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FILM SCANNING WITH KODAK GENESIS INFO SHEET (1)

Instructions for Delivery:

Film negative on reels - no longer than 120 meters, please - and accompanied by an identical work print. In addition: a list with frame numbers, if the starting frame is clearly recognizable, or the exact edge numbers.

The frames can also be indicated on the work print.

Datenformate:

Preferred

Bitmap (Win) 8 Bit (.bmp)
TIFF 8/10/12/16 Bit (.tif)
SGI 8/10/12/16 Bit (.rgb)
Kodak 10 Bit log. (.cin)

Acceptable

Wavefront 8/16 Bit (.rla)
Wavefront (.rlb)
Alias (.als)
JPEG (.jpg)
Softimage (.pic)
Vista (.vst)
Targa (.tga)
Pict (Macintosh) (.pct)



SCANNING INFO SHEET PICTURE FORMATS FOR FILM (2)

Picture formats - Film

Format	4K	MB	2K	MB	1K	MB	Aspect Ratio	Pixel Ratio
Academy	3656 x 2664	27,9	1828 x 1332	7,0	914 x 666	1,75	(1:1,372)	1:1
Cinemascope	3656 x 3112	32,6	1828 x 1556	8,1	914 x 778	2,04	(1:2,35) (1:1,175)	1:2
1:1,66	3656 x 2200	23,1	1828 x 1100	5,8	914 x 550	1,44	(1:1,66)	1:1
1:1,85	3656 x 1976	20,7	1828 x 988	5,2	914 x 494	1,30	(1:1,85)	1:1
Super 35	4096 x 3112	36,5	2048 x 1556	9,1	1024 x 778	2,28	(1:1,316)	1:1
VistaVision	4096 x 6144	72,0	2048 x 3072	18,0	1024 x 1536	4,50	(1:1,50)	1:1
Super 16			2048 x 1240	7,3	1024 x 620	1,80	(1:1,652)	1:1
16 mm			1728 x 1240	6,1	864 x 620	1,53	(1:1,394)	1:1

The value given in MB are approximate for 8-bit data and vary according to data format and colour depth.

Film-Scan (Kodak Genesis)

Format	4K	2K	1K
Academy	X	X	X
Cinemascope	X	X	X
1:1,66	X	X	X
1:1,85	X	X	X
Super 16		X	X
16 mm		X	X

Film stock

- In general, all Kodak and Fuji emulsions.
- Other emulsions upon request.



INFORMATIONEN FOR PRINTING DIGITAL IMAGE DATA FROM VIDEO / FILM (3)

Examples based on standards for half-tone printing of video and film images.

Medium	Resolution	Pixeldimensions	Dimensions in cm (54' half-tone screen (lpcm)/QF 2)
Video	D1	768 x 576	7,1 x 5,3
16mm	2K	1728 x 1240	16,0 x 11,5
S16	2K	2028 x 1240	18,8 x 11,5
35mm (1:1,66)	2K	1828 x 1100	16,9 x 10,2
35mm (1:1,66)	4K	3656 x 2200	33,9 x 20,4

Please Note:

- If you wish to retouch or enhance these images, we recommend consulting a lithographer experienced in these techniques.
- Depending on the material delivered, video lines or film grain can significantly detract from the quality of the images. The source material (ex: original / dupe negative / positive) can also greatly affect image quality.
- For film, the highest resolution currently possible is 4K (4000 ppi).

Output size of computer-processed images for printing at 100% output size is calculated as follows:

$$\frac{\text{Image height or width in pixels}}{(\text{half-tone screen width (cm)} \times 2.54 \times \text{QF})} = \text{Image height or width in inches}$$

(x 2.54 = image height or width in cm)

(half-ton screen = Lines per inch)

Or:

$$\frac{\text{Image height or width in pixels}}{(\text{half-tone screen width (in cm)} \times \text{QF})} = \text{Image height or width in cm}$$

The quality factor QF should be equal to 2. For half-tone screen widths over 133 lpi (approx. 54 lpcm) a QF of 1.5 may be sufficient (lpi = half-tone screen width in lpcm x ~2.54).

Calculation example using a video image

Pixel dimensions 768 x 576

Printing with a 60' half-tone screen
(300 lpi / ~ 60 lpcm QF 2):

$$\begin{aligned} 768 / (60 \times 2) &= 6,4 \text{ cm} \\ 576 / 120 &= 4,8 \text{ cm} \end{aligned}$$

Printing with a 54' half-tone screen
(266 lpi / ~ 54 lpcm QF 2):

$$\begin{aligned} 768 / (54 \times 2) &= 7,1 \text{ cm} \\ 576 / 108 &= 5,3 \text{ cm} \end{aligned}$$

For printing, the resolution of one frame of video without interpolation is only sufficient for the above proportions. However, depending on the content of the image, the frame may be enlarged through interpolation.