

X16 Graphics File Format Version # 1.0

This is a specification for an Image file format for the Commander X16 platform. It is not meant for general use on other platforms . Tools will be provided on those Platforms (Linux/BSD/Windows/Mac) to convert standard file formats such as PNG & JPG to the X16 format.

DESIGN GOALS

- A format optimized for the X16 that is easily programmed for
- Takes full advantage of all capabilities of the VERA video hardware.
- Portability for software developed for X16

DETAILED FILE SPECIFICATION

FILE ELEMENT	SIZE IN BYTES	PURPOSE	Comment
File ID (char)	3	To identify this file as an X16 Bitmap File	Always " BMX " \$42,\$4D,\$58
Version (byte)	1	File format version	\$01 (for this version)
Bit Depth (byte)	1	What is the color depth of this image ?	1, 2, 4 or 8 0, 1, 2 or 3
VERA Color Depth Register (byte)	1	Corresponds to Color Depth	Should have a 1 to 1 correspondence to Bit Depth. (can be used as a sanity check also)
Width (Word) <i>Little Endian</i>	2		Image Width
Height (Word) <i>Little Endian</i>	2		Image Height
Pal_Used (unsigned byte)	1	Tells how many entries in the Palette are significant for this Image.	0 = 256 entries (or else how many)
Pal_Start (unsigned byte)	1	Palette Index on the X16 Where Pal Load should start	0-255
Data Start (word)	2	Offset in this file where the Image data starts	
COMPRESSED (signed byte)	1	Image uses LZSA compression	-1 if Image data is LZSA compressed
VERA Border Color (unsigned byte)	1	Self Explanatory	0-255 (Should be 0 if unused)
RESERVED	16	RESERVED FOR FUTURE USE	THIS MAKES THE HEADER 32 BYTES.
IMAGE PALETTE	Variable 2 x Pal_Used	Image desired colors	2 byte Entries with 12 significant bits GB_R arrangement.
IMAGE DATA	Variable	The Image Data to copy to Screen Memory (Taking into account Width and Height)	