

# DSC-S980

Ver. 1.0 2009.01

Revision History

## SECTION 5 ADJUSTMENTS

ADJ

### Link

#### • PREPARATIONS

- List of Service Tools and Equipments
- Connecting the Equipments
- Adjusting Items When Replacing Lens
- Handling of Firmware

#### • CAMERA SECTION ADJUSTMENTS

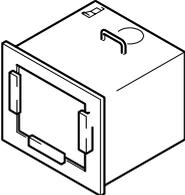
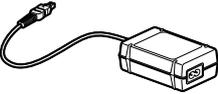
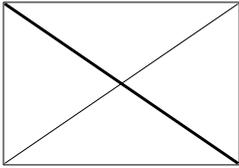
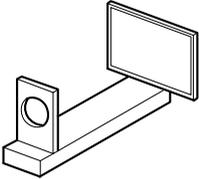
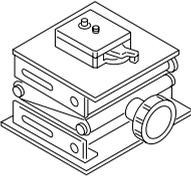
- Introduction
- Iris/Mechanical Shutter Adjustment
- Zoom Adjustment
- Far Focus Adjustment
- Near Focus Adjustment

# SONY®

## 5. ADJUSTMENTS

### 5-1. PREPARATIONS

#### 5-1-1. List of Service Tools and Equipments

<p>J-1</p>  <p>SONY Memory Stick PRO Duo (128 MB or more)</p>	<p>J-2</p>  <p>Small pattern box PTB-1450 J-6082-557-A</p>
<p>J-3</p>  <p>AC power adaptor (AC-LS5) 1-479-284-51</p>	<p>J-4</p>  <p>Chart (Note)</p>
<p>J-5</p>  <p>Flange back adjustment jig J-6082-563-A</p>	<p>J-6</p>  <p>Camera table J-6082-384-A</p>

**Fig. 5-1-1**

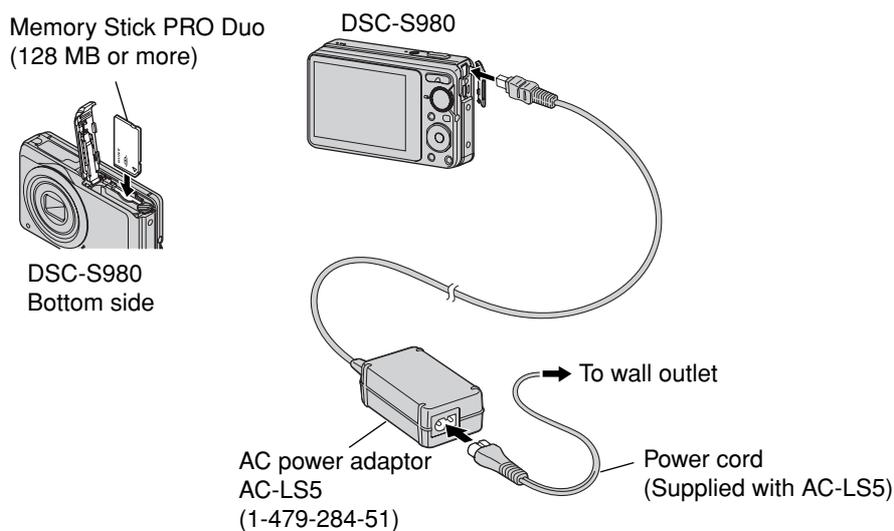
**Note:**

For the chart, search “J-6082-563-A” in the JIG & Software on ESI homepage, download the PDF file and print out it on the A4 size white paper.

Paste it to the chart pasting position on the flange back adjustment jig aligning center without wrinkles.

#### 5-1-2. Connecting the Equipments

Connect the equipments as shown below.



**Fig. 5-1-2**

### 5-1-3. Adjusting Items When Replacing Lens

In case of replacing lens, the adjustments mentioned below are required.

- Iris/Mechanical Shutter Adjustment
- Zoom Adjustment
- Far Focus Adjustment
- Near Focus Adjustment

### 5-1-4. Handling of Firmware

#### Note 1:

Save the firmware file in the root directory of Memory Stick.  
Saving it in the other directory causes the malfunction of program.

#### Note 2:

The firmware file is downloadable from the ESI homepage.

#### Preparations:

First, format the Memory Stick before copying the firmware.  
When formatting, perform on the PC, using the FAT. Do not format on the unit.  
If the concealed file "MEMSTICK.IND" exists, delete it.  
Decompress the file and confirm the file format as shown below.

