

Tips for Shooting Pictures with Rich and Deep Black reproduction (Y BLACK GAMMA Function)

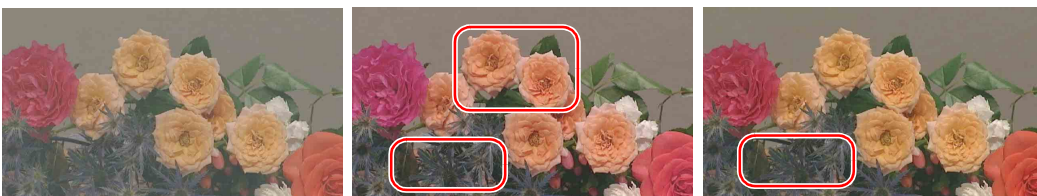
Preface

To shoot images with much richer black reproduction, the BLACK GAMMA function (Issue 04) and GAMMA function (Issue 08) are effective. These functions allow you to reproduce the desired color tone by adjusting the saturation and contrast of the image.

However, since BLACK GAMMA and GAMMA change the image's saturation together with contrast, they are not appropriate for adjusting picture contrast alone. For example, suppose you wanted to adjust only the black color tone or contrast of the

bouquet in the "Before setting" image. When using BLACK GAMMA function (Master Black : -87) as shown in "After setting 1", the colors of the flowers are also changed, resulting in the impression of the image turning out to be somewhat different than expected.

For such cases, the Y GAMMA BLACK function is useful, allowing you to adjust only the black contrast of the image to have richer and deeper black tones while keeping the color intact.



Before setting

After setting 1

After setting 2

Features of Sony Cameras

Sony professional camcorders have a Y BLACK GAMMA function to adjust the contrast of dark areas of an image without affecting color, in addition to the traditional BLACK GAMMA and GAMMA functions. For example, as shown in the "After setting 2" image, the black shades of the bouquet are reproduced with more depth, giving the picture much richer visual impression.

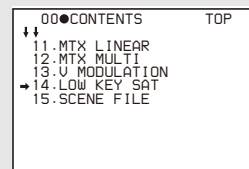
The Y BLACK GAMMA function is especially useful for reproducing more steps of black contrast which is vital when shooting a movie or a drama.

Major Sony camcorders with the Y BLACK GAMMA adjustment function
HDW-900 series, HDW-750/730 series, DVW-970 series, PDW-530/510 series, DSR-450/400 series, MSW-970 series

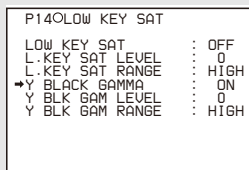
Camera Settings

To adjust Y BLACK GAMMA, use the LOW KEY SAT page of the PAINT menu.

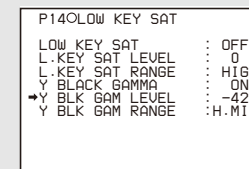
1 Open LOW KEY SAT in the PAINT menu.



2 Set Y BLACK GAMMA to ON, and then set Y BLK GAM RANGE to either LOW, L.MID, H.MID, or HIGH. This will define the video level up to which the Y BLACK GAMMA functions.



3 Adjust Y BLK GAM LEVEL in the range of -99 to +99.



Setting Y BLK GAM LEVEL to a negative (-) value will deepen the picture's black, while setting it to a positive (+) value will increase the black contrast. In the case shown in the "After setting 2" image, Y BLK GAM RANGE is set to "H.MID" and Y BLK GAM LEVEL "-42."

The example shown is with a DSR-450WSL camera. The results of this adjustment may differ from the sample image, depending on the camera model and the lighting conditions, even if the same setting value is used.

For additional information, refer to the Operating Instructions for your camera.

Technical Information

What is Y BLACK GAMMA?

The BLACK GAMMA and GAMMA functions are used to adjust signals in the low-luminance area and entire luminance range respectively. Because they process luminance and color-difference signals together in their circuits, both black tonal reproduction and color saturation are effected. On the other hand, the Y BLACK GAMMA function applies gamma processing only to the luminance signal and mixes the resultant

signal with the color difference signals to create the final output. This allows operators to independently adjust the tones of black/dark areas in the images. However, since Y BLACK GAMMA mixes the deepened shades of black with the final output, the original colors may darken or noise may become visible. Therefore, it is necessary to always check your monitor when using this function.

