Cherry 1600

IBM*-MF-compatible Keyboard with integrated Barcode Decoder.
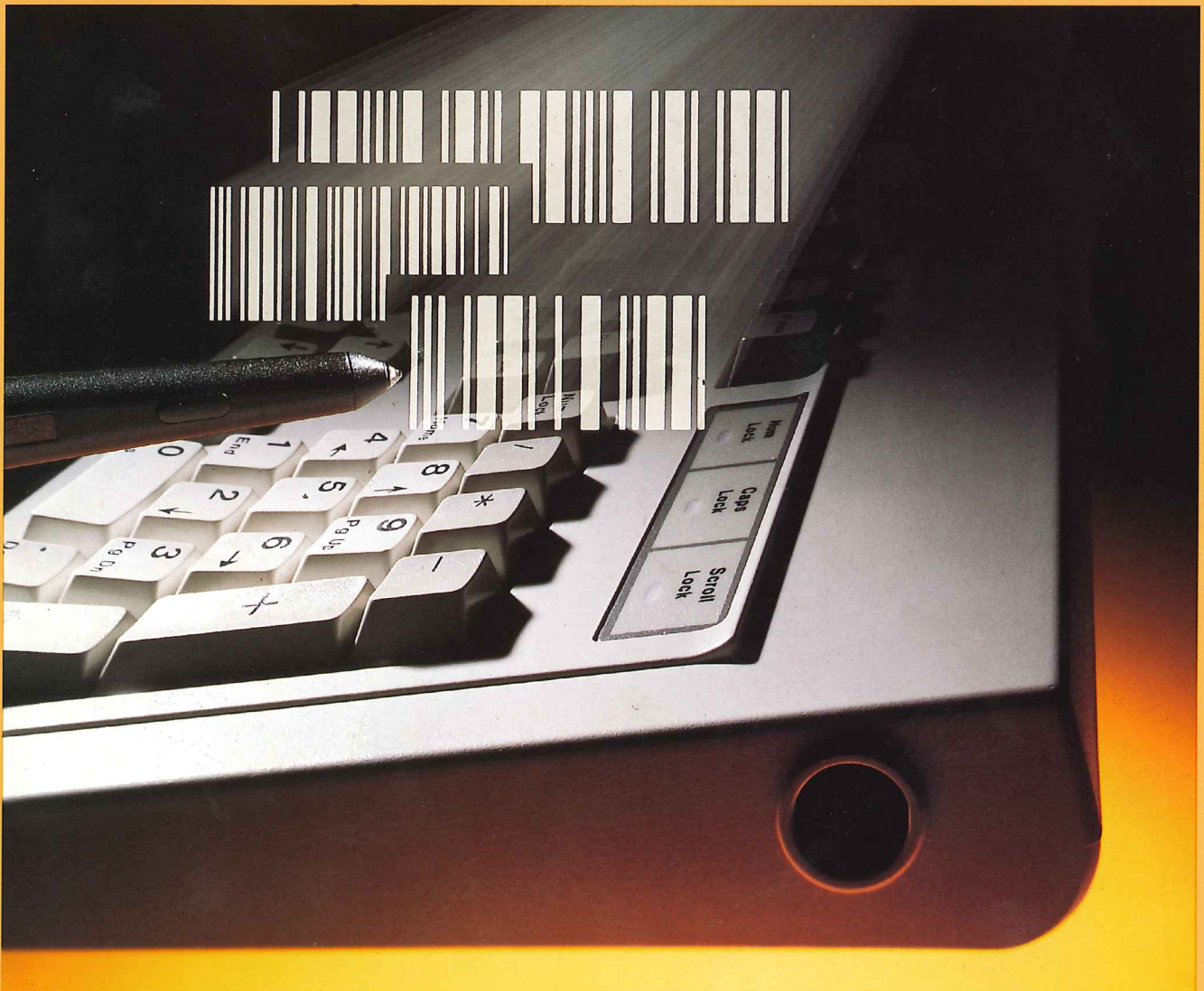
General Information

The Cherry 1600 is a data-entry device with integrated barcode decoder unit. All popular barcode reading devices can be connected, including optical pens (wands), laser scanners and CCD scanners.

