

Camera 101

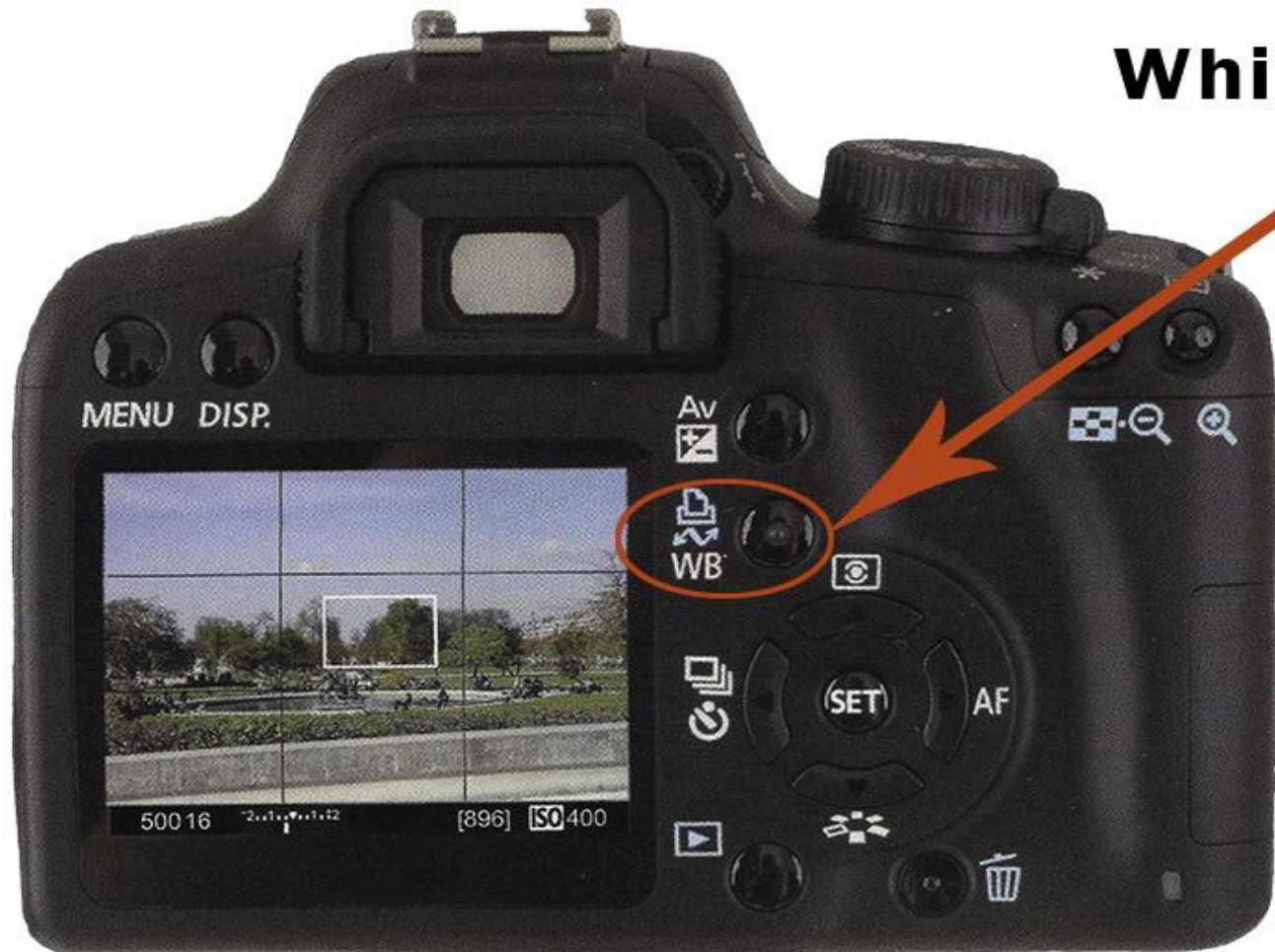


Purpose of this first session

To prepare everyone for the second session by making sure you know where the “basic controls” are on your camera regardless of whether you are using a basic point and shoot or a single lens reflex camera.

