

# Technical instructions for digital images

Submission of digital images (line drawings and half-tones, black and white and colour) on diskette or some other storage medium can mean more efficient production, but only if a few basic rules are observed when preparing the image file. Otherwise, it could be more economical to use the hard copy for conventional reproduction.

When preparing figures, please adhere to the rules specified in our "Instructions to authors".

Authors wishing to submit digital images are requested to wait until the reviewing process has been completed.



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## ■ Scan resolution

Scanned line drawings must be digitalized with a minimum resolution of 800 dpi (dots per inch). Illustrations that contain very fine details (small type size, fine lines) should have a resolution of 1000 dpi. For digital half-tones, 300 dpi is usually sufficient.

The correct scan resolution can be found using the following formula:

$$(\text{lpi} \times 2) \times \text{scaling factor}$$

(lpi: lines per inch)

## ■ Programs

Illustrations should be in landscape or portrait form at correctly positioned and without an additional margin allowance.

A common computer program should be used to generate the illustrations. For Windows and Windows 95, the programs Corel Draw and Designer are suitable; for Apple System 7, the programs Freehand and Illustrator are suitable.

For processing and retouching the scanned half-tone images, Photoshop is suitable for both platforms.

## ■ Data formats

Suitable data formats are TIFF 5.0 RGB, TIFF 6.0 CMYK and EPS. In order to avoid the problems associated with the colour separation process from RGB to CMYK for printing, the data for colour illustrations must be set up in CMYK mode.

Since in most cases illustrations have to be retouched, the original data must be included.

## ■ Archiving

Please send large amounts of data in archived form on 3.5-inch diskettes.

The following formats are preferred by Springer:

- zip
- tar, tar.gz, tar.Z
- sit

When data are archived, the program used must be copied onto the diskette so that we can deal with

problems we encounter when unpacking the data.

## ■ Storage media

If large amounts of data are involved, the following storage media can be used on MS-DOS and/or Macintosh:

- CD-ROM
- 5.25" Syquest Cartridges (44, 88, 200 MB)
- 5.25" Magneto Optical Disc (650 MB, 1.3 GB)

When there is a mixture of text and illustration data, the illustration data must always be stored separately. In particular, figure legends must not be integrated into the illustration data.

On the diskette, please store only the data necessary for the current paper, and take care that the file names used are identical to the names in the text.

## ■ Labelling the diskette

The following information must be written on the label:

- File name with extension
- Name of author
- Title of journal
- System used (DOS, Windows 95, MAC OS)
- Compression program
- Illustration program with version number

## ■ Prints

We would like to point out that it is necessary to furnish a print of all data. If the file is not the same as the prints, then the prints will be regarded as the final version.

If it is not possible for you to furnish your figure files in the formats specified, please check with the production department at Springer!