Monitor Gamma

Michael v.Ostheim
Monitor Gamma
Monitor Gamma

Contents

1 Introduction 4

2 Using the Test Images 4
   2.1 Grey Scale Test Image ........................................ 4
   2.2 RGB Scale Test Picture ........................................ 4
   2.3 CMY Scale Test Picture ........................................ 5
   2.4 Advanced Test Pictures ....................................... 5
      2.4.1 Dark Gray Test Picture ................................. 5
      2.4.2 Mid Gray Test Picture .................................. 5
      2.4.3 Light Gray Test Picture ................................. 5
1 Introduction

This module is a tool for monitor gamma correction. With proper gamma settings, your display (websites, images, etc.) will look the same on your monitor as on other monitors. It allows you to alter the monitor’s gamma correction of the X-Server. But that’s not all to do. For good results you have to set the correct brightness, contrast and color balance of your monitor. This may be difficult and you have to repeat every step several times. For perfect results you need really good (and expensive) hardware.

Use the four sliders to define the gamma correction either as a single value, or separately for the red, green and blue components. The X-Server default setting for gamma is 1.00 (Mac® 1.80, WinXX 2.20). The test images help you to find proper settings.

To store the gamma settings system wide, enable the option Save settings system wide. The system settings will be restored at next X-Server startup. You need root access to use this option. Use this if you want to correct the gamma settings for all users and graphical environments on this machine.

To store the gamma settings to your personal Plasma configuration, do not enable that option. The user settings will be restored at next Plasma startup and replace temporary the system gamma settings. The system settings are not removed by that and will be restored at next X-Server startup.

On multi head systems, select the screen you want to alter with the combo box. This will also work with xinerama enabled. If you want to set all screens to the same gamma values, enable the Sync screens option. On systems with only one screen this option will take no effect.

2 Using the Test Images

This module provides six different test pictures selectable from the drop down box at the top of the window.

2.1 Grey Scale Test Image

You should be able to see the following:

- A grayscale with 20 different sections
- The darkest section pure black
- The lightest section pure white
- No hint of any color in the gray tones

If you cannot see all of the 20 sections, use your monitors contrast settings or the Gamma: slider to correct this. If black is not pure black, try to darken the monitor, if white is not pure white, try to lighten it. If you see any colors in the gray tones alter the color balance settings of your monitor or the Red:, Green: and Blue: sliders.

2.2 RGB Scale Test Picture

You should be able to see three strips, each with 16 sections of red, green or blue tones. The darkest sections should be pure black, the brightest should be pure red, green or blue. If you don’t see all sections of a color strip, try to lighten or darken this color.
2.3 CMY Scale Test Picture

You should be able to see three strips, each with 11 sections of cyan, magenta or yellow tones. The brightest sections should be pure white, the darkest should be pure cyan, magenta or yellow.

- If you cannot see all cyan sections, try to lighten or darken red
- If you cannot see all magenta sections, try to lighten or darken green
- If you cannot see all yellow sections, try to lighten or darken blue

2.4 Advanced Test Pictures

The following three pictures show you the abilities of your monitor at three points of the gray spectrum. If you cannot see all of the details, don’t be worry, or buy better hardware.

2.4.1 Dark Gray Test Picture

You should be able to see 10 different rectangles of dark gray within a black box. The chart shows you 1% steps from black.

2.4.2 Mid Gray Test Picture

This picture shows you 11 gray rectangles within a 50% gray box. You should be able to see all of the rectangles except the middle one. The rectangles represent the steps from 45% to 55% gray.

2.4.3 Light Gray Test Picture

You should be able to see 10 different rectangles of light gray within a white box. The chart shows you 1% steps from white.