

Jasmin - Sabrina



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Test Pattern: Jasmin - Sabrina



In addition to the abstract technical test patterns this real image shows typical problems and its effect on real, complex motives. On this page you see the image in correct exposition. For clarification serves also maximized cut-outs of this motive.

This photo shows two womans. The left one with blond hair and bright skin type and on the right is a young woman with dark hair and dark teint. Both in front of a neutral background with only minimal brightness variation. At a correct exposition you see a well-balanced photo with two only discreetely made up young womans. The motive is contour-focussed and detail-focussed and original without any overshoots or artificial filtering.

- Image size
- image geometry
- image cut / overscan
- brightness
- contrast
- gamma
- color saturation
- color balance
- contour lifting (sharpness / ringing)
- luminance band width
- chrominance band width
- scaling
- noise (subjective)

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Subsequent you find the descriptions of the individual image elements



Ringings, here clearly shown as over-focussing. Appears often well focussed in the first moment, but produces unnatural annoyances on all image details and accentuate hairs and skin pores unnaturally.



blur – too low adjusted focus control or lacking band width in the transfer string causes soft contours and lacking detail- and contour sharpness.

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Noise in images has a lot of reasons and distinguish from compressions artifacts by itself random graining.



In case of too low adjusted gamma the middle brightness parts will raise unnaturally. The image seems flat and a little plastically. Is the gamma too low the compressions artifacts become more visible as you want to (eg. on DVB-T).



Too high adjusted gamma makes the middle brightness parts in the image unnaturally darker. The motive seems to be unnaturally.

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S-deformed gamma adds contrast. The disadvantage is that the S-deformed gamma barely disallows brightness differences. The image is made up of only dark and bright areas. There is a lack of shading.



In this example the color temperature drifts to the dark. In this case you have a overage of red.

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In case of too low adjusted brightness control the dark image details disappear. So, this details are only shown as black area (see left).

In case of too high adjusted brightness control (black-value) the darkest parts in the image brighten up. So the image becomes less depth and contrast (see right).



In case of too low adjusted contrast control the maximum brightness and brilliance of the image will lose (see left).

In case of too high adjusted contrast control (white-value) the brightly parts of the image will stand out. In the extremest case the brightly parts become blurred to a white area (see right).

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Lacking quantification causes deficient differentiation of fine shading and so too stepped exposition of fine nuances and – how in this left example – wrong colors and solarisation effects.



Dithering mixes not visible color nuances by „interweaving“ of nearby areas by means of quantification or principally. Dithering can follow constant or random patterning and uses the idleness and blurring of the human eye for mixing of the nuances.

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Fatal for the color balance affects the gamma curve of only one color.
In this case the gamma of red is too high.

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Standards are helpful and important

For a correct playback of a film or a video or even of an image there have to be a neutral transfer. You often hear the argumentation that these isn't necessary because the vision of every human is different and so a objective playback isn't possible. As a matter of principle is this argumentation right. Admittedly there will be ignored that it's only possible if the signal transfer acts neutral and straight. Only when the expressed image is similar to the recorded image by the camera, the human is able to perceive what he would saw at location by his individual sensation.

The transfer itself have to behave neutrally. Big worldwide institues look after the standards so that the neutrality is warranted.

In german speaking countries is the institute for broadcast engineering of the public broadcasting corporation of ARD, ZDF, DLR, ORF and SRG/SSR mainly responsible for the standards:

www.irt.de

For the whole european area the European Broadcast Union, EBU in Switzerland handles superordinate to the local development institutes:

www.ebu.ch

On international floor established in 1865 in Paris the International Telecommunication Union, ITU is included:

www.itu.int

For best image evaluation and calibration you use the test pictures from this document. It works also with real, filmed motives but with reservations. The big advantage of test patterns from Burosch Audio-Video-Technik is the knowledge how the test patterns have to look and the knowledge how to reproduce them. Only this way the neutrality of the transmission and the playback can be measured exactly and if necessary to correct it:

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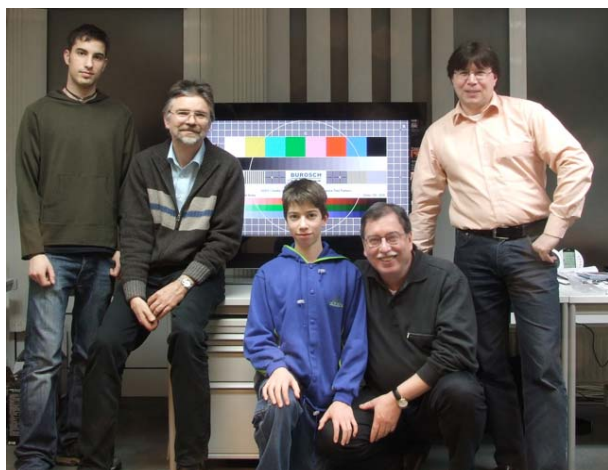
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