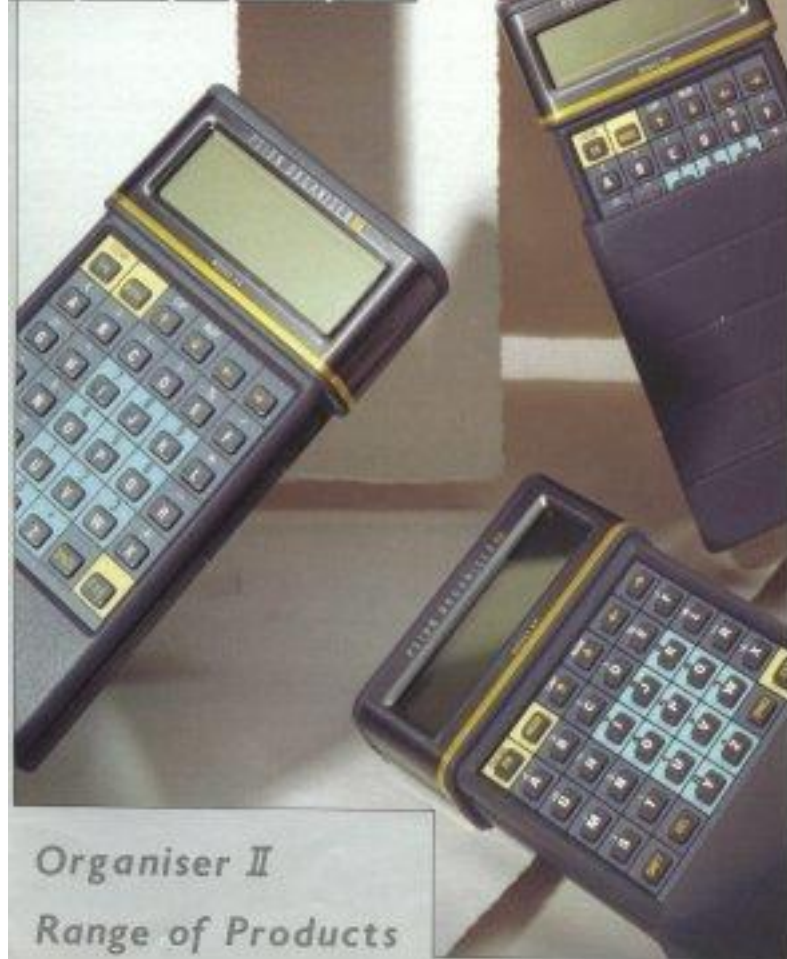# PSION

Organiser II
Range of Products

Power in the Palm
of Your Hand

Say Organiser, and you'll immediately think of Psion's range of pocket-sized
Personal Organisers. Which isn't really very surprising ... with our Psion
Organiser II, we pioneered a whole new and exciting trend in electronic personal
management, enabling anyone and everyone to organise their domestic and
business lives efficiently and productively.

The Psion Organiser II makes important, relevant information available, quite
literally, on tap. It simplifies the search for vital facts, providing the answer
within a fraction of a second on the meagrest of clues. It reminds. It calculates. It
evaluates. It simplifies life. Considerably.

And the Psion Organiser II is, of course, a powerful computer that can be held in
the palm of the hand but with an ease that makes it instantly useable.

....

Four Powerful Models
to Choose from ...

All four models have a large internal RAM memory, three expansion slots that take an extensive range
of additional software, peripheral units and memory packs, plus a highly sophisticated yet easy to use
built-in computer language enabling very fast, highly structured programs to be written for individual
requirements.
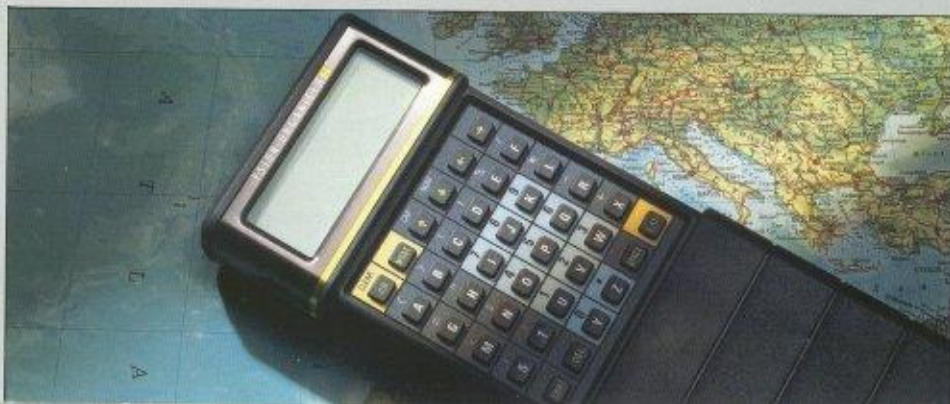
These built-in functions enable you to ...

