

The EL-W506 is more advanced and rich with features:

- Complex number calculation
- Quadratic and cubic equation solver
- Matrix calculations
- List calculations
- Differentiation and Integration
- Powerful statistical analysis

As well as standard keyboard functions, menu driven options give access to the very advanced capabilities of the EL-W506 and, as a particular feature, the calculator can be setup to display your own personal message at power off.



WriteView EL-W506 FAQ's

Q: Can a matrix be converted to a list?

A: Yes. With the calculator set in **MATRIX MODE** there are two built-in functions for converting matrices to a **LIST**. Up to four lists can be created using each of the left hand columns of matrices *matA* to *matD*, where they exist. Alternatively up to four lists can be created using each of the four columns of *matA*, where they exist.

Q: I see that User Defined keys D1–D4 are EL-W506 functions but what are functions F1–F4?

A: The User Defined keys D1–D4 introduced with the EL-W531, allowing the user to combine two or more key strokes on one of the D1–D4 keys, have been added to with keys F1–F4: **Formula Memories**. The user can create an expression or formula and store it using one of the Formula Memories F1–F4 for recall later. If the expression uses any of the standard memories of

the calculator: *A* – *F*, *X*, *Y*, *M* and *ANS* then the expression will be evaluated on recall when these memories have values.

Q: What does the Σ function do?

A: The cumulative sum of an expression can be found using this function. The expression is written, the range of summation defined and the incremental steps, if required, are set. For example, the cumulative sum of the expression $(X + 2)$ can be found as *X* takes values between 1 and 5 in steps of 0.5. (Answer: 45).

Q: What size matrices will the EL-W506 handle?

A: The EL-W506 can store and edit up to four matrices: *matA* to *matD*. Each matrix can be defined up to a size of 4 x 4. Each stored matrix can be used in arithmetic calculations including x^3 , x^2 and x^1 provided matrix dimension rules are obeyed.

Q: What special statistical functions does the EL-W506 have?

A: In addition to all the expected statistical capability of an advanced scientific calculator the EL-W506 has built-in functions to allow the calculation of the probability of a variable being within chosen limits on a Normal Distribution curve.

Sharp Attends Education Exhibitions in 2008!

The Education Show

Sharp will be attending The Education Show, which takes place at the NEC, Birmingham, 28th February–1st March, exhibiting on stand no: IT-W55.

The exhibition will provide Sharp the perfect opportunity to showcase and demonstrate some new and innovative concepts from within the copier, projector and calculator divisions.

ATM Conference 08

Following on from our successful attendance at ATM Conference 08, we will be again exhibiting this year's ATM Conference. ATM will be holding the event at Keele University 3rd–5th April and we will be showcasing the latest model *WriteView* EL-W506.

We will also be sponsoring the treasure trail and evening quiz, by donating some fantastic prizes. If you are going to ATM this year please drop by to see us we would love to demonstrate the new *WriteView* EL-W506 and emulator!

BETT

At the beginning of the year we exhibited at the BETT Exhibition at Earls Court, London, 9th–13th January. Sharp showcased many products across a number of divisions which included calculator, fax, copier, and projector.

WriteView EL-W531 and EL-W506 were demonstrated together with the appropriate PC software emulator.

The document solutions division showcased their new & innovative Schools Information Management System (SIMS) – which is now used in most UK schools from Primary level upwards. It's used to store and retrieve electronic records on each student.

The projector division showcased their three new lightweight projectors PG-150X, XR-30X and XG-F260X all suited to the classroom environment and boast a comprehensive choice of connections including DVI-D, often seen in high-end projectors, all offering digital compatibility with the latest technology – all of these new products, highlighted the diversity of the education product range offered by Sharp.



WIN 30 EL-W531 NEW WRITEVIEW CALCULATORS FOR YOUR STUDENTS!

If you would like to be entered into the free prize draw to win 30 *WriteView* Calculators together with free emulation software all you need to do is to provide your name/name of academic institute/ email address and phone number and you will automatically be entered into the free prize draw.

Please send your details to:
lisa.watson@sharp-uk.co.uk

Prize draw will be held on Monday 27th April 2008.

Winners names will be published in the next edition of Sharp Minds and www.sharp.co.uk/education

Go online, get more help

You'll find a wealth of useful help on the Sharp educational website. This is solely dedicated to providing a complete support solution for teachers and pupils alike – including downloadable manuals and other support materials.



www.sharp.co.uk/education



Questions and feedback

If you have any questions regarding *WriteView* or any of our other educational calculators please contact Ron Johnson, our residential mathematics consultant on: ron.johnson@sharp-uk.co.uk and he will be happy to answer all your mathematical queries.

If you have any comments or feedback on this issue or have a story for the next issue of Sharp Minds, please contact Lisa Watson at lisa.watson@sharp-uk.co.uk or phone: 0208 734 2133

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