

Tips for Improving Picture Sharpness without Coarsening the Image

Preface

Increasing a camera's DETAIL LEVEL (refer to Issue 01) can effectively sharpen the picture edges of an image.

However, as shown in the "Before setting" image, this operation can also coarsen the entire image, even though the picture edges of the perfume bottles and plastic cubes are correctly enhanced. This effect occurs

because the DETAIL process is applied to all areas of the image, including unnecessary noise.

In such situations, adjusting the Crispening level can reduce this effect while picture edges are kept sharp.



Before setting



After setting

Features of Sony Cameras

Sony cameras have a CRISPENING function which can be used to prevent the image from being coarse when detail level is raised. This function can be adjusted so that detail signals are not added to signal level transitions below a selected threshold, such as noise. For example, in the "After setting" image, the picture edges of the perfume bottles and plastic cubes are sharpened, but the entire image including the black background remains smooth. Crispening is also effective for shooting

scenes with busy contrast changes, such as a flower garden, which tend to coarsen by the detail function. Setting the CRISPENING LEVEL to a positive (+) value prevents unnecessary detail from being generated around noise, while maintaining picture contrast and color saturation.

Major Sony cameras with the CRISPENING 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 CRISPENING, use the DETAIL 1 page of the PAINT menu.

1 Open DETAIL 1 of the PAINT menu.

```

00●CONTENTS TOP
↓ ↓
01.SW STATUS
02.WHITE
03.BLACK/FLARE
04.GAMMA
05.BLACK GAMMA
06.KNEE
→07.DETAIL 1
08.DETAIL 2
09.DETAIL 3
10.SKIN DETAIL
    
```

2 Set DETAIL to ON (default).

```

P070DETAIL 1
→DETAIL : ON
DETAIL LEVEL : 0
APERTURE LEVEL : 0
DTL H/V RATIO : 0
CRISPENING : 0
LEVEL DEPEND : ON
LEVEL DEPEND LVL : 0
DETAIL FREQUENCY : 0
    
```

3 Adjust CRISPENING in the range of -99 to +99.

```

P070DETAIL 1
DETAIL : ON
APERTURE : ON
DETAIL LEVEL : 0
APERTURE LEVEL : 0
DTL H/V RATIO : 0
→CRISPENING : 98
LEVEL DEPEND : ON
LEVEL DEPEND LVL : 0
DETAIL FREQUENCY : 0
    
```

Setting a negative (-) value makes the image sharper, and setting a positive (+) value decreases noise and makes the image smoother. In the case shown in the "After setting" image, the level was set to "+99."

The example shown is with the DSR-450WSL.

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

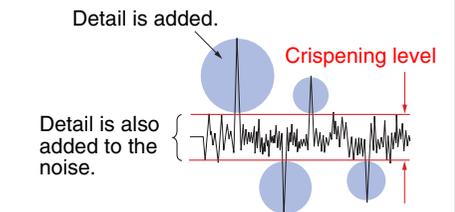
What is CRISPENING?

CRISPENING is a function that prevents detail signals being generated around noise or small picture edge transitions, when the DETAIL function is set to ON. The CRISPENING function allows you to select the threshold (based on transition level) of picture edge transitions to which detail signals should not be added.

In Sony cameras, the crispening level can be adjusted in the range of -99 to +99. The same setting value may have a different effect on the image, depending on the camera and recording formats used, such as HDCAM, DVCAM, and so on. It is also important to note that raising crispening level can result in details signals not be added around small picture edge transitions. Since this can cause the image to blur, crispening should be adjusted with care, using a high grade picture monitor.

Status of Detail Signals

Before CRISPENING



After CRISPENING

