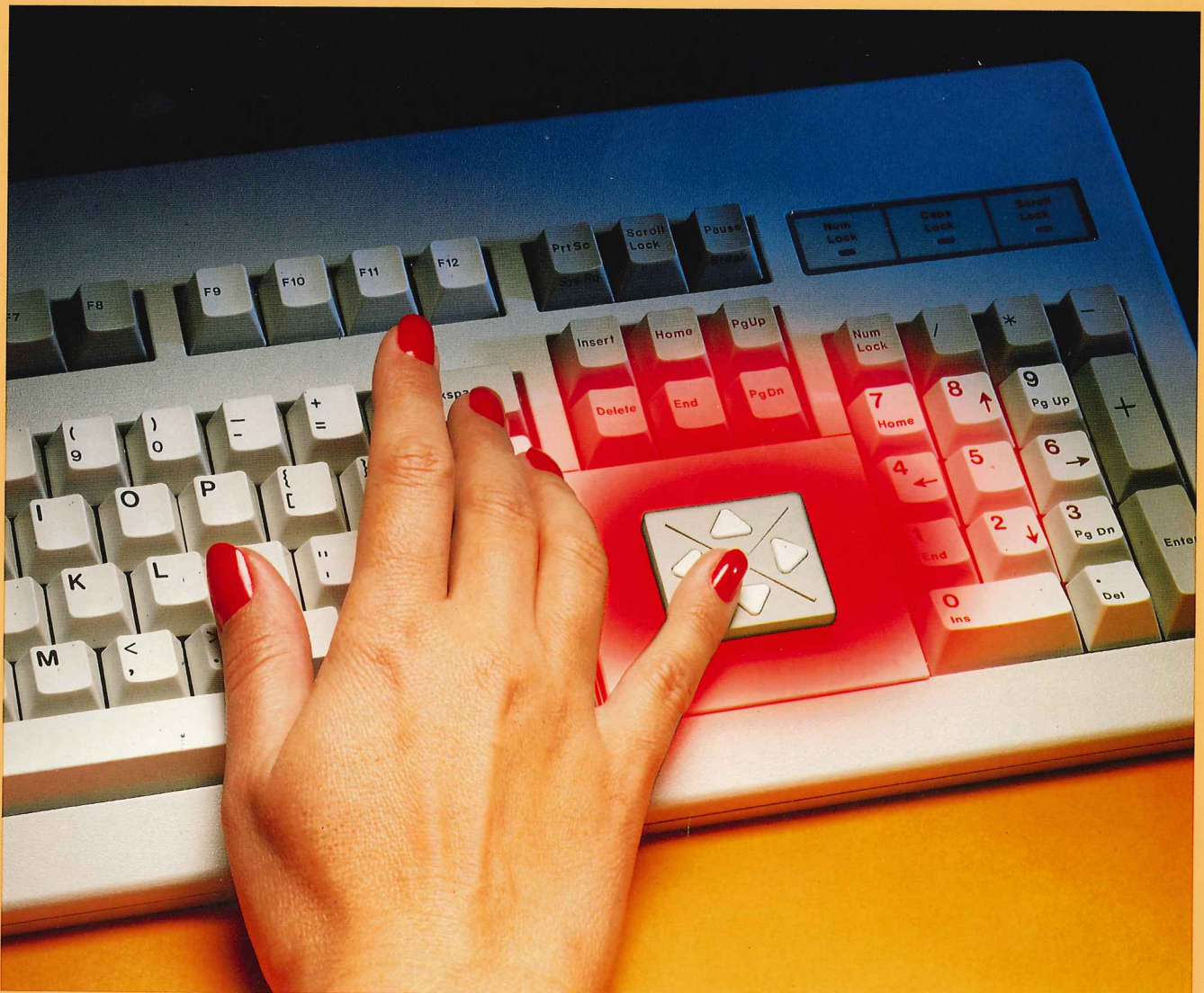




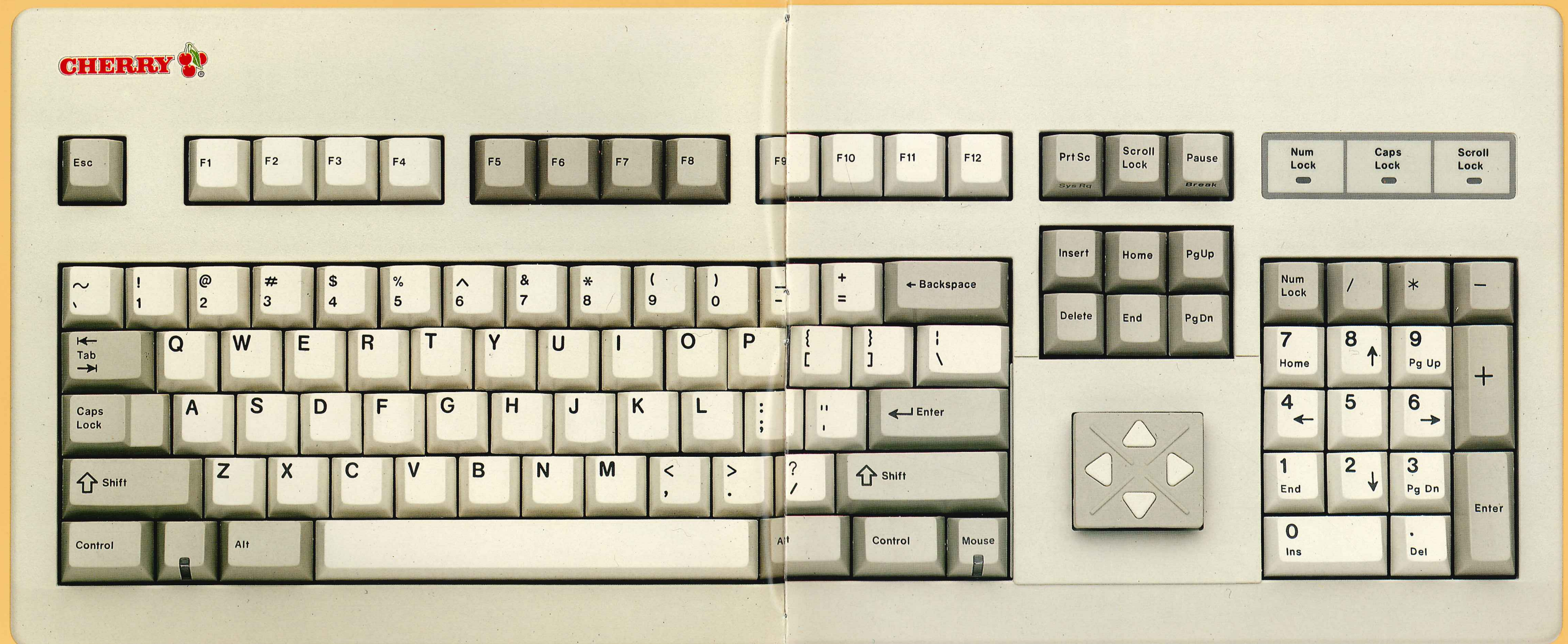
Cherry MouseBoard.®

A new Keyboard with pioneering
Technology.
Featuring integrated Mouse and
Cursor Functions.
For PC, XT, AT and PS/2 Systems.



Main Advantages

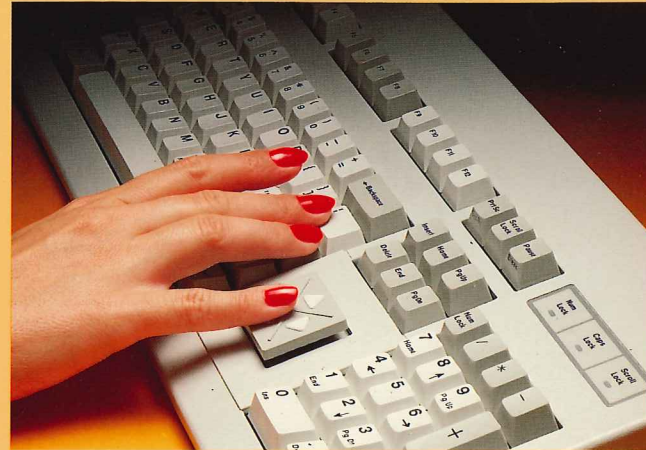
- The combination of Cherry keyboard technology with a Cherry MousePanel creates a totally new ergonomic concept.
- Fatigue-free input as wrist can be rested even during extended periods of operation of the Cherry MousePanel.
- Readily changeable between mouse and cursor modes.
- Compatible with Microsoft* protocols.
- Fast and precise pointing control.
- Speed of pointer movements is in proportion to the movement and the speed of the movement of the Cherry MousePanel.
- In comparison with a normal mouse the distance between the finger position on the home-row and the pointing device is negligible.
- No additional working areas are required.
- An excellent price/efficiency ratio is achieved through:
 - combination of keyboard and mouse technologies.
 - specific application of high quality materials, UL 94 approved.
 - automated manufacturing procedures with integrated test stations.
 - most modern quality control systems defined by DIN ISO 9001.
 - use of failure prevention methods such as FMEA and SPC.
 - fulfilment of the latest ergonomic requirements.
- Repeat key for acceleration.



