

## ADR2.5 Taking good photographs with available light and space, using a small camera

This is the third ADR information sheet on photography. Please also refer to ADR2.1 Photography help notes and ADR2.2 Simple conservation photography and documentation for some tips on how to take good photographs of dresses.

This information sheet supports the video ADR2.AV2 Taking good photographs with available light and space, using a small camera. They have been made to demonstrate how to get good photos that reveal clear details of the fabric and the condition. In the video, conservation photographer, Nitsa Yioupros is giving the demonstration, Kate Chidlow, textile conservator is assisting her.

The video was made at the Illawarra Museum and we would like to thank them for kindly letting us film two of their dresses for this video.

### Equipment needed

- Camera
- Tripod (essential for slow shutter times)
- Available light (a good flood of even light)
- A large piece of white board such as corflute to reflect light off
- A grey cloth or sheet for the background
- A mannequin (for dresses in reasonable condition)
- A sturdy board (for photographing fragile dresses)
- A crate to slope the board on
- Grey fabric to cover the sloped backboard
- A ladder

### Setting up

#### Step 1: Look at your camera manual

The first thing Nitsa recommends is to consult your camera manual. Most people look at it once when they first buy their camera and never again, but it is the key to getting better photographs.

#### Step 2: Setting the correct compression

Turn to the compression section of your manual. This will show you options for obtaining higher quality images. You do this by changing the compression to fine or superfine. Note that the images will be larger so you won't get as many shots on your camera card.

#### Step 3: Setting the resolution

The more pixels you have, the better your image will be, so set the resolution to large. When you load them into your computer, save the images at 300 dpi (dots per inch) for good print publications and web use.

#### Step 4: Shooting in auto mode

Turn your camera dial to auto and this will adjust everything automatically (auto white balance, aperture and shutter speed).

#### Step 5: Shooting in manual mode (necessary for black and white garments)

Sometimes using the automatic setting on your camera will not give you the best result. This is particularly true of black dresses where the photos tend to be underexposed or white dresses, where the photos tend to be overexposed. To improve your photo, you can manually set the white balance, aperture and shutter speed. It is essential that you use a tripod for this type of photography due to slow shutter speeds. Turn to 'shooting in manual mode' in your camera manual.

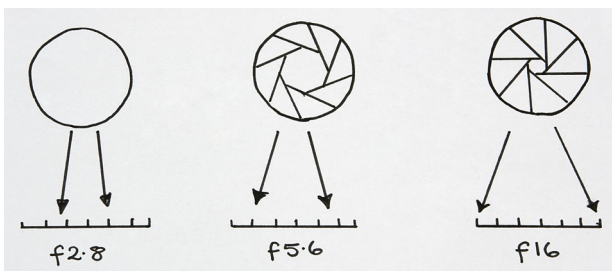
#### Step 6: Setting the white balance

There are two options for setting the white balance to get the correct colour. You can set your white balance to AWB (automatic white balance) in manual shooting if you have more than one light source in the room. However, if there is only one light source, you can select the appropriate icons on your camera, eg fluoro, daylight, tungsten.

#### Step 7: Aperture

This is an adjustable lens opening that lets light into the camera. The size of the openings are called f-stops. The f-stop affects the depth of field (area of focus). This is the range of distance from the camera in which things will be in focus. The wider the aperture, the narrower the depth of field. The depth of field is particularly important when photographing three-dimensional objects.

- A wide aperture (f2.8) gives a shallow depth of field (less will be in focus).
- A mid aperture (f5.6 or f8) gives a good depth of field (most things will be in focus).
- A small aperture (f16 or above) gives an excellent depth of field.



The circles represent the aperture (f-stop) and the arrows indicate the depth of field (focus).



**f2.8 — short depth of field.** The small area of sharpness/focus is only in the foreground on the right-hand sleeve, the lace on the left shoulder is blurred.



**f5.6 — medium depth of field.** The area of focus has increased in the foreground to midway across the back and part of the left sleeve.



**f16 — long depth of field.** The area of focus is sharp from the right sleeve in the foreground across to the left sleeve in the background.

### Step 8: Shutter speed

The shutter speed controls the length of time the light hits the image plane in the camera. The higher the shutter speed number, the faster the shutter. It can range from 1/500th of a second to minutes. Most photos are taken between 1/60th and 1/125th of a second. When shooting with available light indoors, you will need a much slower shutter speed, so use a tripod to hold your camera still.

### Tips

#### Shooting options — bracketing

It is always wise to bracket your shots. This means you select an f-stop and shutter speed you are happy with and then take another two photos (one f-stop above and one f-stop below), eg if you shoot on f8, take another photo at f11 and another at f5.6. View the image on your camera and keep shooting until you get a satisfactory result which shows detail on the garment. You can then select the best exposed image after you have viewed them on a computer screen.

#### Under and overexposing

It may be easier to select aperture priority mode which allows you to set the f-stop but will automatically adjust the shutter speed for you. When photographing a white dress, choose an f-stop you are happy with. You will probably need to underexpose your shot as less light is needed on white objects, so raise your f-stop by one or more. With a black dress, you may need to overexpose your shot as more light is needed, so lower your f-stop by one.

The Australian Dress Register is an initiative of the Powerhouse Movable Heritage NSW program, which is coordinated through the Museum's Regional Services program to support research and documentation of cultural heritage collections.

**This information sheet is part of a series developed by the Powerhouse Museum, April 2010.**

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