• *Store* all your vital personal information – such as names, addresses, phone numbers, expenses and so on – and to retrieve it again by typing in two or three letters as a clue. The automatic cross-referencing system does the rest, displaying what you want on the screen in less than a second.

```
D. Fisher, Q.C.
01-588-1234
```

• *Make* calculations: your complete entry is displayed on the screen, permitting you to make changes in the figures if necessary. The calculator has 10 permanent memories, over 50 mathematical and scientific functions and is programmable as well.

```
M9+4.7×cos(Pi/8)
=4·34223380279
```

• *Record* appointments in the diary by date and time, from now until the year 2000. You can browse through your entries, go to specific dates or find a particular entry. An audible reminder alarm can be set and the impending appointment is temporarily displayed on the screen.

```
Jun:23:Fri:10·30
Kate at Marks
```


Information on tap

• *Set* up to eight separate alarm clocks to ring at hourly, daily or weekly intervals.

• *Refer* to the clock showing weekday, date, month, year, hours, minutes and seconds.

• *Check* how much memory you have used in the internal memory and on fitted Datapaks.

• *Use* the powerful programming language, 'OPL' to create your own programs.

```
cls: Print time
until time > 30
```
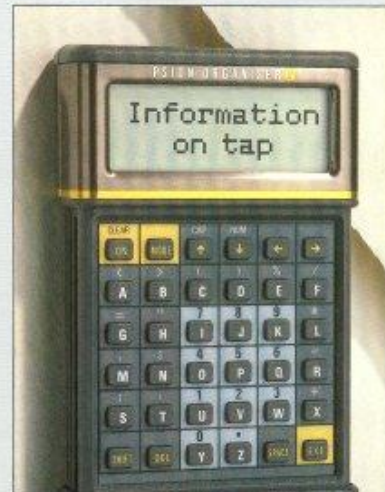
Models LZ and LZ64 – More Memory, More Functions

As you would expect from the inventors of the Electronic Organiser, Psion have produced the most comprehensive Organisers yet, the models LZ and LZ64.

- The four line 80 character screen means more information at a glance.

```
Tue  2 May 1989 Wk18
 8:30a Mtg at Psion
10:00a <Free>
12:30p Lunch with JS
```

- The Diary is a neat, simple solution to time management. It provides you with a daily or weekly view with start and end times for efficient appointment planning including an optional audible alarm. PLUS a graphic representation of the weekly overview with any free time being instantly visible.

```
Mo Tu We Th Fr Mar89
06 07 08 09 10 11 12
```

- The Notepad lets you keep easily retrievable memos, lists, "things to do", expenses and business notes. In fact, the notepad will also

```
              10:32a
ToDo:
1] Call Mike ext5155
2] Buy wine
```

number lines, calculate and sort your data, and you can password protect it encoding sensitive information such as bank account and PIN numbers.

- The massive 64K RAM memory in the LZ64 stores approximately 10,000 words (the equivalent of 30 full typewritten pages) that can be retrieved with a single clue.

- The cross referencing filing system allows you to sort records alphabetically, establish multiple files by specific category, and to search within each file or across all files, programs, notepads and diaries, automatically, to retrieve data.

- There is password controlled access to the machine to prevent unauthorised access.

- The 12 or 24 hour clock has a stop watch and timer.

