

Audio Files

An audio file format is a file format for storing digital audio. The layout can be uncompressed, or compressed to reduce the file size, often using lossy compression.

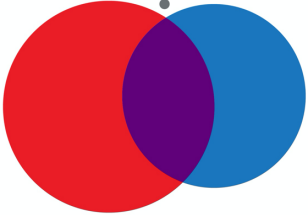
FORMAT	COMPRESSION	PORTABILITY	FEATURES
.MP3	Lossy	Most <i>widely used file format</i> - supported by nearly everything.	Extremely <i>efficient compression</i> and <i>excellent sound quality</i> for highly compressed files.
.WAV	Lossless	Widely supported, but <i>limited file size</i> - slowly becoming less popular (similar to .bmp)	Wide support and no loss of file quality makes it a <i>perfect editing file format</i> .
.AAC	Lossy	Files are <i>slightly smaller than MP3</i> , but <i>sound quality is better</i> .	Part of the Video .MP4 format - not very popular, used <i>mainly on iTunes</i> .
.M4A	Lossy	<i>Better compression vs quality ratio</i> than MP3.	Becoming more popular, <i>particularly for streaming</i> - related to the .MP4 file format.
.WMA	Lossy - Can be lossless but <i>decreases efficiency of compression rates</i> .	Moderately Portable.	.wma files can be secured <i>against authorised access</i> (a big deal to publishers and copyright holders) but <i>bloats the file size</i> .

🦋 Vector Graphics

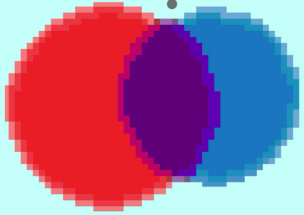
Vector files **do not pixelate** but aren't good with wide variety of colours. (24 binary digits = 1 pixel)
Web Uses: SOURCE files – for logos, charts, icons or any hard-edged graphics.

FORMAT	USE	PORTABILITY	FEATURES
.CGM	A file used for storage of 2D Vector art.	Has abilities to utilise several different encoding schemes to store a wide variety of content.	Considered an older file format, mainly used in engineering applications.
.SVG	A vector graphic storage format which stores 2D objects using an XML based file structure.	Supported by a wide variety of web browsers - supports animation and complex elements.	Considered a modern, open file format. Part of the .pdf file type.

Vector



Raster



AI

EPS

CGM

PDF

SVG

CDR

BMP

TIFF

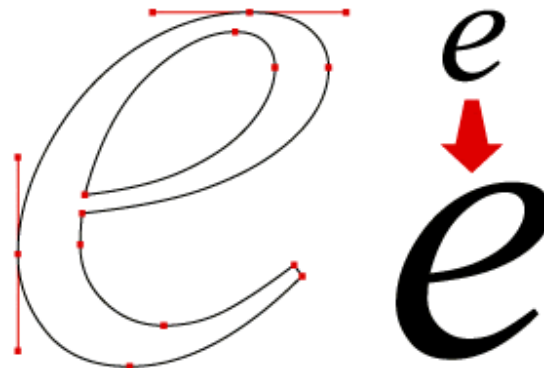
PCX

GIF

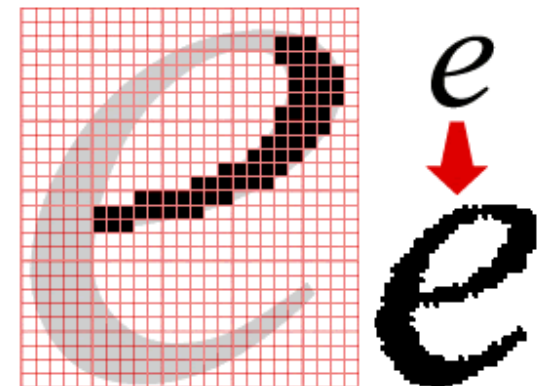
PNG

JPEG

VECTOR GRAPHICS



BITMAPPED (RASTER) GRAPHICS



Raster Graphics

In computer graphics, a raster graphics or bitmap image is a dot matrix data structure that represents a generally rectangular grid of pixels (points of colour).

<i>FORMAT</i>	<i>COMPRESSION</i>	<i>ANIMATION</i>	<i>TRANSPARENT</i>	<i>COLOUR DEPTH</i>	<i>PORTABILITY</i>	<i>FEATURES</i>
.BMP	Lossless, uses compression.	✓	✓	24-bit colour depth	Widely portable - rarely used in web applications	Large file size - rarely used in modern application
.GIF	Lossless (mainly)	✓	✓	Indexed 256 colour	Widely portable - used extensively throughout the web.	Available for editing and viewing in most applications.
.JPG/ JPEG	Lossy			24-bit, but with lossy compression it varies.	Widely portable - most available in raster format. HIGH portability.	Used for most expensive and advanced cameras. Very small file sizes.
.TIF	Lossless		✓	24-bit	Widely portable, but not commonly utilised anymore.	High resolution image file.
.PNG	Lossless	✓	✓	24-bit	Commonly used in internet applications - typically avoided if .gif and .jpg are suitable.	High portability and alpha transparency makes it useful for the web.