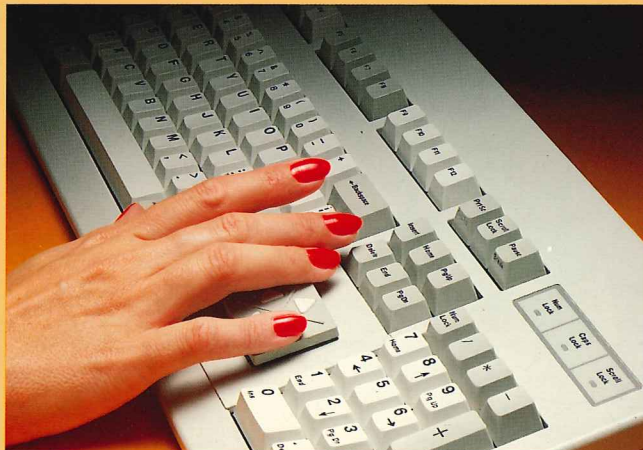
User Benefits



The integration of mouse and cursor functions into the Cherry MouseBoard eliminates separate mice and cursor keys.



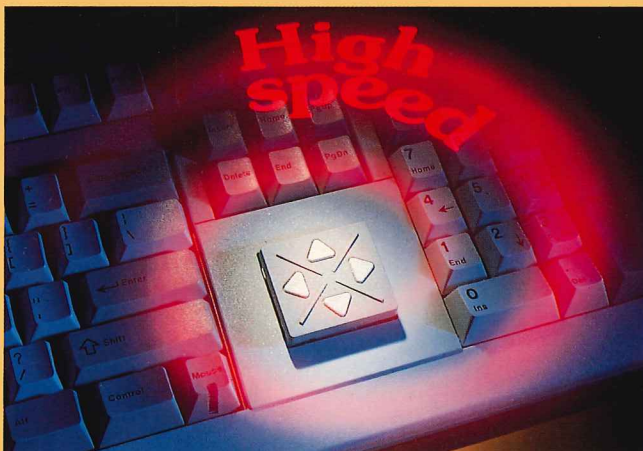
Can be effortlessly moved in any direction. Maximum precision in positioning. Wrist support to minimize hand fatigue.



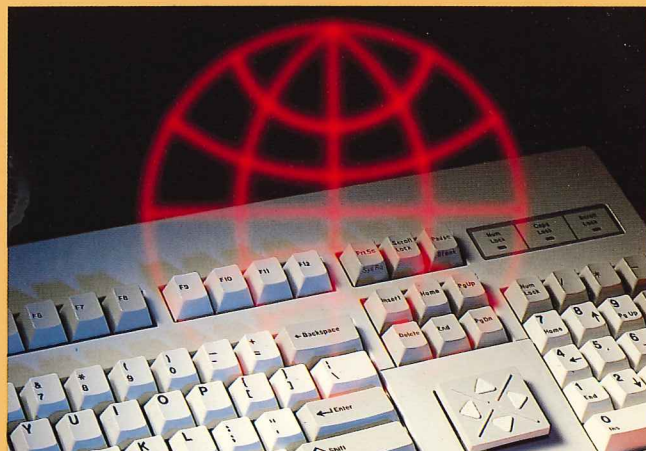
Cursor functions are controlled by exact gliding movements of the Cherry MousePanel. Functions are activated by pressing the integrated keys.



Integrated Cherry MousePanel with high resolution.