Summary Specifications – Built-in Software

Compatibility	Model CM and XP software is upwardly compatible to LZ and LZ64.
Menus	Functions selected from a menu using cursor or first letter. The main menu can be customised by the user.
Filing	Cross referencing filing system using simple SAVE and FIND menu items. Automatic scrolling on screen. Text editing facilities. Finds all records which match given search clue. Records can be added, removed, copied or updated. Maximum 255 characters per record over 16 fields (lines). Average access time 0.5 seconds for 32K of data. All files accessible from programming language. Models LZ and LZ64 include sorting and printing of multiple files on each storage device and "wildcard" search clues.
Notepad	LZ/LZ64 only. Free form note taker with built in calculation and numbering facilities for memos, lists, expenses, business notes, records. Password protection (with encryption) and sorting options.
Diary	Tabular form: days horizontal, times vertical. Appointment slots selected with cursor keys, or FIND and GOTO menu items. Text description for each appointment. Reminder alarm can precede any number of appointments by up to 59 minutes. Diary may be tidied to remove old entries, saved in or restored from a storage device. CM and XP: appointment slots at 30 minute intervals. Start time for each appointment may be selected. LZ/LZ64: appointment slots at 15 minute intervals. Start and end times may be selected. Week-at-a-view graphic representation.
Time, Alarms and Calendar	24 hour clock (year, month, date, day, hours, minutes, seconds). LZ/LZ64 have date to the year 2155, week number, home city and country, 12 hour clock and daylight saving options. 1 hour countdown timer and stopwatch with lap times. All models have up to 8 alarms, that may be set with weekly, daily or hourly repeat. LZ/LZ64 include Monday to Friday repeat, choice of alarm sound and a monthly calendar.
Calculator	12 digit accuracy, 10 memories. Complete calculations can be entered and edited to correct mistakes or use "what-if" facility. Unlimited number of brackets may be used. User can set 0 to 12 decimal places. 50 maths and scientific functions and user programmed functions.
Data Storage Devices	One internal (A), two external (B, C) for removable memory packs: Datapaks for secure battery-independent long-term storage, Rampaks and Program packs.
World Time and International Codes	LZ/LZ64 only: International dialling codes for 400 cities in 150 countries plus local time.
Programming	All models contain a powerful, procedure based programming language.

- The 8 independent alarms can be set hourly, daily, weekly, monthly or even for the work week only.

- International dialling codes and world time for 400 cities in 150 countries are available wherever you are.

```
     Florence
      Italy
Fri 10 Mar  5:26P
Dial: 010 39 55
```

Programmability

Built into all our Organiser II models is a powerful operating system and programming language called OPL designed to enable you to write programs easily to solve specific problems.

The high-level OPL language is essentially drawn from BASIC but developed further by Psion engineers using modern structured programming concepts. It is procedure-based, comprehensive and very fast!

Within OPL are full database facilities, enabling you to create files, define, search and locate fields and records quickly and easily.

Using the Organiser II Developer which runs on IBM PC and compatibles, you can also develop, test and de-bug your own programs on your PC before transferring them to any of the Organiser II models.

4 – More
ry, More Functions

mmary Specifications –
Built-in Software

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A Range of Organiser II Software
and

The Organiser II is amazingly flexible and versatile with its wide range of software and peripheral products. Pre-programmed software and memory packs fit flush into the back of any Organiser II, and by plugging in the Comms Link, the Organiser II can talk to your PC and transfer data back and forth with ease.

....

Memory Packs

With Datapaks and Rampaks, it is possible to build an unlimited library of personal data and programs for everyday or specialised use.

DATAPAKS: Are the equivalent of floppy discs in PCs, don't require a power back-up and are less volatile than RAM memory, so they keep your information permanently safe even when removed from the Organiser II. They are available in sizes 8K, 16K, 32K, 64K and 128K sizes and each machine can take two at a time giving as much as 320K of on-board memory in our LZ64 model.

RAMPAKS: Are an ideal alternative if the information being stored needs to be frequently edited or revised. (Excluded from model CM).

FORMATTER: Erases two Datapaks in just 30 minutes leaving them blank for re-use.

....

Psion Printer II

A purpose designed, dot matrix portable thermal printer with 20, 40, 60, 80 column and 256 dots per line graphic modes, underline and double height options and built-in rechargeable battery pack. The charger doubles as the Organiser II AC mains adapter. Organiser II top slot devices (such as RS232 Comms Link) plug into the printer and it has an optional integral magnetic card reader. It prints up to 80 characters per line at a speed of approximately one line per second.

