

PHOTOGRAPHY

Use this help guide to refresh what you have learned in one of our workshops.

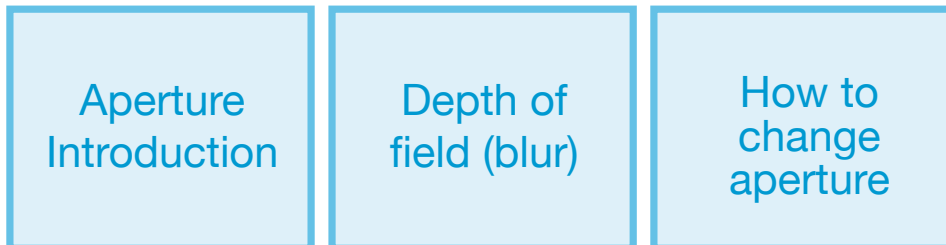
HELP
GUIDE

Click -or- tap the squares to navigate

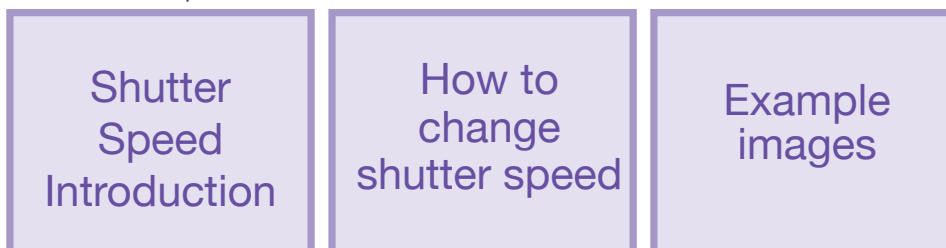
Using camera



Aperture

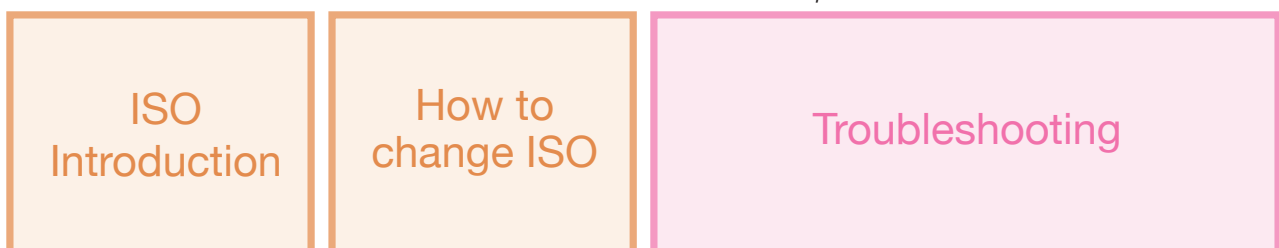


Shutter Speed



ISO

More help



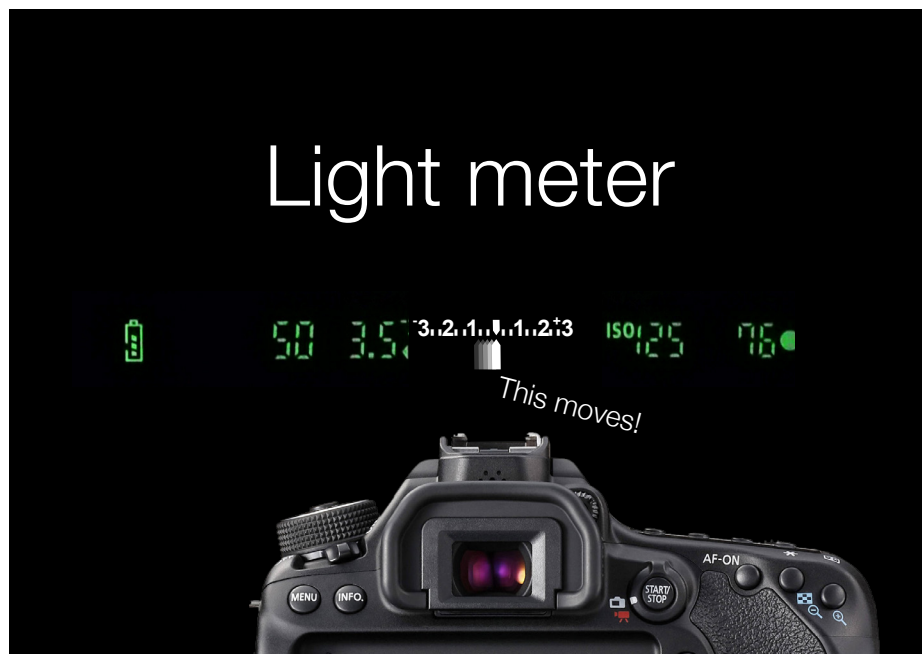
Using the Canon 80D



Previewing exposure

- Two methods -

Method #1




Light Meter

- Look through the view finder
- Pay attention to the light indicator as it moves
- Aim for the middle for a good exposure
- Can't see your light meter? Check to make sure your camera is NOT in 'Live View' mode. (see below)