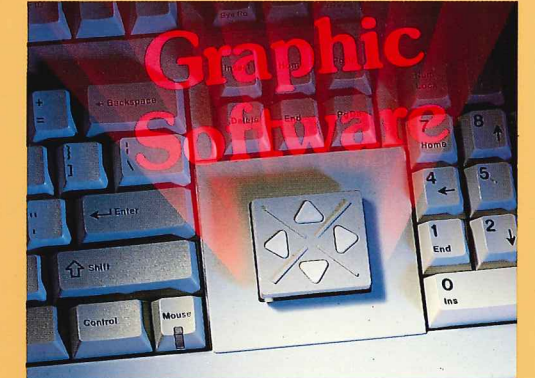
The speed of the repeat function is in proportion to the movement of the Cherry MousePanel. This is highly advantageous for rapidly paging through text in word processing programs and in data base applications. Moreover the hand does not have to leave the keyboard when operating the Cherry MousePanel.



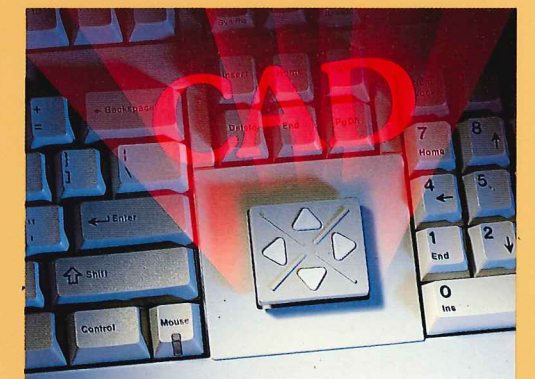
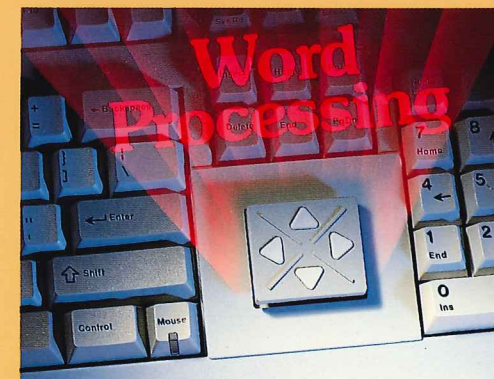
The Cherry MouseBoard – a world premiere with pioneering technology.

Typical Applications

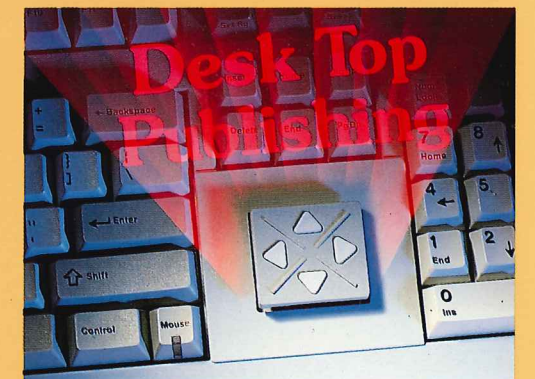
Operating Systems.
Graphic Software.



Word Processing Programs.
CAD.



CAE.
Desktop Publishing.



Data Base Applications.
Spreadsheet.



Cherry MouseBoard Package includes:

- Cherry MouseBoard.
- Graphic software "Paintshow" (5/4" diskettes).
- Cherry MouseBoard driver (5/4" diskettes).
- Manual "Paintshow".
- Manual Cherry MouseBoard.

Important Features

- Compatible to IBM* PC systems.
- Integrated Cherry MousePanel is compatible with Microsoft* and IBM* protocols.
- Fatigue-free operation with minimal risk of multiple actuation through use of ergonomic »Cylindrical« keys.
- Sliding switch for selection of PC, XT or XT 286, AT and PS/2 operation.
- LED indicators show selected mode.
- 4 mm full-travel keyswitches.
- Use of Cherry MX keymodules with »Gold Crosspoint« contacts.
- Reliability: MCBF = 1×10^9 operations.
MTBF ≥ 80.000 hours.
- Long life expectancy of individual keys: $> 50 \times 10^6$ operations.
- "Deep Dish" sculptured keys for F and J index finger locations and a dimple on the "5" in the numeric pad for quick and accurate homing when touch-typing.
- Wear resistant keycap legends.
- Height of 3rd keyrow is 30 mm (measured from table top with keyboard in flat position), conforming to the most recent research results regarding ergonomic requirements for display workstation.
- Super low-profile, minimum height.
- Linear feel. Additional version (soft tactile feedback, tactile "click") upon request.
- Synchronous data format for keyboard communication.
- Asynchronous data format for mouse communication.
- N-Key-Rollover.

