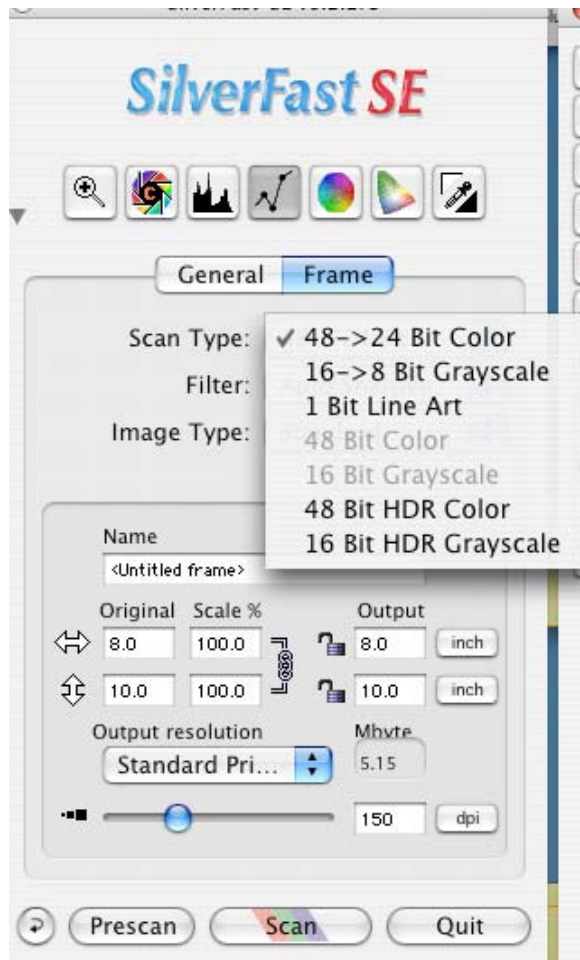**Frame Palette in SilverFast**

Based on the internal color depth of the scanner (Epson Photo 4990) the selection in this combo box determines the color depth of the output scan.

Most scanners produce internally more than 24 bit color data depth, i.e. 30 bit (3x10 bit per channel R, G, B), 36 bit (3x12 bit) or 48 bit (3x16 bit), which is reduced for 24 bit output depth. SilverFast reads the internal color depth of your scanner and adapts the contents of this dropdown-menu accordingly.

The entry "**48-> 24 Bit Color**" or "**48 Bit HDR Color**" shows that the scanner uses an internal color depth of 48 bit. Silverfast will internally use 48 bit, incorporate your adjustments and create a standard 24 bit output.

The selection "**16-> 8 Bit Grayscale**" or "**16 Bit HDR Grayscale**" indicates the output of a black / white halftone image file with a correspondingly fine differenciation of grey tone levels.

The selection "**1 Bit Line Art**" indicates the scan with pixels of only pure white and pure black values.

With some scanners SilverFast is able to deliver not only standard 24 bit of data. but also the entire internal information of the scanner's capable color depth. This can be 36 bit, 42 bit or more depending on the hardware used. However, as computer programs only understand 8 or 16 bit of data per color channel the next higher output format must be chosen. If the hardware data (internal color depth) is less than 48 bit, the gap is filled with zero values in order to meet the required 48 bit data depth.

NOTE that 48 bit files are twice the size of standard 24 bit files!

SilverFast offers the output of 48 bit files as pure, uncorrected "raw data format" (**HDR**).The corresponding selections for this kind of data are "**48 bit HDR color**" and "**16 bit HDR greyscale**". These two selections will deliver the "raw data" read by the scanner" as is" (unchanged) as RGB file in uncompressed TIFF format. The only available software controls in the raw data scan mode are: **output correction** and **output resolution**. All other software tools will become unavailable as soon as the Image Mode is set to rawdata scan mode.

Conclusion: If you want to save your image in **jpg** or any other compressed file format, and you don't really need the image in Raw, Psd (Photoshop) or Tiff format , use either **48-> 24 Bit Color** for color images or **16-> 8 Bit Grayscale** for greyscale images!

Otherwise, when you scan in Raw format, you will first need to convert the image from 16 Bits/Channel to 8 Bits/Channel, And just now you can save it in any format.