....

Program Packs

Program packs are pre-programmed software that can cover almost any subject from calculating your mortgage payments to how to buy a cup of coffee in Spanish. The possibilities are endless, and there is a wide variety of software packs currently available on the market.
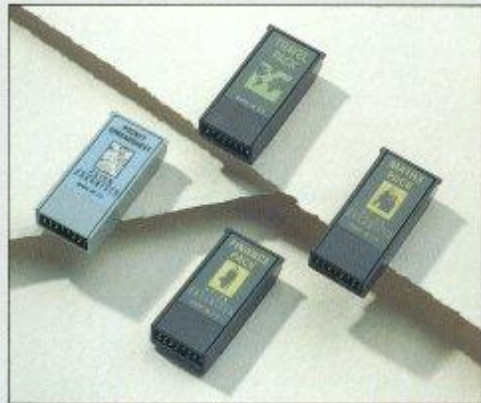
FINANCE PACK: Will do everything from complex financial calculations to keep track of and record expenses and bank accounts giving you a detailed bank statement at all times. Calculates discounted cash flows, interest, annuities, mortgages: records, monitors and analyses expenses as they take place.

SPELLING CHECKER: Just type in the first few letters to define the word, and the Concise Oxford™ Spelling Checker, with over 24,000 words available, will display the correct spelling.

POCKET SPREADSHEET: A full function spreadsheet, 26 columns by 99 rows, that is compatible with Lotus™ 1-2-3.™ Ideal for performing both simple and complex analysis, it will also accept Lotus™ 1-2-3™ worksheets directly from a PC. (Excluded from model CM).

FORMULATOR: Accepts formulae just as you would write them, prompts for numeric values and displays the results. Hundreds of built-in formulae and conversions handle everything from simple sales tax calculations to more complex engineering problems.

TRAVEL PACK: Provides a translation dictionary with over 700 words and phrases translated between English, French, German, Spanish and Italian, currency conversion, weights and measures, clothes size conversion, and dialling codes.

PORTFOLIO: For the private investor, records share, unit trust, gilt and bond investments, the updating of prices and the buying and selling of holdings. Keeps track of fees and dividends.

MATHS PACK: The fast and easy way to solve Bessel functions, polynomial equations, quadratics, the solutions of matrices, Eigenvalues and more.

"Lotus" and "1-2-3" are trademarks of the Lotus Development Corporation. "Concise Oxford" is a trademark of Oxford University Press.

Communications Link

Psion Organiser II has a standard peripheral port at the top of the machine to allow a wide variety of devices to be attached for communications and specialised applications. Once the peripheral has been connected, additional commands which access the peripheral are activated automatically within Organiser II.

By simply plugging in the sophisticated COMMS-LINK interface and cable, the portable Organiser II talks to printers, computers and communication devices equipped with the industry standard RS232 port. Records and files can be transferred in either direction, from the Organiser II to the printer, computer or modem, or from the computer or modem to the Organiser II. The communication software allows for error-free transmission of files through telephone lines via a modem. This system enables the Psion Organiser II to be used as a portable database, holding information from a central computer or for collecting and transferring data to other systems. It can also communicate with messaging services to access telex or electronic mail networks. Moreover, you can print, send or receive information from the OPL programming language.

The Comms Link includes interface, cable and Organiser II software, with asynchronous communications at 50 to 9600 baud and it allows bi-directional transfer of files, OPL programs, notepads and spreadsheets. It includes RTS/CTS, XON/XOFF handshaking and XMODEM error-checking protocols. In addition, the top port accepts the other standard Psion peripherals such as the Bar Code Reader and Magnetic Card Reader and because of the power and versatility of the Organiser II, the machines can also be customised for large scale Corporate applications.

....

BOOKS: Two detailed and readable books explaining the Organiser II functions and taking the reader into programming and file handling.

LEATHER CASE: Handsome black leather case.

Summary Specifications – OPL Programming Language

LANGUAGE
PROCEDURE-BASED, BASIC-LIKE, EXTENDABLE

CONSTRUCTS
IF, ELSEIF, ELSE, ENDIF
DO, UNTIL
WHILE, ENDWH
BREAK/CONTINUE
GOTO

VARIABLES
EXTENT	Local, global, single and arrays.
TYPE	Real, integer, string, fields.