Firmware file for DSC-S980: **SDMC450C.bin**

Save the file in the root directory of Memory Stick.  
This Memory Stick saved the firmware is used in the adjustments.

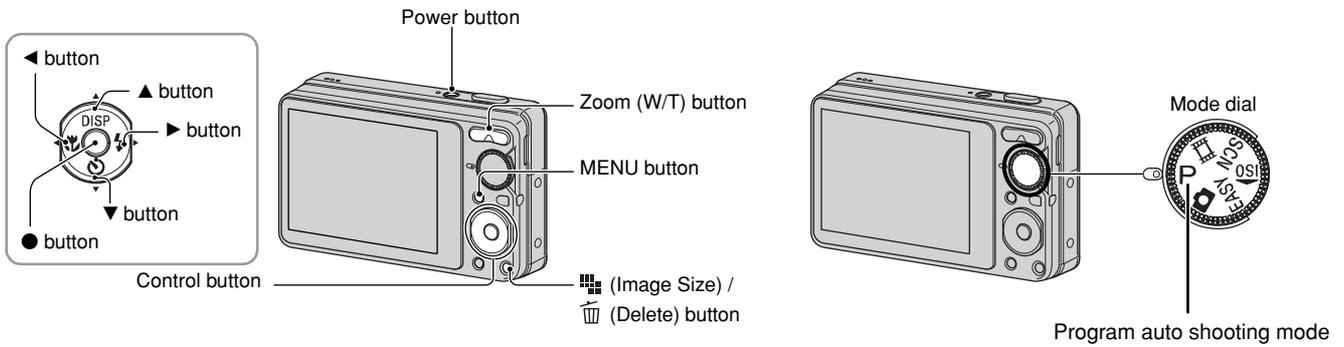
1. With the camera turned OFF, set the Mode dial to "Program auto shooting mode" and insert the Memory Stick with the firmware files into the Memory Stick slot of the camera.
2. While pressing the "Image Size" button, press the POWER button and release when the POWER lamp and the LCD display turns on. Release the "Image Size" button when the POWER lamp and the LCD display goes out.
3. After a few seconds, the LCD display will turn white and then show the Adjustment mode screen.

Pushing "MENU" button, the adjustment is finished makes to return to the initial screen display for adjustments.  
In case of adjusting continuously, go to the next step with above mentioned operation.  
Changing the Mode dial will take you out of the Adjustment mode.  
When all adjustments are completed, just simply remove the power from the unit completes the adjustment procedure.

## 5-2. CAMERA SECTION ADJUSTMENTS

### 5-2-1. Introduction

After lens replacement, perform adjustments to operate the camera. Followings are keys and functions used in the adjustments.



**Fig. 5-2-1**

The initial screen for the adjustment mode is as follows.

**SDMC450 Adjust**  
Select Adjust Items:  
Key Up: IRIS/MS Adjust  
Key Down: Zoom Adjust  
Key Left: Far Focus Adjust  
Key Right: Near Focus Adjust

**Fig. 5-2-2**

## 5-2-2. Iris/Mechanical Shutter Adjustment

The Iris/Mechanical Shutter adjustment order is as follows.

