

Colour management by a change of the *rgb* data within the colour workflow before the linearized output

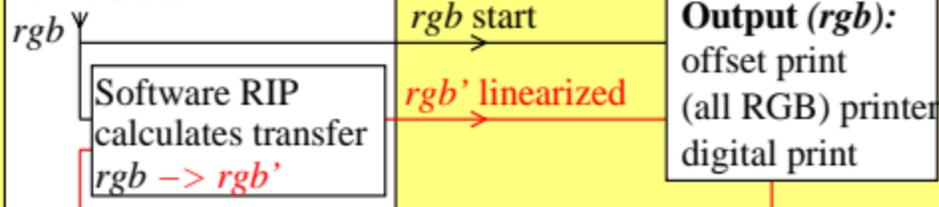
See *ISO-Ergonomics of human-systems interaction – Field assessment methods for electronic visual displays*

For ISO-test charts according to ISO 9241-306:2018 see: <http://standards.iso.org/iso/9241/306/ed-2/index.html>

The computer with an **Ergonomic Colour Processor (ECP)** includes the **1-Minus-Relations (1MR)**. It is valid: $r=1-c$, $g=1-m$, $b=1-y$. [1]. The output is equal for: $r=g=b=0,5$ or $c=m=y=0,5$ or $k=0,5$ or $w=1-k=0,5$. [2]

If the 1MR is active, then the output of the ISO-test chart shows **equal output** in each colour square of: <http://standards.iso.org/iso/9241/306/ed-2/AE49/AE490-7N.PDF> and independent of the use of *rgb* or *cmyk*.

Computer software of an ergonomic colour processor (ECP), it includes 1MR



Many print workflows need *rgb* data in the files. Often for *cmyk* data 1MR is **not used**.

For the many *RGB* printers the manufacturers use unknown *CMYK* separations.

For users 100% UCR (grey is printed only by black *k*) is not possible.

All PostScript(PS) and most proof printers allow CMYK separations defined by users.

For users 100% UCR is possible. This reduces the print costs and enhance the visibility.

In a general case the Software Image Processor (RIP) transfers 16,7 (256x256x256-1) million *rgb* to *rgb'* data. For linearization methods see *Klaus Richter* (2016), 1,4MB, http://farbe.li.tu-berlin.de/OUTLIN16_01.PDF