

# Tips & Tricks

## ***Which picture (or graphic) file formats will LinkOne handle?***

This document is intended to assist users to select the best graphic format to enable LinkOne WinView to clearly and accurately represent the user's original graphic.

### **Graphic File Formats Suitable for LinkOne**

Picture files come in different formats (raster and vector) and can be in colour or monochrome. LinkOne has built-in support for three types of raster graphics; monochrome, grey scale and colour. LinkOne also has built-in reader for WMF vector graphics.

The graphic file formats that LinkOne can read directly are listed below. Additional filters are also providing using technology from LeadTools and SquareOne.

- The built-in readers are:
  - BMP (Windows Bitmap – 2, 16, 256 colour)
  - PCX (Windows PaintBrush – mono only)
  - CAL (CALS Raster – mono only)
  - TIF ( Tagged Image File Format – G4 mono only)
  - WMF (Windows Metafile)
- LeadTools Filters:
  - JPEG and LEAD Compressed (JPG and CMP)\*
  - GIF and TIFF with LZW Compression\*\*
- TIFF Formats:
  - BMP Formats Icons, Cursors and Animated Cursors (ICO, CUR and ANI)
  - Clipboard Format (CLP)
  - Silicon Graphics image Format (SGI)
  - PCX Formats (PCX and DCX)
  - Kodak formats (PCD and FPX)
  - DICOM Format (DIC)
  - Exif Formats (TIFF and JPG)
- Windows Metafile Formats (WMF and EMF)
- XPicMap (XPM)
- Interchange File Format (IFF)
- Portable Bitmap Utilities (PBM)
- Portable Document Format (PDF)
- PostScript Raster (Encapsulated PostScript) (EPS)
- Dr. Halo (CUT)
- PhotoShop Format (PSD)
- Portable Network Graphics Format (PNG)
- Truevision TARGA Format (TGA)
- Encapsulated PostScript (EPS)
- JBIG Format (JBG)

- SUN Raster Format (RAS)
- WordPerfect Format (WPG)
- Macintosh Pict Format (PCT)
- Windows AVI (AVI)
- Flic Animation (FLC and FLI)
- X Windows Dump (XWD)
- Bitonal (1-Bit) TIFF CCITT and Other FAX Formats:
  - TIFF CCITT Group 3
  - TIFF CCITT Group 4
  - CALS Raster (Type 1,2,3,and 4)
  - IOCA / MO: DCA (ICA)
  - LEAD 1-Bit Format (CMP)
  - XBitMap (XBM)
  - Intergraph Format (ITG)
  - Miscellaneous 1-Bit Formats (MAC, IMG, and MSP)
- Vector Formats:
  - Drawing Interchange Format (DXF) (R12)
  - TIFF (TIF) containing DXF
  - AutoCAD Drawing Format (DWF) DWG (R14)
  - Computer Graphics Metafile (CGM)
  - Micrografx Designer (DRW)
  - Macintosh Pict (PICT)
  - Intergraph Microstation (DGN)
  - HPGL / HPGL2 (PLT)
  - Coral Draw graphic files (CDR)

**NOTE:** Owing to the variety and complexity of programs producing graphic files and PDF formats, DS Techwrite is unable to guarantee that the graphics supplied in the formats mentioned above will be fully compatible with LinkOne Publisher.

## Graphics Files and Suitability for Purpose

### Raster Graphics

Where raster graphics files are provided, the following guidelines are recommended:

- Resolution of 300 DPI (dots per inch) for scanned monochrome graphics of printed images A4 size and smaller.
- Resolution of 200 DPI (dots per inch) for scanned monochrome graphics of printed images larger than A4.
- Scanned photographs should use 256 colour and resolution suitable for the size of the image. For instance, a standard 4" x 3" photo might be suited to 300 DPI, larger images might be suited to 200 DPI.

## Vector Graphics

Where vector graphics files are provided, the following guidelines are recommended:

- Highly complex drawings should be avoided for parts pictures.
- The number of vector objects included in any one drawing should be kept to the minimum for the drawing to be effective. In this way, computer hardware requirements are minimised and display speeds are maximised.
- The use of stroke fonts for text should be avoided at all times. Stroke fonts can cause complications when creating hyperlinks between callouts and associated parts lists.

## Matching Resolution of the Target Book Pictures to the Resolution of the Source Pictures

LinkOne can produce an exact match of the resolution of the original, or it can reduce it.

The trade-off is file size. The higher the resolution, the larger the size of the target picture file (the ILG file) and the longer it takes to display on a computer.

## Large Vector Files

Where Vector files are large (eg over 2mb), check the following:

- Does it contain vector or raster data?  
Storing raster data in a WMF is very inefficient and it is recommended that it is converted into a bitmap file.
- Is the data all vector?  
There may be too much detail in the graphics - far more than is needed by maintenance staff. The solution would be to use a graphics editor to delete superfluous detail from the graphic. Often CAD operators tend to draw in great detail things like bolt heads which appear as no more than fly-specks in the final drawing.

## Converting Graphics

It is advisable to test a sample of the desired graphic format in LinkOne prior to converting all of the drawings.

DS TechWrite have a range of experience in converting graphic formats using our tools to ensure we can establish the best solution for the conversion and inclusion of your graphic formats into LinkOne.