Small pattern box setting:  
Color temperature = 3000 ± 300K

Equipments required: Small pattern box  
Camera table

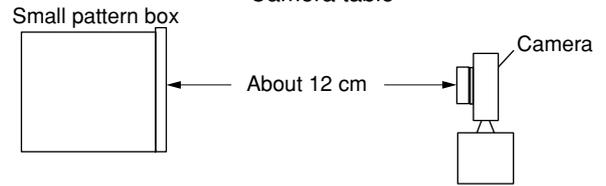
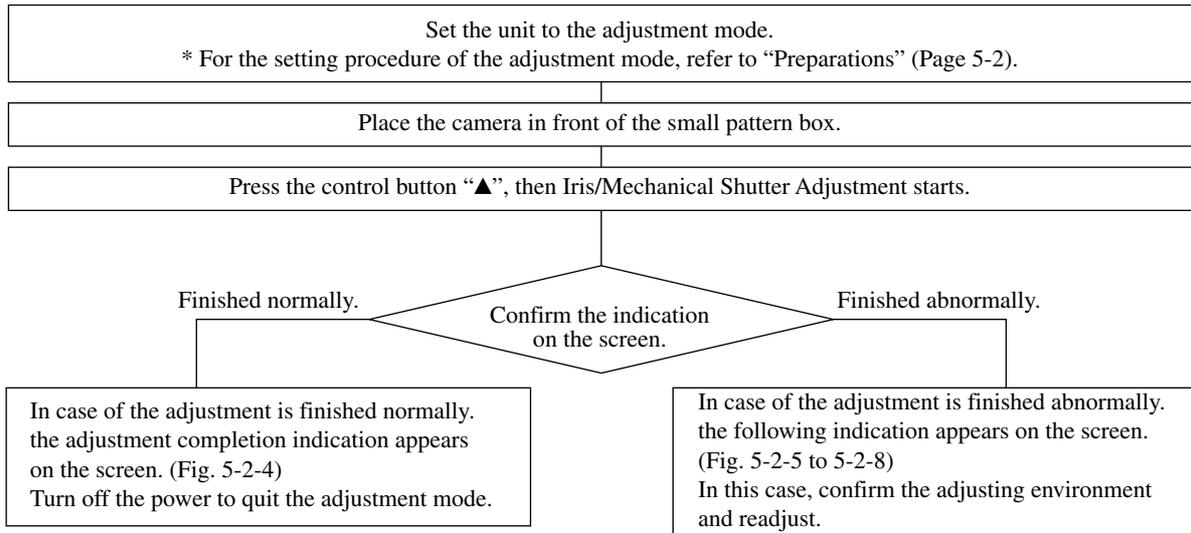


Fig. 5-2-3

Adjustment order



Screen display

The adjustment finished normally.



Fig. 5-2-4

The adjustment is complete.

The adjustment is finished abnormally.



Fig. 5-2-5

Malfunction of Iris adjustment



Fig. 5-2-6

Malfunction of Mechanical Shutter adjustment



Fig. 5-2-7

Malfunction of Mechanical Shutter adjustment



Fig. 5-2-8

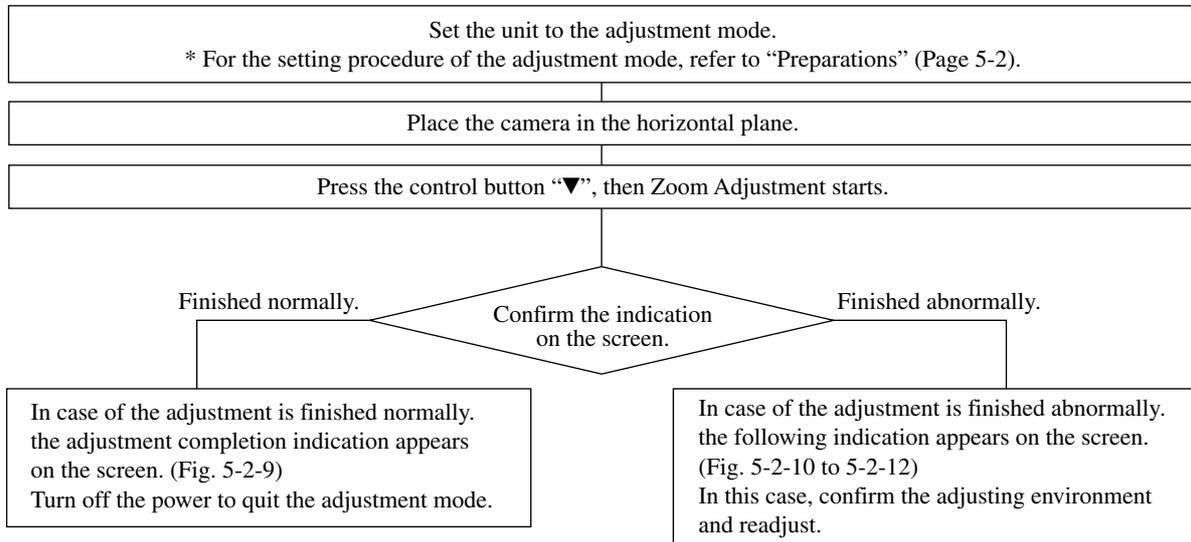
Malfunction of Mechanical Shutter adjustment

### 5-2-3. Zoom Adjustment

The Zoom Over Run/Focus Back Lash adjustment order is as follows.

Perform the zoom adjustment in the condition the camera stands up in the horizontal plane.  
Adjusting in the other condition causes the malfunction of the zoom adjustment.

Adjustment order



#### Screen display

The adjustment finished normally.