COMMANDS
AT i,j	Position on screen.
BEEP i,j	BEEP with i duration, j period.
CLS	Clears the display.
CURSOR ON/OFF	Sets cursor mask.
EDIT a$	Edit a string.
ESCAPE ON/OFF	Allows/Disallows user to break into program.
INPUT i%/x/a$	Input an integer/number/text string.
KSTAT i	Set keyboard status.
ONERR LABEL	Goto label on error.
ONERR OFF	Turns off error protection.
OFF	Turns Organiser II off.
PAUSE i	Wait in 50 millisecond units.
POKEB/W i, j	Poke j at address i.
PRINT a$, i;c	Print numbers or strings.
LPRINT a$, i, x	Print to a printer.
RAISE i	Generate an error condition.
RANDOMIZE	Seed the random number generator.
REM	Remark statement.
RETURN i/x/a$	Return i/x/a$ to calling procedure.
STOP	Exit from the language.
TRAP	Trap errors on the next command.

FILE HANDLING
APPEND	Append a record.
COPY	Copies a file or files.
CREATE	Creates a file.
DELETE	Deletes a file.
ERASE	Erases a record.
FIRST/LAST/ NEXT/BACK	Gets the first/last/next/previous record.
OPEN/CLOSE	Opens/closes a file. Up to 4 files can be open at a time.
POSITION	Selects a record by number.
RENAME	Rename a file.
UPDATE	Update a record.
USE	Change files.

FUNCTIONS
FIND (a$)	Finds record containing string a$.
DATIM$	Date time string.
FREE	Returns free memory in bytes.
COUNT	Returns the number of records in a file.
POS	Returns the correct record number.
SPACE	Returns free of space on the device.
DIR$(a$)	Returns file name.
FIX$(x,i,j)	Returns x as a fixed point decimal number.
GEN$(x,i)	Returns x in the best fit format.
NUM$(x,i)	Returns x as an integer.
SCI$(x,i,j)	Returns x in scientific format.
ERR	Returns the last error number.
ERR$(i)	Returns the error string associated with an error number.
DISP(i,a$)	Display a record.
MENU(a$)	Provides a menu option.
VIEW(i,a$)	Displays a scrolling string on the screen.

ADDITIONAL FUNCTIONS
SECOND, MINUTE, HOUR DAY, MONTH, YEAR

ABS(x), ATAN(x), COS(x), DEG(x), EXP(x), FLT(i), IABS(i), INT(x), INTF(x), RND, LN(x), LOG(x), PI, RAD(x), SIN(x), SQR(x), TAN(x).

GET, GET$, KEY, KEY$

ASC(a$), CHR$(x), HEX$(i), LEN(a$), LOC(a$, b$), LOWER$(a$), UPPER$(a$), VAL(a$).

LEFT$(a$,i), MID$(a$, x%, y%), RIGHT$(a$,i), REPT$(a$,i).

ADDR(i%/x/a$/a()), USR(i,j), USR$(i,j), PEEKB(i), PEEKW(i).

EOF, EXIST(a$), RECSIZE.

LZ AND LZ64 ONLY
%

ASIN($\times$), ACOS($\times$)

COPYW, DELETEW, DIRW$, FINDW$

SUM($\times_1$, $\times_2$ $\times_3$,...,$\times_n$), MEAN($\times_1$, $\times_2$ $\times_3$,...,$\times_n$), STD($\times_1$, $\times_2$ $\times_3$,...,$\times_n$), VAR($\times_1$, $\times_2$ $\times_3$,...,$\times_n$), MAX($\times_1$, $\times_2$ $\times_3$,...,$\times_n$), MIN($\times_1$, $\times_2$ $\times_3$,...,$\times_n$), SUM(a( ),n%), MEAN(a( ),n%), STD(a( ),n%), VAR(a( ),n%), MAX(a( ),n%), MIN(a( ),n%)