Mechanical Data

(Keyboard)

Total travel: 4–0.4 mm.
Pretravel: 2 ± 0.6 mm.
Operating force: 60 ± 20.0 cN.

Mechanical Data

(Cherry MousePanel)

Displacement: $\pm x = 14.5$ mm.
 $\pm y = 16.5$ mm.

Electrical Data

Power supply:
+ 5V/DC, current consumption < 200 mA.

Interface:

- Keyboard interface: Bidirectional, serial synchronous.
The keyboard communicates with the systems via clock and data lines.
- Interface Cherry MousePanel: RS 232 C.

Data format:

- Keyboard: Data transfer to and from the keyboard is in synchronous IBM*-format.
AT-, PS/2 and XT 286 Mode: idle state data and clock lines HIGH.
PC, XT mode: idle state: data line LOW, clock line HIGH
- Cherry MousePanel:
Asynchronous Microsoft* protocol.

Data buffer:

All codes are buffered prior to output (buffer capacity 16 bytes).

Keyboard input sequence:

N-Key-Rollover:
Generation of "ghost" characters is prevented by use of integrated decoupling diodes in the keymatrix.

Autorepeat:

All keys are equipped with automatic repeat function, except for "Pause" key.

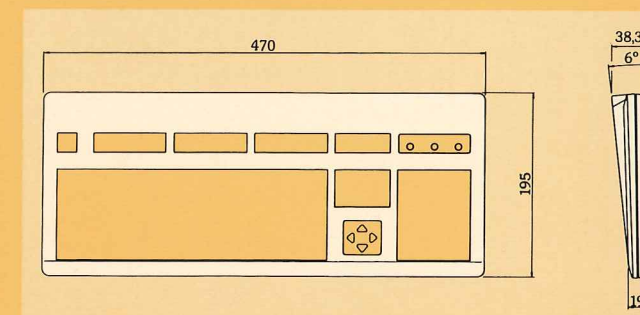
Keyboard self-test:

Upon power-up or if requested by system, the keyboard performs a self-test routine. If no faults are detected, the keyboard transmits the hexadecimal "AA". Any other code is interpreted to mean the keyboard is defective.

Temperature range:

Storage temperature: -40°C (-40°F) to $+70^\circ\text{C}$ ($+158^\circ\text{F}$).
Working temperature: 0°C ($+32^\circ\text{F}$) to $+60^\circ\text{C}$ ($+122^\circ\text{F}$).

Dimensions



Ordering Codes

US-English	UK-English	German	French
G80-3500 HAU	G80-3500 HAG	G80-3500 HAD	G80-3500 HAF

* Microsoft is the registered trademark of the Microsoft Corporation.
* IBM ist the registered trademark of the IBM Corporation.

Housing



Preparation of specifications of the components including their technical data is carried out due to internal Cherry tests in accordance with approved procedures only.

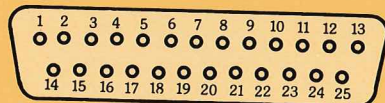
Notes for end users:
With respect to the variety of applications we suggest that you consult an expert regarding product modifications.

Pin Assignment

Asynchronous interface
25 pole SUB-D socket plug

Pin	Assignment
2	TXD
3	RXD
4	RTS
5	CTS
6	DSR connected to 20
7	GND
20	DTR connected to 6

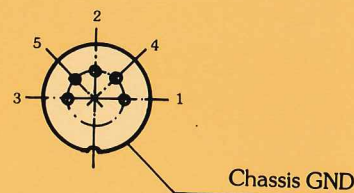
No other pins allocated.



