

BUROSCH

Audio-Video-Technik



First TV Tuning

Reference Test Pattern

Technical description and application

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BUROSCH Audio-Video-Technik Reference FullHD Test Pattern: First TV Tuning Test Pattern 1920 x 1080 px.

Please adjust the following TV menu settings for an optimal image quality.

1. Overscan / Picture Format: All black picture delimiters must be completely visible.
2. Brightness: All six stages A to F of the dark grey ramp must be separately visible.
3. Contrast: All six stages G to L of the bright grey ramp must be separately visible. Besides no color pass should be recognizable.
4. Colour: Please control the natural representation of the different skin tones.
5. Focus: The cross-hair should be represented precisely without double outlines.

First TV Tuning Reference Test Pattern:
The test pattern should look like this on your TV display, when your TV setup is perfectly adjusted.

Reference Test Pattern: First TV Tuning

Introduction

The TV Tuning Reference Test Pattern is particularly for first and quick calibration of your Full HD television or video projector. You find the individual test zones described in the lower area of the test pattern. Unfortunately the most displays and/or television are by default not optimally adjusted and thus the display need an individual correction.

If the television is not correctly adjusted, the picture is not represented correctly. This is valid for all pictures, however the possibility is given to make attitudes purposefully and to see wrong menu settings directly with test patterns by their scales and references.

This easy to use test pattern offers the possibility to also inexperienced users to accomplish a simple optimization fast. A test pattern is for the user the visual reference, in order to control or optimize the menu values of its television in such a way, that the reproduction of the picture looks like the original. The goal should always be the absolutely natural reproduction of the picture. This reference test pattern is optimally for the optimization of Full HD LED/LCD/Plasma television and/or displays and also for video projectors.

Only five easy steps to more enjoyment and fun with your TV!

The "First TV Tuning" Test Pattern (Freeze Frame in JPEG picture format) is optimised to directly plug a SD-Card or memory stick into a display or Blu-ray player with USB or SD-Card Slot. A other option is to burn the JPEG File on a CD or DVD and use it in a DVD or Blu-ray player who can play Image Discs. Or you just connect your PC with your display via VGA, DVI or HDMI.

For a large quality optimization you find further professional test patterns and sequences on our homepage www.burosch.de.

Reference Test Pattern: First TV Tuning

1. Overscan / Picture Format

To see content on your TV correctly and undistorted you should check the Overscan function of your TV. Please make sure, that all of the black arrows (picture delimiters) are completely visible. This option is sometimes also called Pixel to Pixel.



Top: Correct attitudes. The triangles at the picture borders are completely visible.

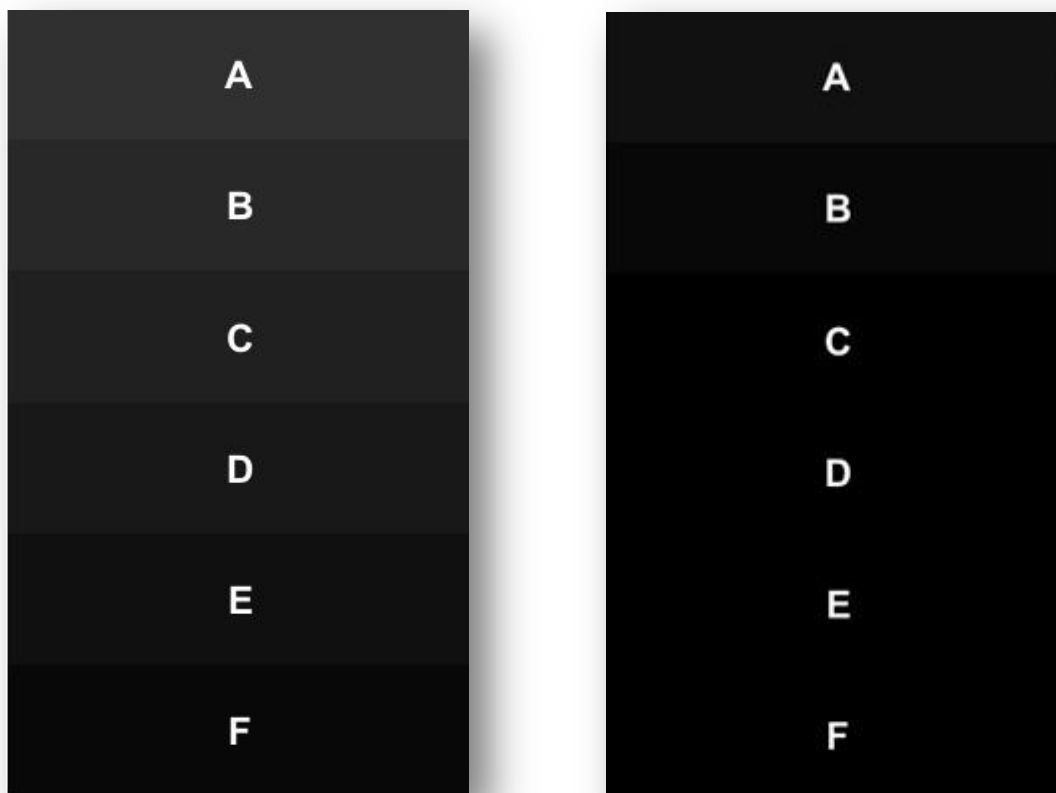
Bottom: Wrong attitudes. The triangles at the picture borders are begun to cut or not at all visible.

Reference Test Pattern: First TV Tuning

2. Brightness

Make sure with this picture element that all segments A to F are clearly and cleanly from each other separate. By using the TV menu option "Brightness" you can adjust the brightness of the display, so that you can see all six steps of the grey ramp.