Method #2

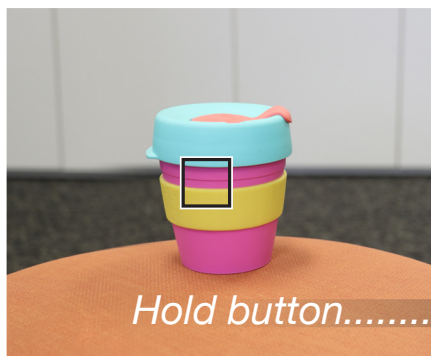


Live View

- Make sure the dial is pointing to the white camera icon 
- Press the 'START/STOP' button
- You'll notice the LCD screen will now display a live image of your scene
- You can now change your settings and use the preview image and the LCD light meter as a guide for a good exposure

Focus Trap

Taking a photo, with the subject in focus, but NOT centered



- Press the shutter button halfway to focus on your subject
- Keep the shutter button half pressed while you move your camera
- Make your subject off centre
- When you are ready, press the shutter button

Review a photo/video



1 - Review 'play' button

2 - images/videos will appear on the LCD screen

3 - Use wheel/pad to cycle through files. The 'Set' button selects images/videos to view

4 - To zoom in on an image, press - or +

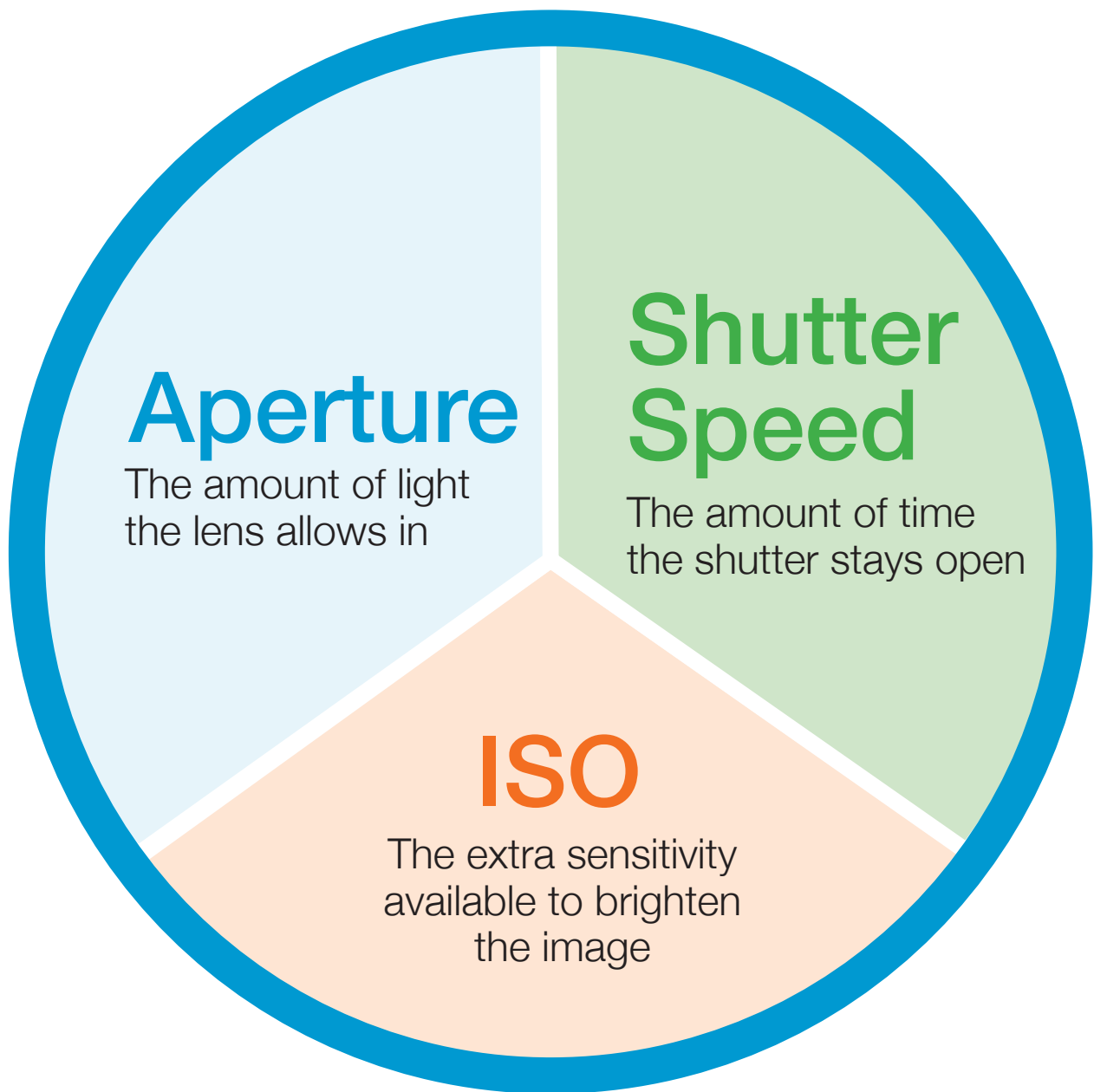
5 - Press the rubbish bin button to delete an image or video. Press 'SET' to confirm.