Data is exchanged between the keyboard and the system exclusively via a single bidirectional, serial synchronous IBM-compatible keyboard interface. That means that although the Cherry 1600 actually comprises two components (keyboard and barcode reader), only the keyboard port of the computer is used. No special driver software is required. This keeps the system's V.24 (RS-232C) serial port free for other purposes. The keyboard layout is available in a wide range of language and country versions.
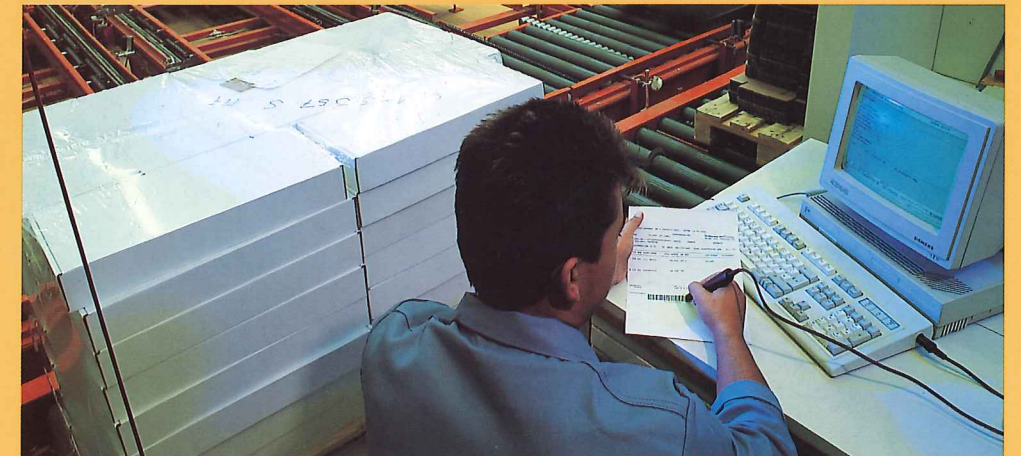
Applications

The Cherry 1600 is excellently suited for user-friendly applications in plant data entry, POS, production data capture, identification of incoming and outgoing merchandise, luggage management, and a host of other barcode uses.

Figure 1
Management and control of luggage movements at airports
Figure 2
Plant data capture
Figure 3
Data capture in production processes
Figure 4
POS applications, here for managing medications in pharmacies
Figure 5
Identification of incoming and outgoing merchandise

Reliability, long life, precise contact closure, and ergonomic design are the primary criteria for developing keyboards. Without such input devices, it would be impossible, even in the future, to communicate efficiently and painlessly with computers or multifunctional terminals. In addition to the usual Cherry quality this keyboard combines modern technology with comfort and offers the eye-catching design of a self-contained system, in which various functions are united.

All our keyboards are now available in European CFC-free environmentally friendly quality.
With 100% testing.
90% recyclable.
In all language versions.
All approvals and certifications applied for.

The bottom line is:
Cherry quality won´t stand for compromises.

Outstanding Advantages

- More cost-effective than stand-alone units.
- The computer's V.24 (RS-232C) serial port or other slot is not needed and can be used for other purposes.
- No special software modifications required, since all entries are made via the keyboard interface.
- Enhanced workplace organisation and manageability.
- Barcode decoder unit.

Barcode Decoder

- Autorecognition of different code types.
- Supports connection of barcode pens and wands of all resolutions, laser scanning guns, CCD scanners and swipe readers.
- Up to 32 characters can be read (not counting start and stop codes).
- Buzzer sounds after each successful reading operation.
- Two headers (codes transmitted prior to the actual barcode data) and two terminators (codes transmitted after the actual barcode data) with up to 12 characters each can be programmed.
- All data from connected reading devices is transferred via the keyboard interface.
- All programmed data and the momentary keyboard mode remained stored when the system is powered down (typically for at least 10.000 programming cycles).
- Please consult with us before connecting reader units that have not been tested by Cherry.

Barcode Types

- Code 39 (standard or full ASCII)
- Code 2 of 5 interleaved
- Code 128
- Codabar
- UPC/EAN/JAN codes
- Individual codes types can be separately enabled

Programming Mode

After activating the programming mode using DIL switches, programming can be done either using bar code sheets or manually with the keyboard.

Technical Data

Electronics

Power supply:
+ 5 V D.C. ± 5 %, current consumption 150 mA typ., SELV (without reading device).

Barcode reader:
5 V/200 mA max.

Interface:
Bidirectional, serial synchronous. The keyboard and connected reader devices communicate with the system via the clock and data lines.

Data outputs:
Open collector TTL

Data buffer:
All codes are buffered before being output.

