Tech Info Library

Monitors Control Panel: Special Gamma Function Explained 1/93

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Security:       Everyone
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Monitors Control Panel: "Special Gamma" Function Explained 1/93

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Article Change History

09/14/92 - REVISED
            • To provide additional information.
01/21/93 - REVISED
            • To add more detailed instructions for changing Gamma
              settings.

TOPIC ---

Can you provide any information on the Special Gamma function in the
Monitors control panel?

DISCUSSION --

How to Change the Gamma Setting

Special Gamma allows different gamma tables to be selected. You access it
through the Monitors control panel:

• By holding down the Option key while clicking the "Options..." button
  or
• By holding down the Option key while double clicking the happy Mac face
  that appears in the monitor window.

Now you get a dialog box where you can change the setting:

1) Check the "Use Special Gamma" checkbox.

2) Highlight the "Mac HiRes Std Gamma" or "Uncorrected Gamma" in the scroll
   box.

3) Restart the computer.

An Example of Special Gamma Table Use

A company has a video card that supports the two different displays that
they sell. Unfortunately, these two displays show colors differently on
the screen. Being able to select the gamma table allows the company to
make both displays generate comparable colors to the viewer's eye.

The following information is on page 9-16 of "Designing Cards and Drivers
for the Macintosh II and Macintosh SE" (Addison Wesley, ISBN
#0-201-19256-X):

  "The gamma table compensates for nonlinearities in a display's color
   response by providing either a function or a look-up value that
   associates each displayed color with an absolute RGB value. It is used
   to modify a video card's color look-up table. The gamma table is
   described in the chapter 'Graphic Devices' of Inside Macintosh Volume V
   (Addison Wesley, ISBN #0-2-1-17719-6)."

Displays that don't use gamma-table correction tend to look over-saturated
and dark. Although determining the correct values for a gamma table can be
difficult without special tools, the table's contribution to image quality
can be striking.

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