**Fig. 5-2-9**

The adjustment is complete.

The adjustment is finished abnormally.



**Fig. 5-2-10**

Malfunction of Zoom adjustment



**Fig. 5-2-11**

Malfunction of Zoom adjustment  
Focus section



**Fig. 5-2-12**

Malfunction of Zoom adjustment  
Zoom section

### 5-2-4. Far Focus Adjustment

**Note:** When using the flange back adjustment jig, take care of the following points:

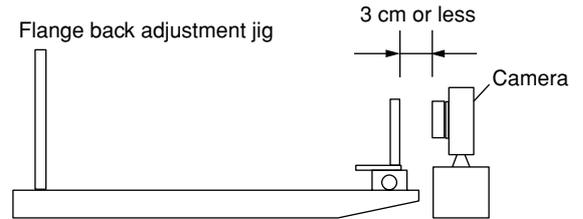
- For the illumination, use a light source such as an incandescent lamp or inverter type fluorescent light free from flickering.
- Do not make an adjustment in the environment where fluorescent lamp flickering occurs even if the illuminance can be ensured with the room illumination only.  
Use an incandescent lamp or inverter type fluorescent light at a place free from the influence of room illumination.

1) Install the flange back adjustment jig so that the distance between it and the front of lens of camera is less than 3 cm.

**Note:** Take care not to hit the flange back adjustment jig when extending the lens.

- 2) Make the height of flange back adjustment jig and the camera equal.
- 3) Check that the center of chart meets the center of shot image screen with the zoom lens at TELE end and WIDE end respectively.

Equipments required: Flange back adjustment jig  
Chart  
Camera table

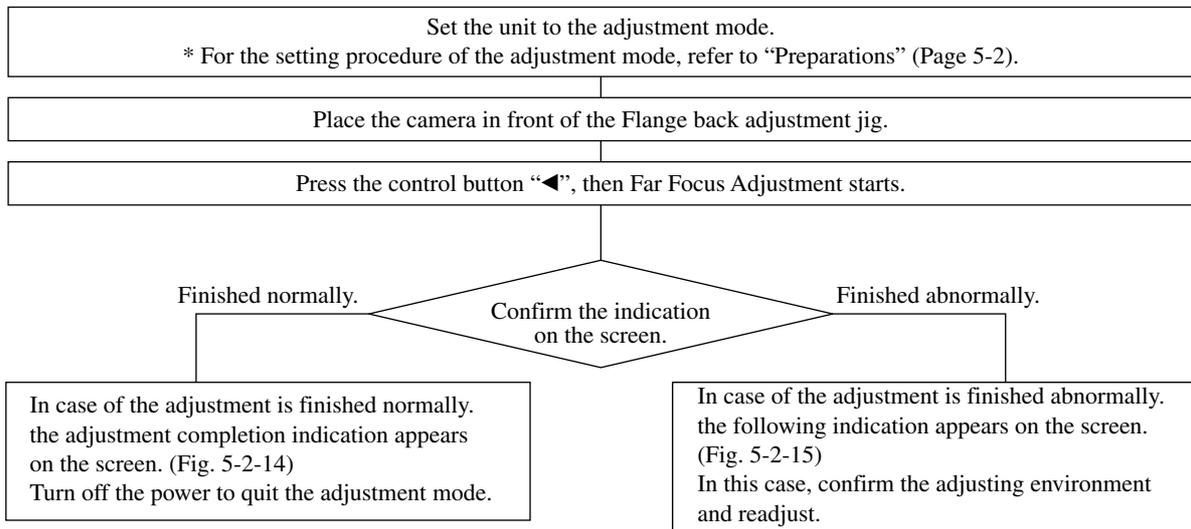


**Fig. 5-2-13**

Color temperature = 5000 ± 300K

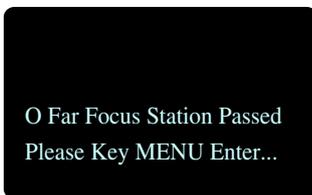
Be sure not to turn off the power during adjusting.

Adjustment order



Screen display

The adjustment finished normally.



**Fig. 5-2-14**

The adjustment is complete.

The adjustment is finished abnormally.