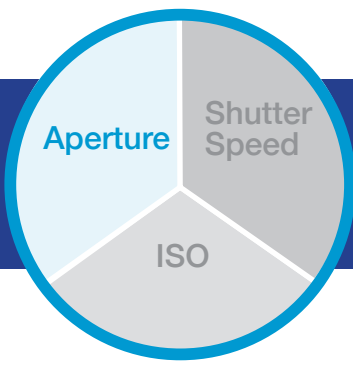
To exit review mode
Press the 'play' button again.

[Return to contents page](#)

Exposure

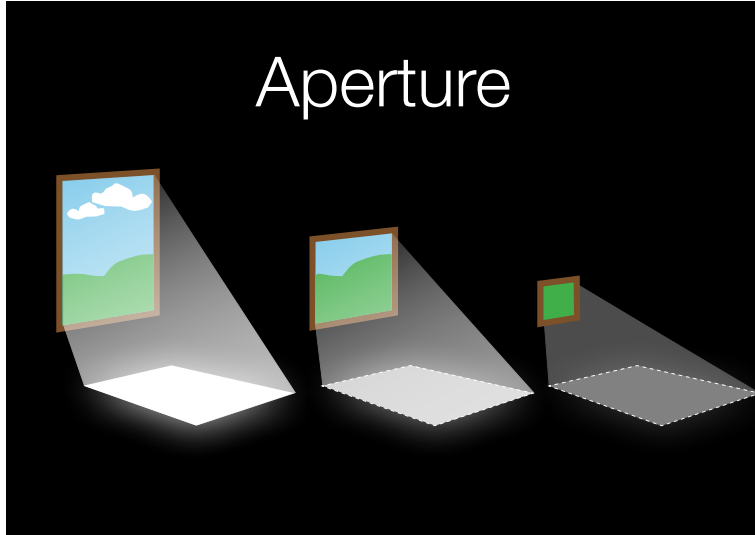
The exposure of your photo/video is created by balancing three factors. Finding a combination of all three will give a well exposed image.





