PCS (Pfaff home) Design format

Explanation of Abbreviations :

• HEX	= hexadecimal
• DEC	= decimal
• MSB	= Most significant Bit
• LSB	= Least significant Bit
• NN	= Value varies or unknown

- Design data starts at 46 HEX = Byte 70 DEC, with first Byte in file numbered 0 (zero)
- Nine Bytes per stitch
- first Byte of a color change record gives new color No. , last byte = 03 marks record as color change
- Up to version 2.0 of PCS designer color change records didn´t hold movement data, from version 2.1 they may hold movement data!
- stitch coordinates are absolute, not relative!
- first record in file is a color change to black!

File structure :

Byte (hex)	Value (hex)	Explanation
0000	32	lead-in character for PCS-file
0001	02 or 03	hoop size. 02 = small , 03 = large
0002-0003	10 00	No. of colors (always 16)
0004-0043	NN NN NN NN	16 x 4 Byte color definition
0044-0045	NN NN	No. of stitches in file , LSB first, max 65536 stitches, does **NOT** include color changes

0046+MMMM	**MMMM** = (stitch count + No. of color changes) x 9 Bitmap filename used as pattern for digitizing, 12 characters, 00 terminated (13 bytes)	
0046+DDDD	**DDDD** = MMMM + 13 File description, 00 terminated	

Examples :

Adress:	Hex values:									Explanation (Dec.)
NN NN	00	XX	XX	XX	00	YY	YY	YY	00	x and y coordinates, LSB first
NN NN	00	XX	XX	XX	00	YY	YY	YY	02	as above

NN NN	02	00	00	00	00	00	00	00	03	Version 2.0 color change to color two
NN NN	05	06	01	00	00	08	00	00	03	Version 2.1 + color change to color 05