Bar Code Module
Supplied with PCE-CAD command language generator

- **For laser, matrix & ink jet printers**
- **Any computer from PC to mainframe**
- **Simple to program**
- **Does not affect normal printer operation**
- **Specialist modules available**

- Bar codes
- Scalable fonts
- Lines & Boxes
- Serial & Parallel interfaces
- Colour printing

Latest in the line of programmer friendly products from Image is the Bar Code Module (BCM3000).

A small, compact unit capable of attachment to all standard laser, matrix and ink jet printers, the BCM3000 transforms them into powerful bar code and labelling printers.

Normal printer operation is not affected - BCM3000 simply extends the printer's capabilities to include bar codes, scalable text, line & box drawing.

With both parallel and serial interfaces in the same unit the BCM3000 connects to systems ranging from PCs to mainframes.

Using the same PCE command language pioneered by previous Image products, programming is simple - a single command generates a complete bar code.

To show how this works, a bar code symbol encoding 'ABC123' is produced by the command 'ESCibABC123/' For systems which have difficulty sending control characters like 'ESC', the unit offers alternative codes.

To make it even simpler to program, BCM3000 comes with a Windows program, PCE-CAD-design the label on screen and PCE-CAD generates a file containing all the required P CE commands.

Because BCM3000 drives all standard laser, matrix and ink jet printers, programs developed for one printer can be used to drive others. Upgrading for faster output or selecting the most suitable printer for an application requires little or no software revision.

PCE-CAD command language generator.
(Supplied with unit)

Specification

The Bar Code Module fits neatly to the rear of the printer. The unit plugs into the printer's parallel port and offers parallel and serial interfaces to the host computer. Power is taken from the printer or from an external transformer unit.

Bar codes

Standard Module includes: Code 39; Code 93; EAN/UPC; Code 128/EAN-128; Interleaved 2 from 5; Industrial 2 from 5; MSI; Plessey; Telepen; Codabar; Postnet; FIM; Royal Mail RM4SCC. Bar codes can be printed in a variety of styles and ratios to suit the application. Options are included for automatic check digit generation and to print human readable data under the bar code. Bar codes can also be printed sideways on laser and shuttle matrix printers.

Modules available for 2 Dimensional bar codes.

Large Characters

Character width and height are independently variable from 2mm-300mm on matrix and 1mm-150mm on laser printers. Characters can be printed normal or inverse (white on black). Additional shading options are available on matrix printers. Characters can be printed rotated in one of 4 orientations.

Lines and boxes

Lines and boxes up to 300mm wide and 300mm high with variable thicknesses.

Colour printing

Black + 6 colours on colour printers.

Interfaces to computer

Parallel Centronics and Serial RS232. Specialist units for Twinax and Coax available.

Power Requirements

Powered from printer 5v at 110mA (pin 18 of Centronics connector) or Mains powered 220-250vAC 50/60Hz 10vDC 300mA external transformer unit (supplied).

Alternative trigger code

In some situations (e.g. from a Mainframe) it is not possible to send the ESCAPE character, The Image controller includes an option to use a standard character, such as @ in place of the ESC code.

Hex input mode

All character codes (00-FF hex) can be sent using this mode. This overcomes the difficulty that Mainframes have in sending some codes. Only 0-9, A-F and ESC (or its alternative) need be sent. The module translates these into actual printer codes.

Printer command extension

Bar codes, large characters and lines can be freely mixed with all the printer's normal output including 10/12/17 cpi normal or NLQ text, printed at 6 lpi or any other vertical spacing. The printer's existing command set is simply extended with the labelling commands.

Ribbon wear monitor

For matrix printers, a count is kept of printhead use. An alarm sounds to indicate that the ribbon needs changing. This ensures good print contrast for bar codes.

Option set-up

The options are set up by using two buttons. A menu is printed allowing selections to be made. Once selected the options are stored in non-volatile memory. No DIP switch settings are necessary.

Compatible printers

Printers that are compatible with the following: EPSON FX, EPSON LQ, IBM Proprinter and HP Laserjet. Most printers are compatible with one of the above.

Laser printers

The unit works with lasers in HP LaserJet II compatible mode. There is no need for font cartridges or extended memory. Font elements are downloaded to the printer allowing labelling to be done at normal printer speed.