Aperture

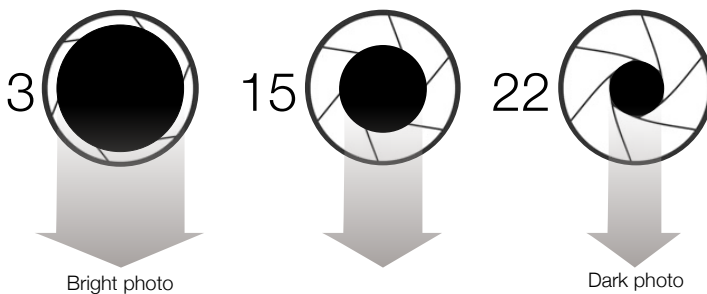
The amount of light the lens allows in



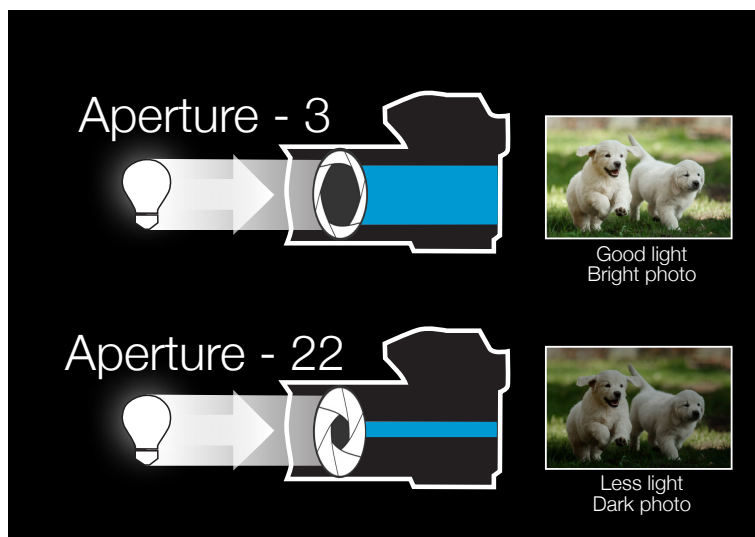
Aperture works like an open window, allowing a large amount, or small amount of light into the camera.

Aperture number

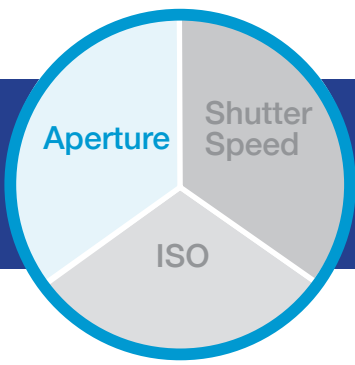
How much aperture leaves **block** the light



- Aperture numbers relate to how much light is STOPPED from entering.
- Aperture 3 stops a **small** amount of light
- Aperture 22 stops a **large** amount of light

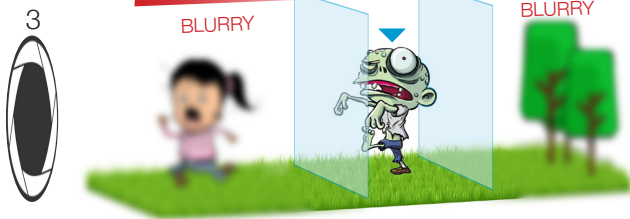
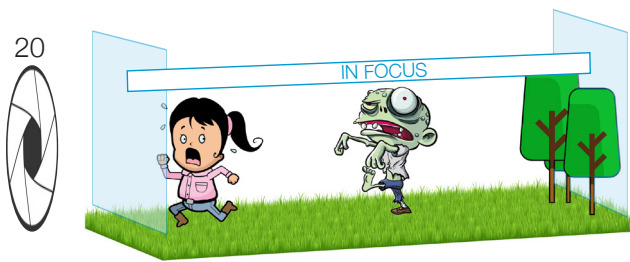


- Aperture 3 allows more light which results in a bright photo
- Aperture 22 stops more light, which results in a darker photo



Aperture

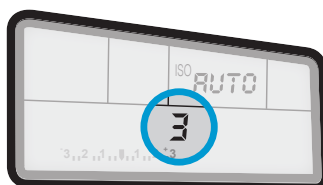
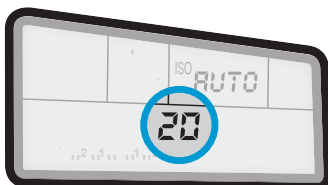
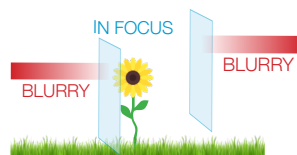
Depth of field - Aperture also helps to create a blurry foreground or background, which makes your subject stand out more in the photo.

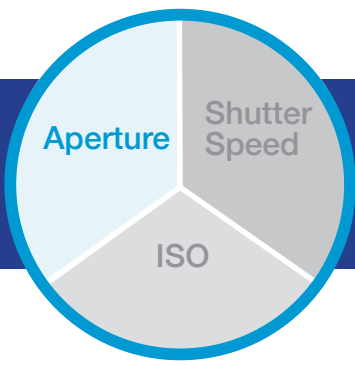


- As well as letting in light, the aperture setting also changes the depth of field resulting in more background blurriness.
- Aperture 20 stops a lot of light, and it makes more of the subject in focus, and less blurring
- Aperture 3 lets in a lot of light, and also creates a lot of blurring



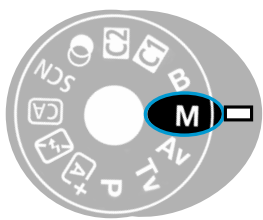
- The same photo with different aperture settings changes the blurriness for a different effect