Pin Assignment

Keyboard interface

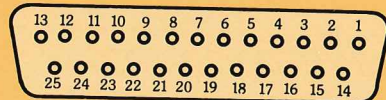
Pin	Assignment TTL	RS485/422
1	CLOCK	-OUT
2	DATA	+OUT
3	free	
4	GND	GND
5	+5V	+5V



Pin Assignment

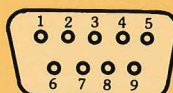
Pin	Assignment
2	TxD
3	RxD
4	RTS
5	CTS
6	DSR
7	SG
8	CD
20	DTR
22	RI

No other pins allocated



Socket Assignment

Pin	Assignment
1	CD
2	RxD
3	TxD
4	DTR
5	SG
6	DSR
7	RTS
8	CTS
9	RI



Adapter for PS/2 Systems

Mini DIN plug Pin	Diode coupling Pin
1	2
2	3
3	4
4	5
5	1
6	/
shell	shield



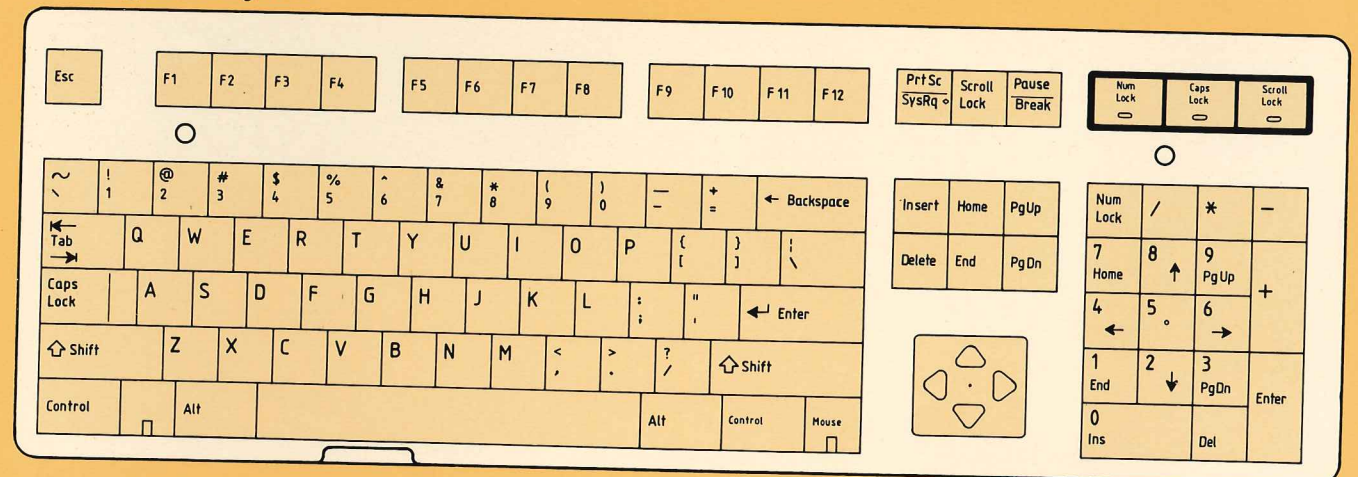
Part No.: 617-0580

Adapter for RS 232 (V 24)

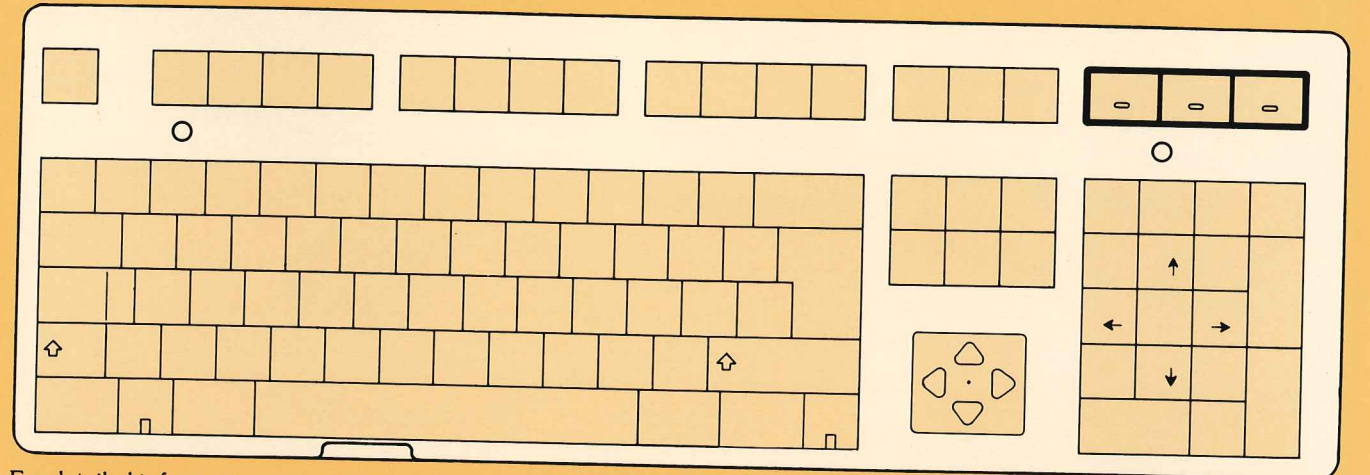
25 pole SUB-D pin plus Pin	9 pole SUB-D socket plug Pin
8	1
3	2
2	3
20	4
7	5
6	6
4	7
5	8
22	9
shell	shield