MENUN(n%, menu$)	LZ menu option
DAYS(day, month, year)	Date to days conversion
DOW(day, month, year)	Date to day of week conversion
WEEK(day, month, year)	Date to week conversion
DAYNAME$(d%)	Day to day name string
MONTH$(m%)	Month to month name string
CLOCK(n%)	Puts real time clock on screen
OFF n%	Off for n% seconds
UDG x%, a%, b%, c%, d%, e%, f%, g%, h%	User defined graphic symbal

Summary Specifications – Hardware

Internal Memory	ROM: 32K (models CM and XP) or 64K (models LZ/LZ64) containing operating system, OPL language and built-in applications. RAM: 8K – model CM; 32k – models XP and LZ; 64K – model LZ64. 1K of memory equivalent to 1024 characters of information.
Mass-storage Devices	Datapacks are solid-state plug-in memory units for secure long term retention of data. Available in 8K, 16K, 32K, 64K, 128K sizes. 32K Rampaks can be used for storing data which frequently changes, such as during program development. Program packs contain pre-written software. Up to two packs can be fitted at once. Access speed is 100K per second. CM: Datapaks up to 64K each, most program packs. XP and LZ/LZ64: Datapaks up to 128K, 32K Rampaks and Program packs.
Memory Retention	Internal memory: indefinite, whilst supported by battery or AC mains adaptor. Without adaptor, 90 seconds allowed for battery change. Datapaks and Program packs: permanent. Rampaks: separate battery in Rampak lasts for at least 3 years.
Display	Dot matrix character based LCD. Character set includes 8 user defined characters. 78 characters directly accessible from keyboard. CM and XP: 2 lines each of 16 characters with 200 character set. LZ/LZ64: 4 lines each of 20 characters with 232 character set.
Keyboard	36 multi-function keys providing 26 upper and lower case alpha, 10 numeric, 16 operator and punctuation keys, and 4 cursor keys. Audio 'click' and tactile mobile feedback. Auto-repeat after 1 second's depression.
Power	PP3 sized Alkaline type battery or equivalent, giving 2-6 month life in typical usage. Power consumption 50µA to 100mA. External AC mains adaptor optional.
Peripheral Interface	16 pin slot behind sliding door on top of machine. Accepts wide range of devices including Psion Printer II, RS232 Comms Link, Bar Code and Magnetic Card Readers, and AC mains adaptor.
Audio	Piezo-electric sounder capable of 300Hz to 10KHz tones of 1 msec to 30 second duration, under software control from OPL.
Dimensions	$142 \times 78 \times 29$mm with protective case closed (approximately $5\frac{1}{2} \times 3 \times 1$ in).
Weight	Approximately 250g without battery (8.8oz).
Durability	Hard protective sliding case. Gold plated contacts.
Operating Temperature	0-50°C.

Features	CM	XP	LZ	LZ64
Screen	32 char 2 line	32 char 2 line	80 char 4 line	80 char 4 line
Memory				
Internal ROM	32K	32K	64K	64K
Internal RAM	8K	32K	32K	64K
(approx words)	1250	5000	5000	10000
Datapak/Rampak slots	2	2	2	2
Max Datapak size	64K	128K	128K	128K
Rampak capability		•	•	•
Built-in-Applications				
Automatic filing system	•	•	•	•
Extended filing system			•	•
Diary with alarm	•	•	•	•
Week-at-a-view			•	•
Calendar			•	•
Alarms	8	8	8	8
Calculator (10 memory)	•	•	•	•
Notepad			•	•
Password protection			•	•
Data encryption			•	•
World times (400 cities)			•	•
International dialling codes			•	•
Clock	•	•	•	•
Stopwatch			•	•
Timer			•	•
Programmability	•	•	•	•
External Applications				
Large range of program packs	•	•	•	•
Range of Peripherals				
RS232 Comms Link	•	•	•	•
Psion Printer II	•	•	•	•
Mains Adaptor	•	•	•	•
PC Developer	•	•	•	•
Barcode Reader		•	•	•
Magnetic Card Reader		•	•	•
Characteristics				
9 V Battery	•	•	•	•
Battery life, approx	2-6 mths	2-6 mths	2-6 mths	2-6 mths
Data retention during battery change	•	•	•	•
Protective sliding case	•	•	•	•
Size and Weight (without battery)	142 × 78 × 29 mm (approx 5 1/2 × 3 × 1 inch) 250g (8.8oz)			

PSION