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How to Change Settings to Shoot in Manual

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The first step is to get your camera owner's manual or reference manual. If you don't have one you can download a PDF version free from the website.

Step 1

~ Your Camera Manual ~

If you don't have a physical copy of your camera manual you can download one.

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Get your FREE copy and get started.



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Nikon D3500

This lesson is aimed at Nikon owners and covers the Nikon D3500. This is an entry-level camera and will be typical of this type of Nikon DSLR camera.

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This lesson will show you how to set your camera up and how to change to settings. You will need to practice changing these settings while looking through the viewfinder. It won't take long before you are making changes without having to think too much about it. If you have a different model and these steps don't work just look up the subject, for example, 'White Balance' or 'Aperture'. Your manual will show you step-by-step how to change that setting.

Step 2

Learn How To ...

- a) turn your camera ON and put it in 'Manual Mode'
- b) turn the 'White Balance' setting to AUTO
- c) change 'Aperture' settings
- d) change 'Shutter Speed'
- e) change 'ISO' settings

First you need to turn your camera ON and set it to Manual Mode. Turning it ON a no-brainer, next turn the Mode Dial so that the “M” lines up with the little white mark on the camera body.

Step 2a



Turn the ON/OFF switch to 'ON'

Turn the Mode Dial to 'M'

Nikon D3500

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Next up is White Balance. I want you to set it to AUTO, you will use custom white balances later, but for now AUTO is perfect.



Step 2b

EXAMPLE
Nikon D3500

White Balance

White balance ensures that colors are unaffected by the color of the light source. Auto white balance is recommended for most light sources; other values can be selected if necessary according to the type of source:

Option	Description
AUTO Auto	Automatic white balance adjustment. Recommended in most situations.
Incandescent	Use under incandescent lighting.
Fluorescent	Use with fluorescent lighting (☞ 112).
Direct sunlight	Use with subjects lit by direct sunlight.
Flash	Use with the flash.
Cloudy	Use in daylight under overcast skies.
Shade	Use in daylight with subjects in the shade.
PRE Preset manual	Measure white balance or copy white balance from existing photo (☞ 116).

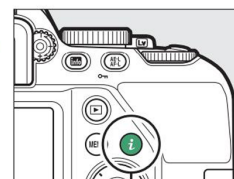
To alter the White Balance setting you press the “i” button, select AUTO, and press OK.



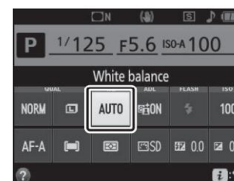
Step 2b

EXAMPLE
Nikon D3500

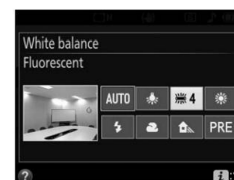
- 1 Display white balance options.**
Press the **i** button, then highlight the current white balance setting in the information display and press **OK**.



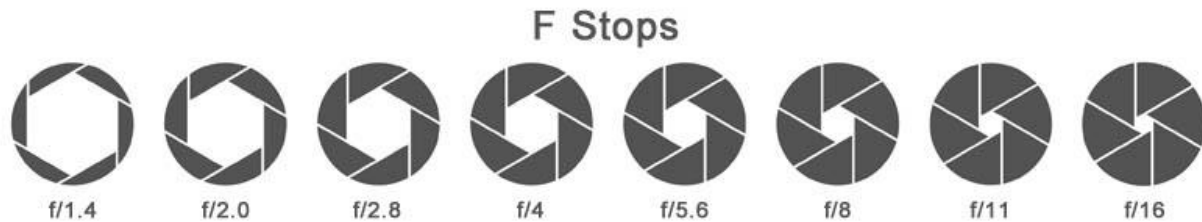
i button



- 2 Choose a white balance option.**
Highlight an option and press **OK**.



Aperture controls the Aperture Blades inside the lens. The Blades control how much light passes through the lens to the sensor. Low f/ numbers let the most light in, higher f/ numbers let less light in.




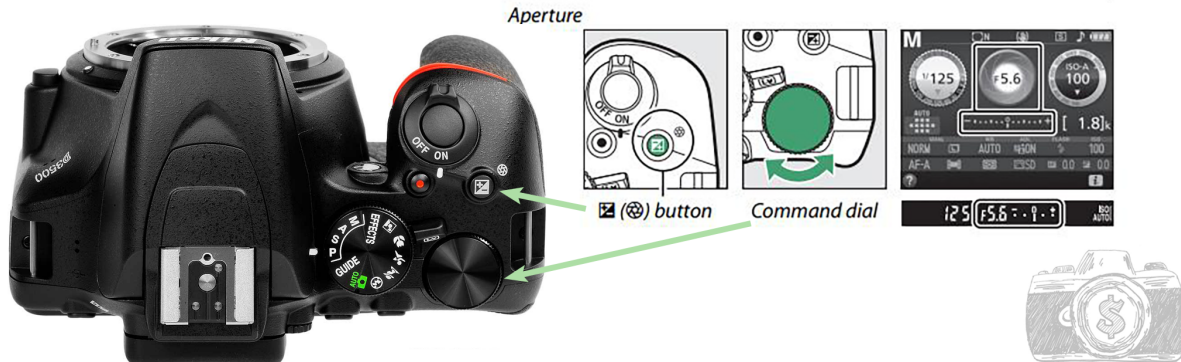
To change the Aperture settings you need to hold down the button with the +/- sign and the aperture blades image next to it. While holding this button down and turn the command dial to change the setting.

