pixi File Format v1

February 26, 2025

1 Flags Enumeration

| Flag Value | Description |
|------------|----------------------------|
| (0x00) | No Flags (Assume Defaults) |
| (0x?1) | RGB |
| (0x?2) | RGBA |
| (0x?3) | CMYK |
| (0x?4) | CMYKA |
| (0x?5) | Indexed Colours |
| (0x1?) | Is Compressed |

2 Header Data

| Location | Size | Description |
|----------|---------|---|
| 0x00 | 4 bytes | magic number 0x50495849 (PIXI in ASCII) |
| 0x04 | 2 bytes | major version 0x00 |
| 0x06 | 2 bytes | minor version 0x01 |
| 0x08 | 4 bytes | width of image |
| 0x0C | 4 bytes | height of image |
| 0x10 | 1 byte | flags |
| 0x11 | 1 byte | triplet size $(3 = RGB, 4 = RGBA, 4 = CYMK, 5 = CMYKA)$ |
| 0x12 | 2 bytes | reserved |

3 File Metadata

| Location | Size | Description |
|----------|---------|------------------------|
| 0x14 | 4 bytes | length of creator name |
| 0x1B | i bytes | creator name |
| 0x1B+i | 4 bytes | length of description |
| 0x1F+i | j bytes | description |

| 0x1F+i+j | 4 bytes | length of tags/keywords |
|------------|-----------|-------------------------|
| 0x23+i+j | k bytes | tags/keywords |
| 0x23+i+j+k | 126 bytes | checksum |

4 Image Data

| Location | Size | Description | |
|--------------|---------|---|--|
| 0xA1+i+j+k | 4 bytes | indexed colours amount | |
| 0xA5+i+j+k | l bytes | colour palette (indexed colours) | |
| 0xA5+i+j+k+l | m bytes | image data (amount to read = width * height * triplet size) | |