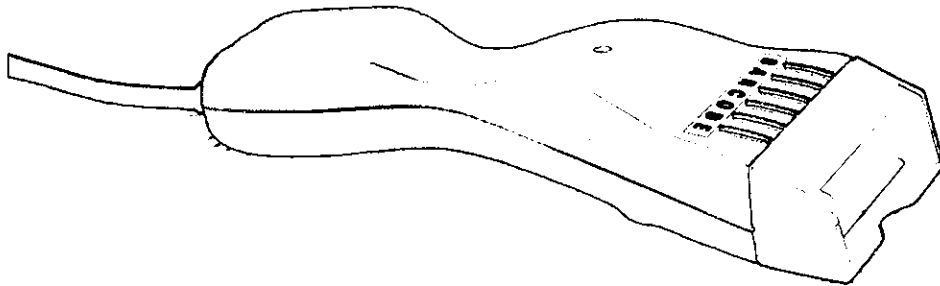


SCANPLUS

ScanPlus is UBI's most advanced scanning, reading and interfacing system. It combines the advantages of solid state, non-contact CCD scanning with extensive interfacing capabilities.

ScanPlus' ease-of-use, ergonomic design, aggressive reading, and lack of moving parts provide superior performance wherever bar code scanners are used to enhance productivity.



FEATURES

- **High Performance** - ScanPlus blazes through codes at 200 scans per second, much faster than its competitors. It offers virtually instant reading of all codes, including those printed poorly, on curved surfaces, or covered with laminates.
- **Direct Connection** - ScanPlus' RS-232, wedge, and cash register interfaces are on-board. No external decoder is required.
- **No Moving Parts** - ScanPlus is far more reliable than hand-held devices that depend on motors and moving mirrors.
- **Easy To Use** - Using ScanPlus is as easy as pointing. The user simply positions the head of the reader over the code and ScanPlus reads it automatically.
- **Ergonomic** - ScanPlus was designed by human factors specialists for maximum comfort. It features a slim handle for comfortable scanning. A narrow holding point on the ScanPlus' neck allows the user to press keys on a portable terminal or cash register while still holding the scanner. ScanPlus incorporates an unusually long cable with double coils.

- **Trigger-Free Operation** - ScanPlus reads automatically. There is no need to move the scanner across the code or to pull a trigger.
- **User Programmable** - The user establishes all key parameters, including the format of the codes to be read, and the host system to which the ScanPlus is to be interfaced, by means of bar code menus in the user's manual.

CONNECTIONS

With its on-board decoder, ScanPlus can interface directly to a wide variety of systems :

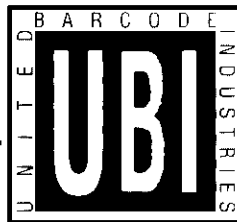
- RS-232 (Single or Dual)
- Wand Emulation
- Laser Emulation
- OCIA for NCR, TEC, and other cash registers
- Universal (Utilizing external interfaces for dual connections)
- Wedge (see reverse for information on "ScanWedge")

BENEFITS

CCD-based scanners are the bar code reading system of choice in Japan, Europe, and increasingly throughout the United States because of their ease of use, aggressive reading performance and great reliability.

ScanPlus goes beyond other CCD scanners with several key innovations :

- ScanPlus' ergonomic shape allows the user to hold the scanner while pressing keys on the cash register or terminal.
- ScanPlus' higher reading speed means that it reads codes faster, especially difficult to read ones.
- ScanPlus' user programmability and on-board intelligence mean it can be easily configured to the user's application.
- ScanPlus' multiple on-board interfaces allow it to be upgraded to meet future requirements.



S C A N P L U S

SCANPLUS OPTIONS

- **On/Off Button** - ScanPlus can be ordered with a power-saving on/off button. The user sets the "time out" or period of inactivity, after which the ScanPlus' LEDs turn off. The user simply presses the button to reactivate the scanner.
- **Optional Narrow Mouth** - ScanPlus can be fitted with an optional narrow mouth which lets the user discriminate between codes placed closely one atop another, as in a bar code "menu" application.

SCANWEDGE

A special version of the ScanPlus connects between keyboard and display to over 150 terminals and PCs. A set of adapter cables is plugged into an adapter at the end of the ScanPlus' cord. One cable is connected to the terminal's keyboard cable ; the other to the keyboard port on the terminal.

Data from the ScanPlus is sent in keyboard emulation format, affording immediate compatibility with the host's hardware and software.

S P E C I F I C A T I O N S

OPTO-ELECTRONIC DESIGN FEATURES

Light Source	Red LED array at 660 nm
Image Sensor	High resolution charge-coupled devices (CCD) linear image sensor
Microprocessor	Intel 80C31
Custom Hardware	Proprietary CMOS standard cell, equivalent to 160,000 transistors

PERFORMANCE CHARACTERISTICS

Scan Repetition Rate	200 scans/sec
Narrow Bar Resolution	.004 in. (.08 mm)
Print Contract Ratio	25% minimum
Depth Of Field	To 1 in (25 mm) depending on density of code and print contrast
Reading Angle	± 60° from vertical
Maximum Code Length	2.75 in (70 mm)
Bar Code Formats	Code 39 (standard or full ASCII), UPC/EAN (in all lengths and variants), Interleaved and Standard 2 of 5, Code 128, Codabar, Ames, MSI, Plessey, Code 11, Code 93 (other codes available on request)
Interface Capability	Wand, laser or CCD emulation, single or dual RS-232, TTL ASCII, OCIA (TEC or NCR format), IBM 4683, wedge to over 150 terminals and PCs, parallel (Fujitsu or Sweda type). For a complete list of supported terminals, see UBI's Product Interface Guide
Advanced Features	User programmability of data format, variable timeout, code identification, interface identification, preambles and postambles, intercharacter and intermessage delays, and many others

PHYSICAL CHARACTERISTICS

Case Material	High impact ABS plastic with rubber end piece
Length	7.3 in (185 mm)
Width At Handle	1.8 in (45 mm)
Width At Narrowest Point	1.3 in (32 mm)
Width At Head	3.0 in (77 mm)
Thickness At Handle	1.2 in (31 mm)
Height From Resting Surface	1.4 in (36 mm)
Cord Length Retracted	59 in (1.5 m)
Cord Length Extended	138 in (3.5 m)
Weight Without Cord	6.7 oz (190 g)

ELECTRICAL REQUIREMENTS

Power Requirements	+5 VDC +/- 5% at 200 mA max, depending on configuration, 5.5 V to 13 V unregulated
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USER ENVIRONMENT

Operating Temperature	32° to 122°F (0° to 50°C)
Storage Temperature	4° to 160°F (-20° to 70°C)
Relative Humidity	5% to 95% (non-condensing)
Shock	Unit functions normally after four-foot drop onto commercial flooring
Operator Interface	On board beeper sounds on good read. LED mounted in handle turns on and off upon good read. Either or both operator interface signals can be deactivated by bar code menu

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