**Fig. 5-2-15**

Malfunction of Far Focus adjustment

### 5-2-5. Near Focus Adjustment

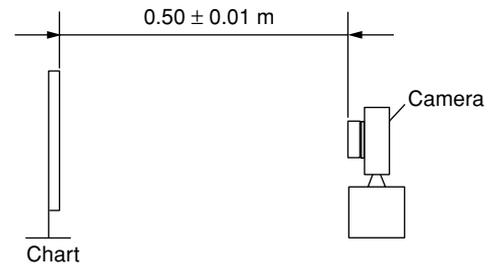
**Note:** Perform the Near Focus Adjustment after the Far Focus adjustment.

- 1) Be sure to set  $0.50 \pm 0.01$  m distance between the chart and the tip of camera lens.
- 2) Check that the center of chart meets the center of shot image screen with the zoom lens at TELE end and WIDE end respectively.

Color temperature =  $5000 \pm 300$ K

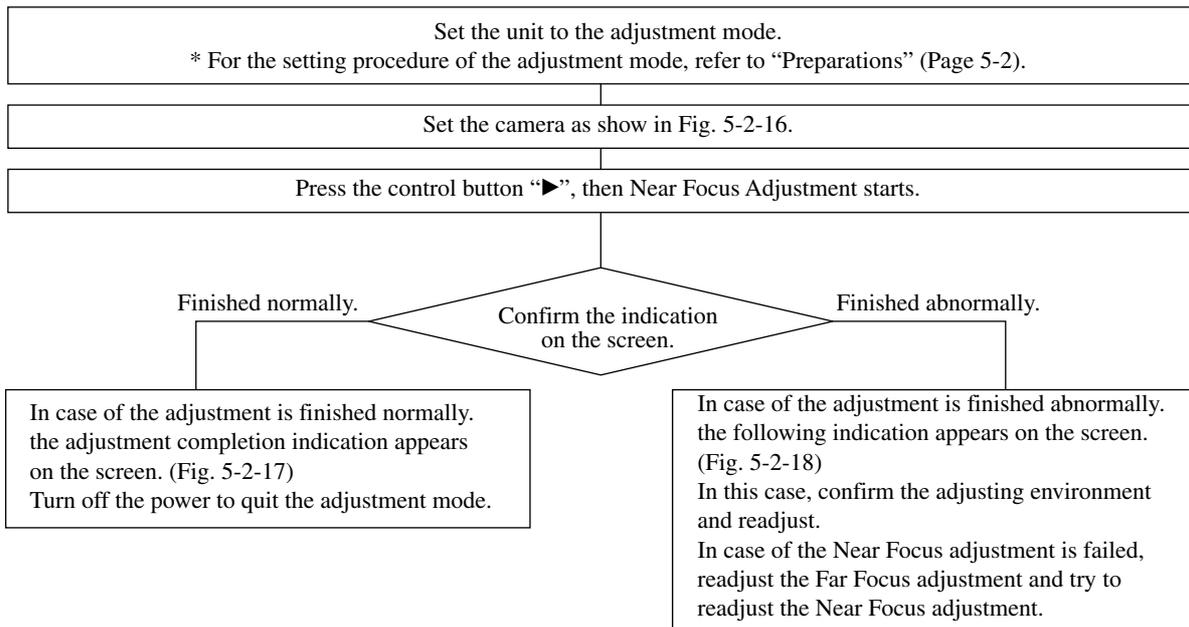
Be sure not to turn off the power during adjusting.

Equipments required: Chart  
Camera table



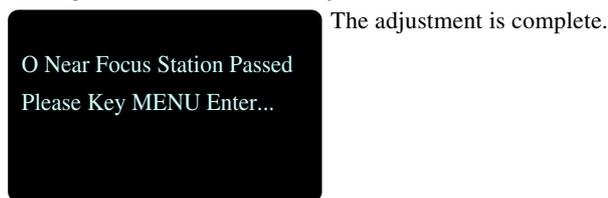
**Fig. 5-2-16**

Adjustment order



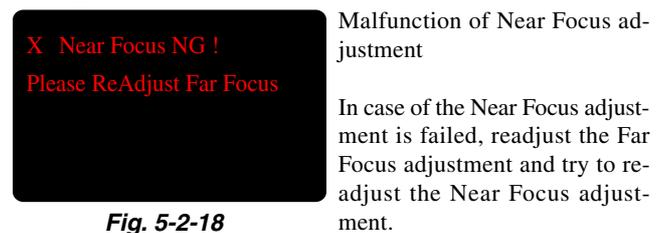
Screen display

The adjustment finished normally.



**Fig. 5-2-17**

The adjustment is finished abnormally.



**Fig. 5-2-18**