Step 2c

EXAMPLE
Nikon D3500

2 Choose aperture and shutter speed.


Checking the exposure indicator (see below), adjust shutter speed and aperture. Shutter speed is selected by rotating the command dial (right for faster speeds, left for slower). To adjust aperture, keep the  button pressed while rotating the command dial (left for larger apertures/lower f-numbers and right for smaller apertures/higher f-numbers).



Shutter Speed is the easiest, all you need to do is turn the Command Dial. The Shutter is in the camera body, this setting like Aperture, controls the amount of light that gets onto the image sensor.

Step 2d

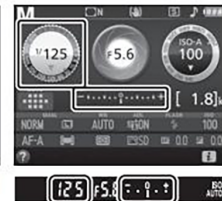
EXAMPLE
Nikon D3500

-
- 2 Choose aperture and shutter speed.**
Checking the exposure indicator (see below), adjust shutter speed and aperture. Shutter speed is selected by rotating the command dial (right for faster speeds, left for slower). To adjust aperture, keep the  button pressed while rotating the command dial (left for larger apertures/lower f-numbers and right for smaller apertures/higher f-numbers).

Shutter speed



Command dial



Step 2e

EXAMPLE Nikon D3500

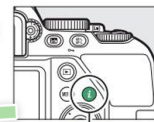


ISO Sensitivity

The camera's sensitivity to light can be adjusted according to the amount of light available. The higher the ISO sensitivity, the less light needed to make an exposure, allowing higher shutter speeds or smaller apertures. Choosing **Auto** allows the camera to set ISO sensitivity automatically in response to lighting conditions; to use auto in P, S, A, and M modes, select **Auto ISO sensitivity control** for the **ISO sensitivity settings** item in the shooting menu (195).

Mode	ISO sensitivity
	Auto
P, S, A, M	100–25600 in steps of 1 EV
Other shooting modes	Auto; 100–25600 in steps of 1 EV

- 1 Display ISO sensitivity options.
Press the **i** button, then highlight the current ISO sensitivity in the information display and press **OK**.



ISO controls how sensitive the image sensor is to light. In low light you want the sensor to collect as much light as possible, using a higher ISO number will make it possible. On a sunny day you can use ISO 100, and in low light conditions ISO 800 or higher is needed.

To make your life easier when starting out I think it's best if you set the ISO to AUTO.

To help you get a correct exposure you need to monitor the Exposure Indicator or Meter. You can see it when looking through the viewfinder or on the rear LCD screen. If you keep the marker on “0” (centered) the correct amount of light will hit the sensor and you’ll get a perfectly exposed photo. If you set the ISO to AUTO this will be done by the camera automatically. In well lit situations like full sunshine the ISO can’t go lower than ISO 100 so to compensate you will need to change the shutter speed to a higher number to get the meter back to “0”. Just keep an eye on the meter and you’ll do great.



Rear Display

The ‘Exposure Indicator’ or ‘Meter’ shows you if your exposure is correct. If it is under exposed (not enough light) or over exposed (too much light).

You need the marker to be on ‘0’. To do that you need to change the ISO setting.

Save yourself the hassle for now and set ISO to ‘AUTO’



Viewfinder

Optimal exposure	Underexposed by $\frac{1}{3}$ EV	Overexposed by over 2 EV
<div> <div> <div></div> <div></div> <div></div> <div></div> <div></div> </div> <div>0</div> <div> <div></div> <div></div> <div></div> <div></div> <div></div> </div> </div>	<div> <div> <div></div> <div></div> <div></div> <div></div> <div></div> </div> <div>0</div> <div> <div></div> <div></div> <div></div> <div></div> <div></div> </div> </div>	<div> <div> <div></div> <div></div> <div></div> <div></div> <div></div> </div> <div>0</div> <div> <div></div> <div></div> <div></div> <div></div> <div></div> </div> </div>

Recap

- a) Turn the Camera on and put in Manual (M) Mode
- b) White Balance will already be set to AUTO
- c) Set Aperture to desired setting
- d) Set Shutter Speed to desired setting
- e) ISO will already be set to AUTO

So next time you go on a shoot.....

1. Turn the Camera on.
2. The mode dial will already be set to "M" for Manual.
3. The White Balance and ISO will already be set to AUTO

You select the Aperture:

Example: A portrait on a sunny day in the shade of a tree. An Aperture of f/2.8 will give the desired Depth of Field'.

Set the Shutter Speed:

To make sure you don't get camera shake and a blurry focus start with 1/250 and look at the Exposure Meter. If the indicator is not on the "0" and centered, turn the Shutter Speed up until the indicator is at "0". When it is, you start taking photos, just keep an eye on the Exposure Meter as light conditions can change.

Happy Shooting!