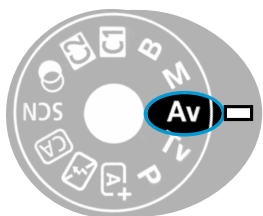
Aperture

How to change aperture -



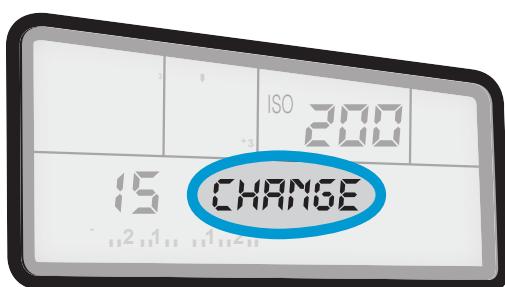
Manual mode

When in 'M' manual settings mode, use the spinning dial on the back of the camera.

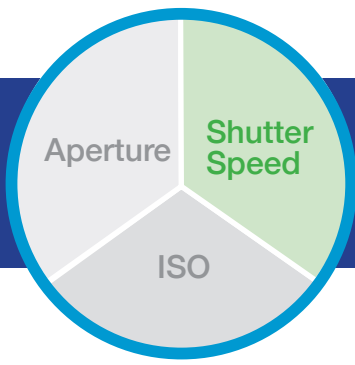


Av mode

When in 'M' manual settings mode, use the wheel on the top of the camera.



In any mode, the top lcd screen will display your aperture number in this location.



Shutter Speed

The amount of time the shutter stays open

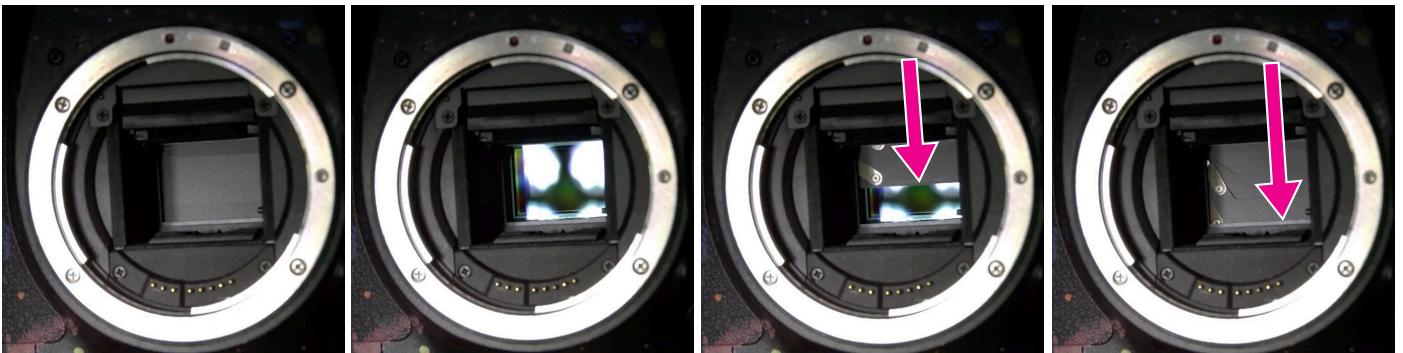
The shutter is a curtain that opens and closes, determining how long the aperture light is allowed into the camera. It can be a long amount of time, or a very short amount of time.

1. Closed

2. Open

3. Closing

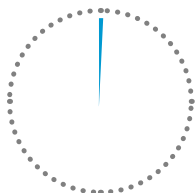
4. Closed



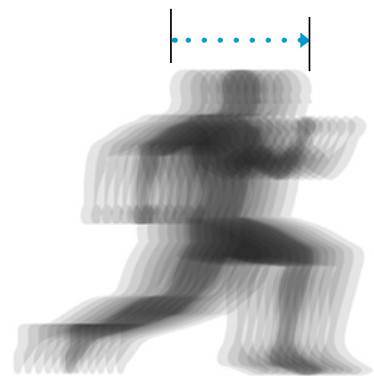
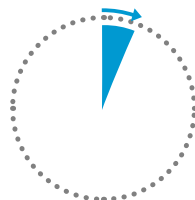
Shutter speed is measured in parts or multiples of a second. The longer the shutter speed, the more light and more movement. The shorter the shutter speed the less light and less movement



