



- High resolution imaging
- Image enhancement
- Geometric correction
- Image editing
- CAD drawing capture
- Document artwork preparation
- Choice of output device

## High resolution imaging

Developments in high resolution raster graphics have resulted in the availability of computers with the ability to display and manipulate complex images. Such images, whether they are textual, pictures, or plans, can be stored, altered or printed as desired.

Textual information may be typed in and drawings may be created using draughting systems, but there is still a need to input existing paper-based pictures.

## Image capture

Imager 20 takes its input from a digital camera which produces an 8-bit image 2496 by 1720 pixels in size. The grey-level data is then processed, using thresholding or half-toning procedures, to produce a bi-level image which may be edited and printed.

## Image enhancement and correction

Original material is often imperfect and may contain unwanted marks or differences in intensity which reduce the quality of the image. Imager 20 overcomes this by applying a process of digital filtering, resulting in crisper line drawings and smoother half-tones.

To compensate for a drawing or map that is stretched or distorted Imager 20 provides rectification procedures to produce an image that is geometrically correct. In this way measurements and positioning can be reliably and accurately made.

## Image editing

Pictures may be modified using Advent's powerful interactive raster editor, which allows images to be manipulated, improved or enhanced with lines, text, circles, filled areas etc. Whole images, regardless of their size, can be panned over and zoomed for editing.

## Output devices

Once input, an image can be printed on a laser printer, at a resolution of 100, 150 or 300 dots per inch, or on an electrostatic plotter at either 100 or 200 dots per inch.

## Incorporation into documents

Images can be scaled to the desired size, and merged with text using the Advent document production system, providing a fast method of including existing artwork into new literature.

## Input to draughting

Imager 20 can be used to capture existing mechanical or architectural drawings, which can then be used as a background within Advent's CAD system, Designer 20. Using Imager 20 and Designer 20 in this way means that the transition from a paper drawing office to a computerised one is simple.

Similarly, maps may be imaged and, in conjunction with Designer 20, vectors can be plotted using the map as a backcloth.

## Multiple images

Drawings up to A2 in size can be imaged in a single pass at a resolution of 100 dots per inch. For larger drawings, or higher resolution, multiple images may be automatically joined to produce a new composite image.

## Access to stored images

A whole library of images can be created by Imager 20. Using the system's powerful networking facilities it is possible to share such libraries and to transmit selected images to remote workstations.