If all stages of the dark six-level grey ramp are represented on your television you have the security that also darkest picture areas in movies will be faithfully visible.



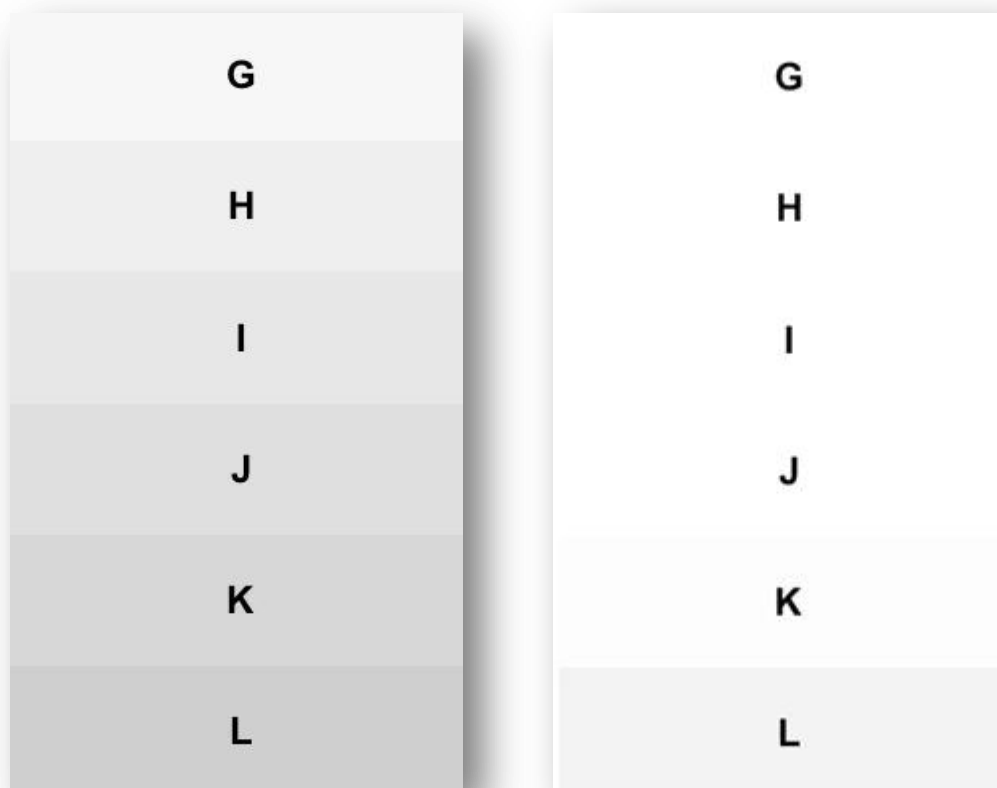
Left: Correct attitudes. All six bars stand out clearly from each other.

Right: Wrong attitudes. The bars do not differ. Reference Test Pattern: First TV Tuning

3. Contrast

In the grey ramp you see small boxes in fine gradations. With a too high or too low contrast value in the TV menu there will appear fewer boxes. Reduce or increase the contrast value, so that the segments G to L are separated from each other clearly.

If all stages of the bright six-level grey ramp are represented on your television you have the security that also brightest picture areas in movies will be faithfully visible.



Left: Correct attitudes. All six bars stand out clearly from each other.

Right: Wrong attitudes. The bars do not differ. Reference Test Pattern:
First TV Tuning

Reference Test Pattern: First TV Tuning

4. Color

Please adjust the color menu options of your TV in such a way, that the two women look as natural as possible. A natural rendition between the dark skin right and the brighter skin left should be the goal. The background should show an absolutely clean-white represented. A too strong attitude of the chroma causes that the different skin tones appear unnatural. As shown in the lower illustrations.



Top: Correct attitudes. The skin tones appear naturally and not too satisfied.

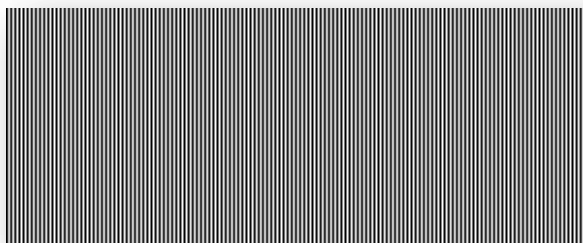
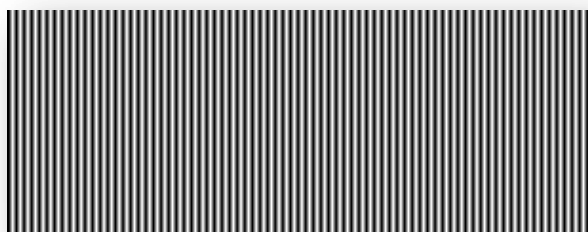
Bottom: Wrong attitudes. The colors are too satisfied.

Reference Test Pattern: First TV Tuning

5. Sharpness / Focus

At the right as well as on the opposite left side of the test pattern are the test ranges for the sharpness attitude. Adjust in the menu of your television step by step the sharpness (focus), until the hair crosses and the writings show no more double outlines.

The more precisely the representation of the cross-hair line, the writings and the many thin black and white lines (multiburst) so much the better. If it still comes despite changed sharpness attitudes to intensity modulations (see illustration below), check the overscan menu option of your display. Your display should show a pixel to pixel view.



Top: Correct attitudes. No double outlines (right) and no intensity modulations show up (left).

Bottom: Wrong attitudes. It comes to double outlines at the edges of the lines (right) and to intensity modulations (left).

Imprint

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