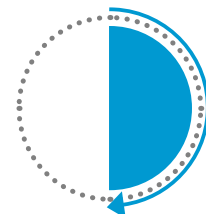
1/1000 Second

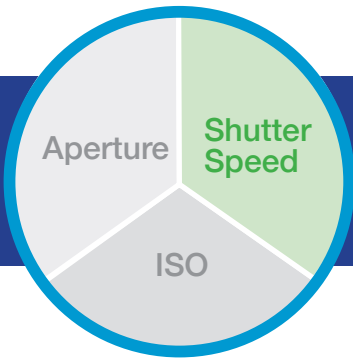


1/10 Second



1/2 Second





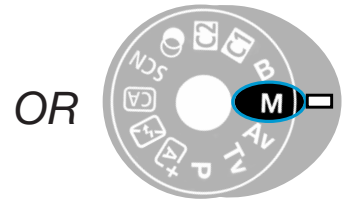
Shutter Speed

The amount of time the shutter stays open

How to change shutter speed



Av mode



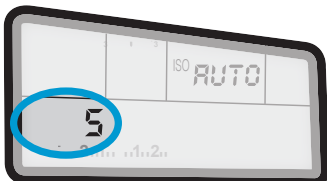
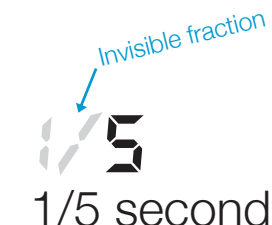

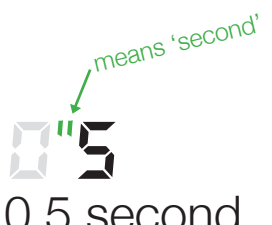
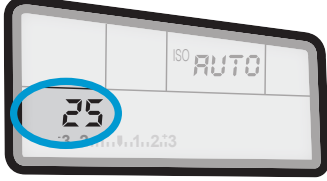

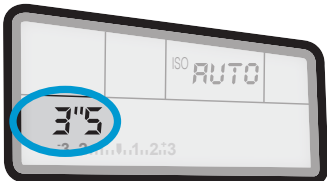

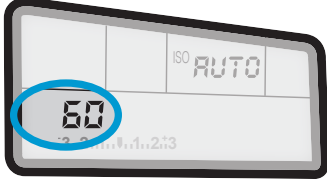

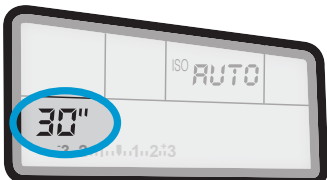

Manual mode

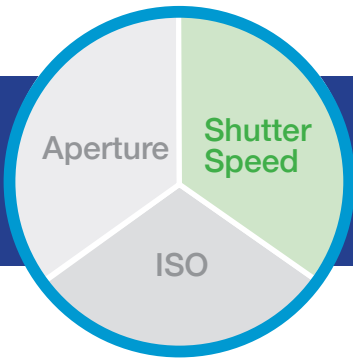
OR

Use the spinning dial on the top right of the camera.

The shutter speed will be displayed on the top LCD here.

The shutter speed is displayed in two ways depending on it being a fraction of a second, or multiple seconds.

			
	1/5 second		0.5 second
			
	1/25 second		2.5 seconds
			
	1/60 second		30 seconds



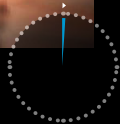
Shutter Speed

The amount of time the shutter stays open

Photos at different shutter speeds



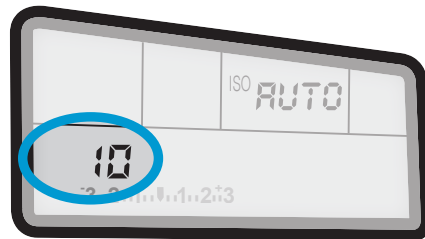
1/1000 Second



This shutter speed is 1/1000th of a second, so it freezes the action.



1/10 Second



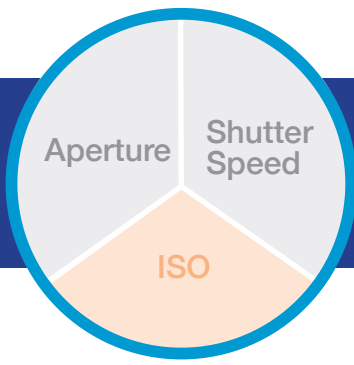
This shutter speed is 1/10th of a second, so it partially freezes the action with some blur.



45 minutes!