Part No.: 617-0935

US-English Layout



Other Country Versions



For detailed information regarding specific country layouts please refer to our brochure "Multi Function Keyboards-Layouts".

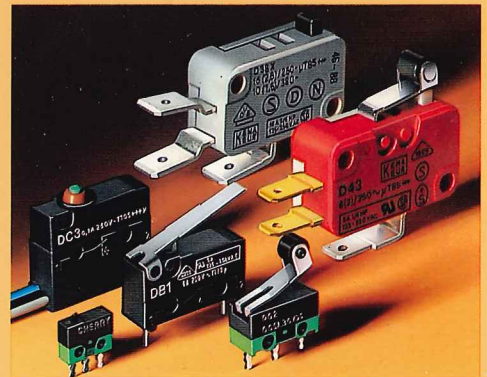
Switch to the Future.

Keyboards of high technology and excellent quality.

With high switching reliability even for speed typing. Standard or customized, intelligent or non-encoded versions. Connectable to all popular EDP systems. Modern design. Harmony in colours. Variety of sizes and heights. Ergonomic styling. With or without housing.

Keymodules. For high technology keyboards.

M8, M9, MX. Keyswitches with exceptional performance. High switching reliability by »Gold Crosspoint« contacts. Low profile design. Excellent touch feeling. Variety of keycap styles and colours. Ideal for ergonomically designed keyboards.



Selector switches with assured security and long life.

Available in many standard and customized codes. Thumbwheel, leverwheel or push versions. Gang assemblies. Solder-pins, connectors or plain soldering. Standard, miniature and subminiature sizes. Also illuminated by LEDs or lamps. Customized lettering and stop limitation is available.

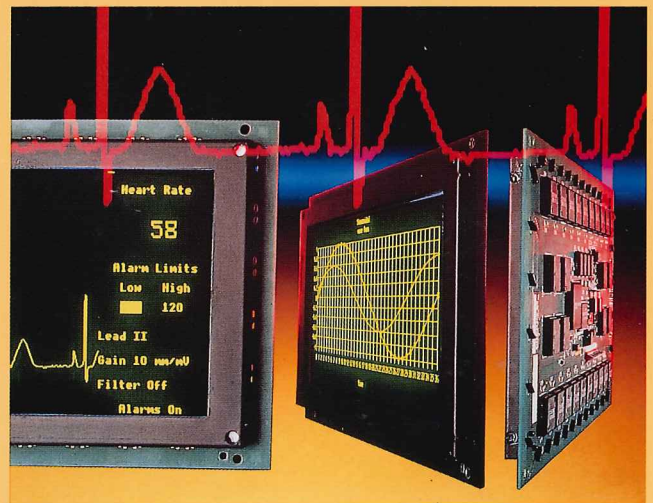
Snap switches for the future.

For precise switching and highest reliability. Large range of standard and non-standard models. Many different connecting possibilities. Standard, miniature and subminiature sizes. And a large number of auxiliary actuators.



New generation digitisers.

Extraordinary precision, enhanced resolution, increased speed, improved shielding, simple set-up and ease of use are the features of Cherry digitisers. The total digitiser package comes complete with stylus pen, cursor, power supply and comprehensive manual.



New generation displays.

For text and graphic applications. With absolute and continuous brightness of all letters. Stable display picture. Long life. Slim profile. Light weight. Low power consumption.

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