Autorepeat function:
All keys have an autorepeat function. Delay time and frequency of repetition can be changed from the system.

For AT and PS/2 systems.

Mechanical Elements

Housing dimensions (L x W x H): 486 mm x 207,5 mm x 36 mm.

Linear actuation characteristic.

Mechanical MY keymodules with membrane contacts (FTSC technology):
Total travel: $4 \pm 0,4$ mm
Pretravel: $2 \pm 0,6$ mm

Temperature ranges:

Storage: - 40° C to + 65° C
Operation: 0° C to + 50° C

Approvals and Certifications

- RFI/EMI: FCC Part 15, Subpart B, Class A; DBP Vfg. 1046/1984 (VDE 0871, Class B); CISPR 22/EN 55022
- ESD: IEC 801-2: 15 kV
- Ergonomics: ZH 1/619; keyboard layout (German): DIN 2137, Part 2
- Safety: UL 1950; CSA C 22.2 no. 220

Environmental Parameters

- Minimal packaging, no composite materials used.
- Recycled plastics added to help reduce consumption of natural resources.
- Designed for easy disassembly to enhance recyclability.
- Plastics used are designated to facilitate segregated collection.
- CFC's, chlorinated hydrocarbons and many other environmentally degrading substances are no longer used in manufacture of our final products. We have also concluded agreements to this effect with our suppliers.
- Low-pressure plasma technology used for degreasing of metal parts.

Language/Country-specific Layout
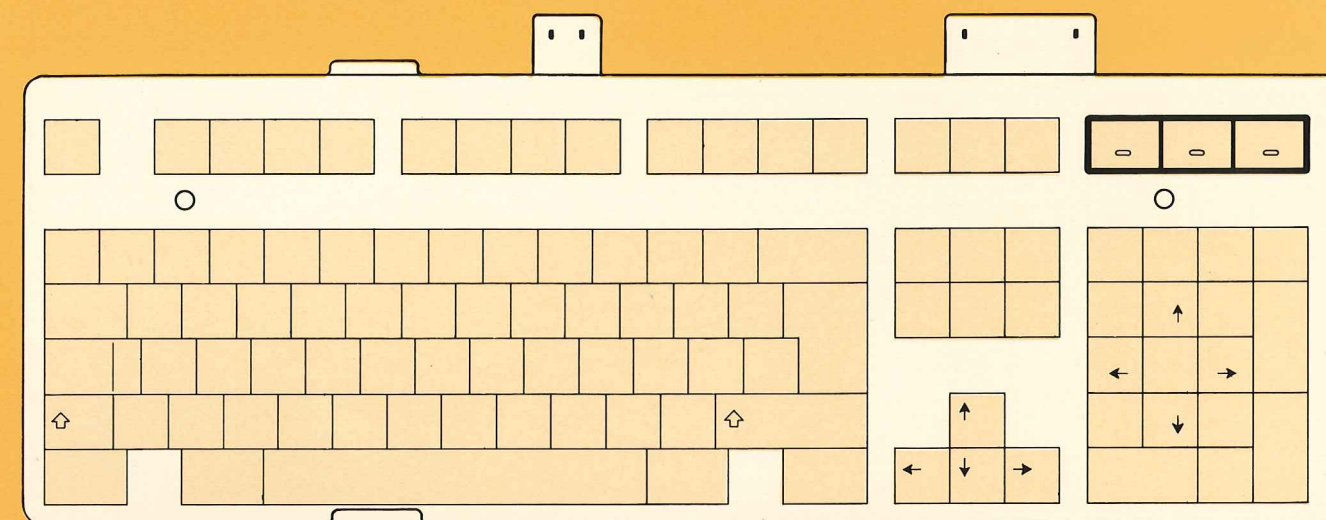
G80-1600

An excellent alternative to the keyboard described in this brochure is our G80-1600. This model is equipped with Series MX mechanical keymodules with "Gold-Crosspoint" contacts and separate "Prog"- and "Laser"-keys.

Ordering numbers
G80-1600
G81-1600

U. S. international	G80-1600 HAU G81-1600 SAU
British English	G80-1600 HAG G81-1600 SAG
German	G80-1600 HAD G81-1600 SAD
French	G80-1600 HAF G81-1600 SAF

Accessories

Barcode wand
- High resolution, plastic casing: No. 630-0238
- Medium resolution, plastic casing: No. 630-0245
- Low resolution, metal casing: No. 630-0235

Laser scanning gun: No. 630-0239

Swipe reader: No. 630-0240

CCD scanner: No. 630-0292

Electrotechnical and Electronic Products for the Future.