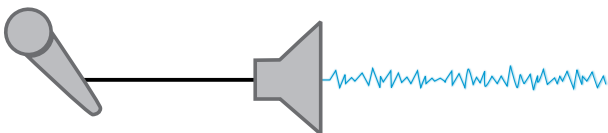
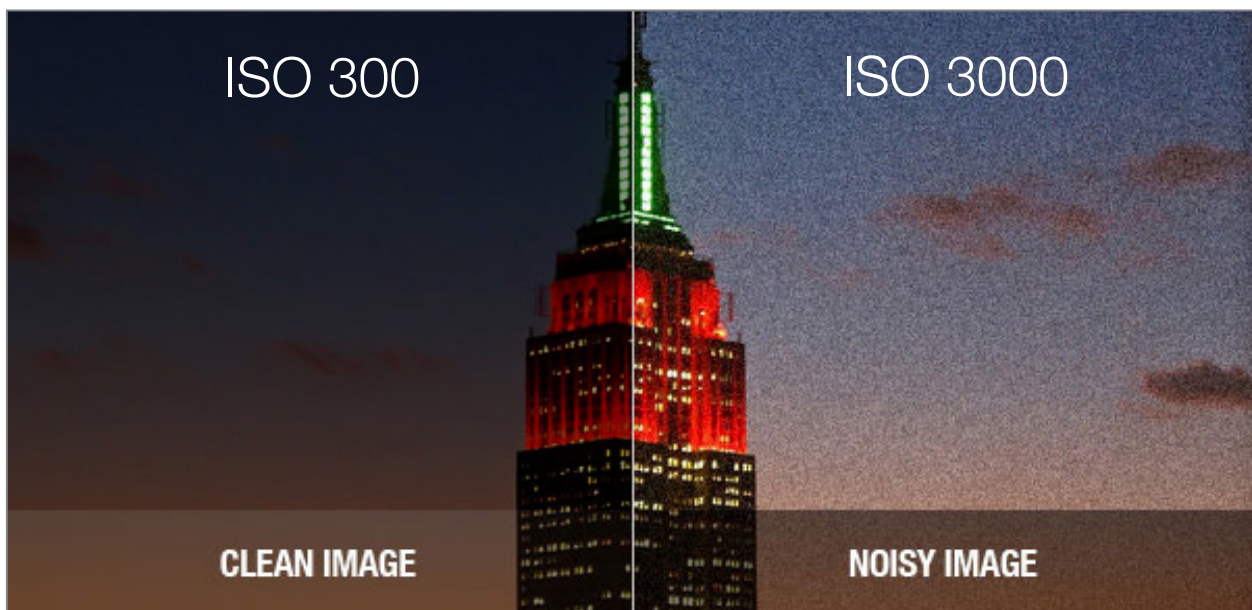
This shutter speed is more than just seconds, it's 45 minutes. It allows so much light in, that stars you wouldn't normally see with the naked eye appear. It also has slight star blur from the earth spinning during the 45 minutes.



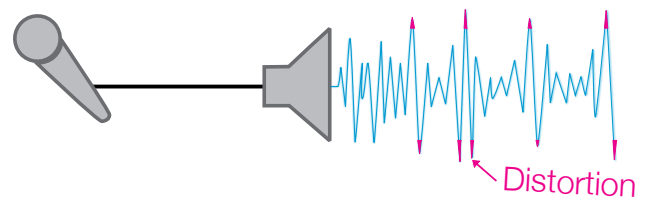
ISO

The ability to increase the sensitivity to light

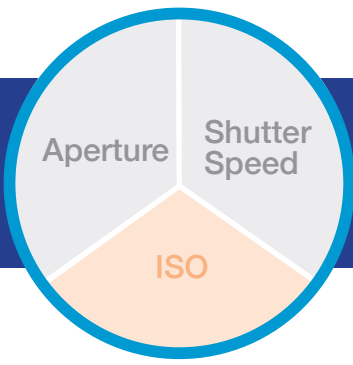
ISO is a number value that represents the sensitivity to light. The higher the number the more sensitive and the brighter the exposure. Think of it like 'free' light for your camera. This becomes important at night/or in low light.



Low ISO produces a clean image. ISO can also be represented by sound volume where a normal level is clean.



When you raise ISO, you gain light sensitivity. But like turning up sound volume, you potentially could raise distortion in the process. Distortion in an image appears as noise giving a grainy look. This may look fine on the LCD screen, but it is better to review an image after shooting and zooming in to check the noise levels.




