Swiss Effects
Telefon +41 (0)1 307 10 10
Fax +41 (0)1 307 10 19
info@swisseffects.ch

Ch-8050 Zürich
Thurgauerstrasse 40
Airgate
www.swisseffects.ch

Picture Formats (1)

Picture - Formats Video

Format / Aspect Ratio	CCIR 601	MB	Active Pixels	Square Pixel	MB	Pixel Ratio	Active Ratio
Pal 4:3/(1:1,33)	720 x 576	1,2	720 x 576	768 x 576	1,27	1:1,06	768 x 576
16:9 Anamorphotic (1:1,77)	720 x 576		720 x 576	1024 x 576	1,69	1:1,42	1024 x 576
1,66	720 x 576		720 x 460	768 x 576		1:1,06	768 x 460
1,85	720 x 576		720 x 415	768 x 576		1:1,06	768 x 415
1,77 (16:9)	720 x 576		720 x 432	768 x 576		1:1,06	768 x 432

Swiss Effects
Telefon +41 (0)1 307 10 10
Fax +41 (0)1 307 10 19
info@swisseffects.ch

Ch-8050 Zürich
Thurgauerstrasse 40
Airgate
www.swisseffects.ch

Information for digital processing
Computer data Formats (2)

Data Formats:

Preferred	**Acceptable**
Bitmap (Win) 8 Bit (.bmp)	Wavefront 8/16 Bit (.rla)
TIFF 8/10/12/16 Bit (.tif)	Wavefront (.rlb)
SGI 8/10/12/16 Bit (.rgb)	Alias (.als)
Kodak 10 Bit log. (.cin)	JPEG (.jpg)
	Softimage (.pic)
	Vista (.vst)
	Targa (.tga)
	Pict (Macintosh) (.pct)

All formats are generally uncompressed. Other formats and/or compression available upon request. Colour depth (in bits) is given for each colour channel.
For example: “SGI 10 bit RGB” means: 10 bits red, 10 bits green, 10 bits blue, i.e. 30 bits of colour depth. If no other information is given, formats have 8 bits of colour depth per channel.

Data Carriers

Fast SCSI-Harddisk	(DOS/UNIX/MAC)
JAZ	(DOS/MAC)
CD	(ISO 9660)
DLT IV	(20/40 GB) (CI-transfer / tar) (10% surcharge)
8mm EXABYTE	(without Datacompression / tar) (10% surcharge)
4mm DAT	(tar) (10% surcharge)
Syquest 44 MB	(DOS / Mac)

Labelling the images

Image names must appear as follows:

- 3 letters = job name
- 4-digit number (starting with the number 1) = image number
- period
- format description = 3 characters

e.g. ABC0001.tif

Image labels and path names must not contain any other characters, symbols or empty spaces.

Swiss Effects
Telefon +41 (0)1 307 10 10
Fax +41 (0)1 307 10 19
info@swisseffects.ch

Ch-8050 Zürich
Thurgauerstrasse 40
Airgate
www.swisseffects.ch

Video Stills (3)

With the Digital Disk Recorder we are able to “grab” high-quality stills from videos and save them in all the computer formats listed below.

Instructions for delivery:

A time-code list of the desired images is necessary. Without the list, clients will be charged for the time spent searching for the images.

Data formats:

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)

Swiss Effects
Telefon +41 (0)1 307 10 10
Fax +41 (0)1 307 10 19
info@swisseffects.ch

Ch-8050 Zürich
Thurgauerstrasse 40
Airgate
www.swisseffects.ch

Informationen for Printing Digital Image Data from Video / Film (4)

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:

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

(x 2.54 = image height or width in cm)

(half-ton screen = Lines per inch)

Or:

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

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):	*Printing with a 54' half-tone screen (266 lpi/~ 54 lpcm QF 2):*
768 / (60 x 2) = 6,4 cm	*768 / (54 x 2) = 7,1 cm*
576 / 120 = 4,8 cm	*576 / 108 = 5,3 cm*

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.