Keyboards of high technology and excellent quality.
With high switching reliability even during speed typing. Standard or customized, intelligent or non-encoded versions. Connectable to all popular EDP systems. Modern design. Harmoneous colours. Variety of sizes and heights. Ergonomic styling. With or without housing.

Keymodules. For high technology keyboards.
M 8, M 9, MX. Keyswitches with exceptional performance. High switching reliability through »Gold Crosspoint« contacts. Low profile design. Excellent touch feeling. Variety of keycap styles and colours. Ideal for ergonomically designed keyboards.
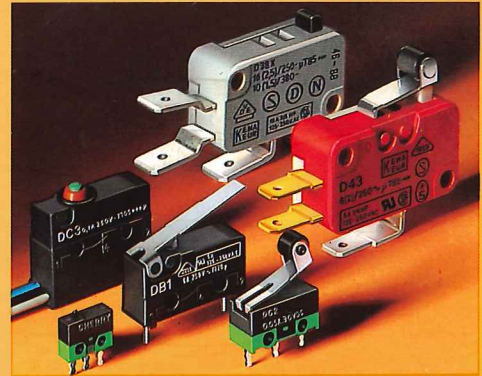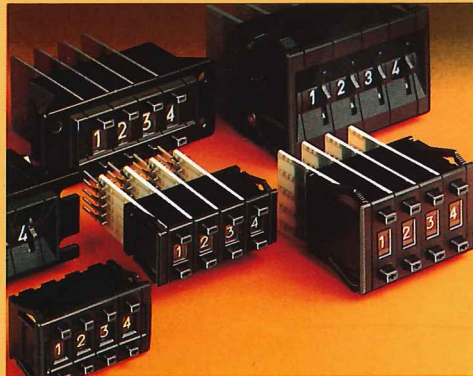
### Selector switches with proven reliability and long life.
Available in many standard and customized codes. Thumbwheel, leverwheel or pushwheel versions. Gang assemblies. Solderpins, connectors or plain soldering. Standard, miniature and subminiature sizes. Also illuminated through LEDs or lamps. Customized lettering and stop limitation available.

Snap switches for the future.
For precise switching and high 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 displays.
For text and graphic applications. With continuous brightness of all letters. Stable display picture. Long life. Slim profile. Light weight. Low power consumption.
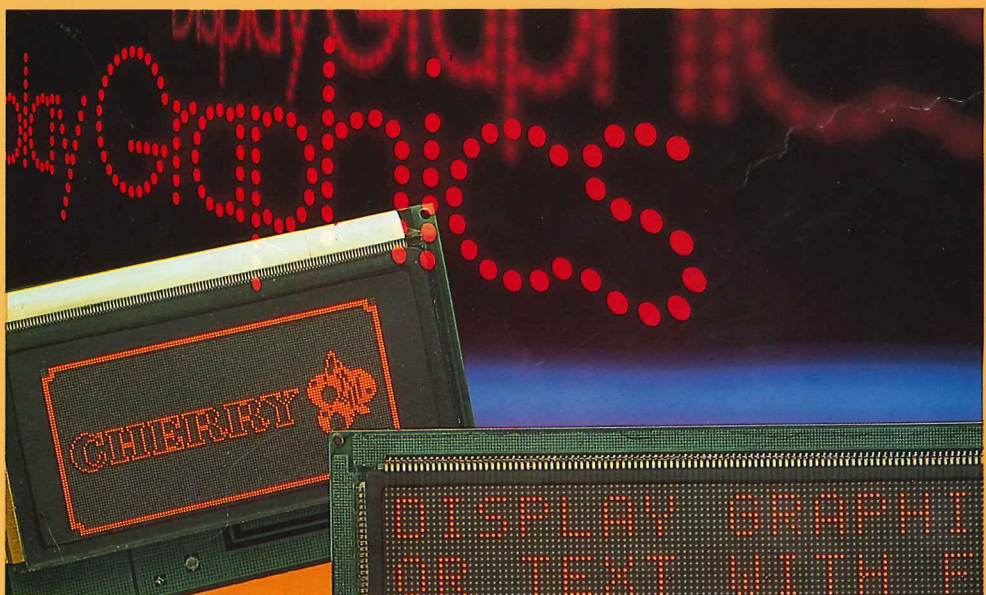
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