ISO

The ability to increase the sensitivity to light

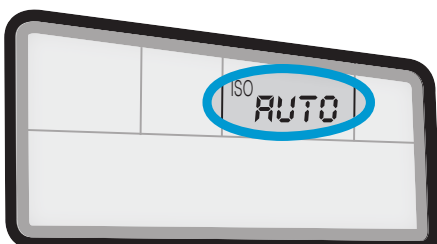
How to change ISO

- 1** Set your mode
M - Manual mode
Av - Aperture priority mode
Tv - Shutter speed priority mode
P - Program mode
- 2** Press the 'ISO' button
- 3** Spin the adjuster wheel

 **NOTE:** Auto modes don't allow ISO changes. ISO will be automatic.



- 4** ISO number will appear here as it changes



NOTE:

If you set the ISO setting to '**AUTO**', then the camera will adjust the ISO itself. Be careful when shooting in low light as the ISO may become high automatically and produce a lot of noise in your images.

Trouble shooting

Use the list below to help solve any issues you are having

LCD only shows information (no image)

1. Make sure the function dial is clicked to the white camera icon (not the red video icon)
2. Press the 'start/stop' button to turn **ON** the LCD screen live viewing mode



Viewfinder not working

1. If the LCD screen is on, the viewfinder is disabled
2. Make sure the function dial is clicked to the white camera icon (not the red video icon)
3. Press the 'start/stop' button to turn **OFF** live viewing mode
4. The viewfinder should now work.



No info details on LCD

1. With the camera on, make sure the function dial is clicked to the white camera icon (not the red video icon)
2. Press the 'start/stop' button to turn on live viewing mode
3. Press the 'Info' button enough times until the information details appear on the LCD



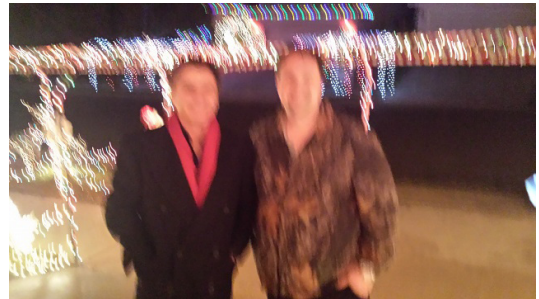
Trouble shooting

Use the list below to help solve any issues you are having

Blurry photos

Solutions:

- Try holding the camera more steady
- Use a tripod to keep the camera steady
- Make the shutter speed faster (spin top dial to the right)



Dark scene or subject

Solutions:

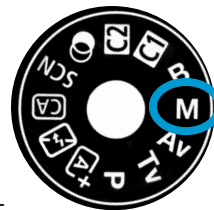
- Move the camera position so the light falls onto the subject (background light can cause the subject to be dark)
- Make the shutter speed slower (spin top dial to the left)
- Change the aperture to be wider (smaller number)
- Change the ISO to be a higher number



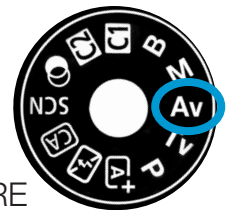
Can't change aperture

1. Ensure the camera mode dial is set to either of these modes. (aperture can't be manually changed in other modes)

M
MANUAL



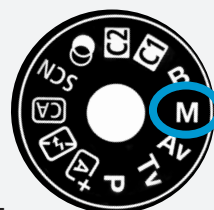
Av
APERTURE
PRIORITY



Can't change shutter speed

1. Ensure the camera mode dial is set to either of these modes. (shutter speed can't be manually changed in other modes)

M
MANUAL



Tv
SHUTTER
PRIORITY



Downloading files

OPTION 1 - Copy directly from the SD card

Required: SD Card reader

- Slide open the SD card slot on the right side of the 80D
- Press the SD card inwards, then release pressure to remove the SD card
- Using an SD card slot or reader, insert the SD card
- Wait for your computer to show the SD card as a removeable drive.
- Copy your files
- Remove and replace the SD card into the 80D. Press the SD card inward, then release. The SD card should stay in place. Close the card panel.



OPTION 2 - Copy using USB cable

Required: USB Cable (included in 80D kit)

PC:

- Open the USB cable port rubber door on the left side of the 80D
- Connect USB-C cable to the camera and then to your computer
- Turn on the 80D
- The camera should mount on your computer like an external drive
- Copy the files

MAC:

- Open the USB cable port rubber door on the left side of the 80D
- Connect USB-C cable to the camera and then to your computer
- Turn on the 80D
- Open 'Image Capture' program on your mac computer (it comes installed with the operating system).
- Select the files to download.



USB CHECK -

If your computer uses USB-C only, you will need a 'USB to USB C' adaptor.



Included in kit



Adaptor not included