Feel free to ask questions at any time or to repeat something you did not understand. There are PACT members available to help with “one on one” assistance.

White Balance



Located on camera as a button and as a menu item on other cameras.

Used to correct photos taken under certain lighting to daylight appearance.

Such as fluorescent (green cast) to daylight

Set to match as closely to the conditions you are shooting under - cloudy, shade etc. It is estimated that "AWB" works about 80% of the time.

The Big Three:

ISO

The measure of a camera's sensitivity to light
(film 100 speed, 200 speed etc.)

These three items combine to produce what is called a balanced or proper exposure

Shutter Speed

The amount of time the shutter is open

Aperture

The size of the opening on the lens that controls the amount of light entering the camera

ISO Settings



Could be located on the top or back of the camera as a button or on the toggle wheel or in one of the menus

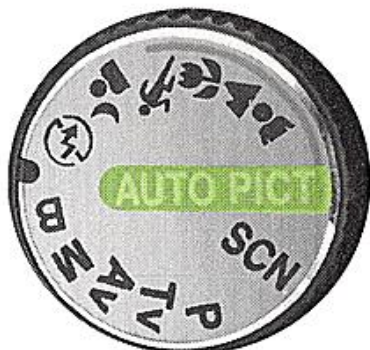
The digital ISO numbers are the equivalent of the ISO or ASA numbers of film. The low numbers such as 100 ISO produce the best quality and are referred to as slow speed. Higher numbers such as 800, 1600 etc are called fast or high speed and are useful for low light conditions but may introduce digital noise into your photos depending upon your camera. Can be reduced or eliminated with editing programs such as Photoshop.



Canon



Nikon



Pentax

The Mode Dial

The camera offers a choice of the following shooting modes:

Auto Modes

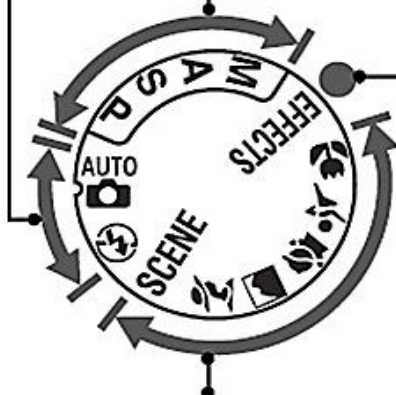
Select these modes for simple, point-and-shoot photography.

- Auto (☞ 26)
- Auto (flash off) (☞ 26)

P, S, A, and M Modes

Select these modes for full control over camera settings.

- P—Programmed auto (☞ 62)
- S—Shutter-priority auto (☞ 63)
- A—Aperture-priority auto (☞ 64)
- M—Manual (☞ 65)



Special Effects Modes

Use special effects during shooting.

- | | |
|----------------------------------|---------------------------------|
| • Night vision (☞ 116) | • Selective color (☞ 117, 120) |
| • Color sketch (☞ 116, 118) | • Silhouette (☞ 117) |
| • Miniature effect (☞ 116, 119) | • High key (☞ 117) |
| | • Low key (☞ 117) |

Scene Modes

The camera automatically optimizes settings to suit the scene selected with the mode dial. Match your selection to the scene being photographed.

- | | |
|---------------------|------------------------------|
| • Portrait (☞ 30) | • Sports (☞ 31) |
| • Landscape (☞ 30) | • Close up (☞ 31) |
| • Child (☞ 31) | • SCENE: Other scenes (☞ 32) |

Scene Auto Selector (Live View)

Selecting live view in or mode enables automatic scene selection (“scene auto selector”; ☞ 104) when autofocus is used.

Auto Mode



Camera will set everything for you.

You have the least amount of control in this mode.

Many of your menu items will be grayed out.

Program Mode

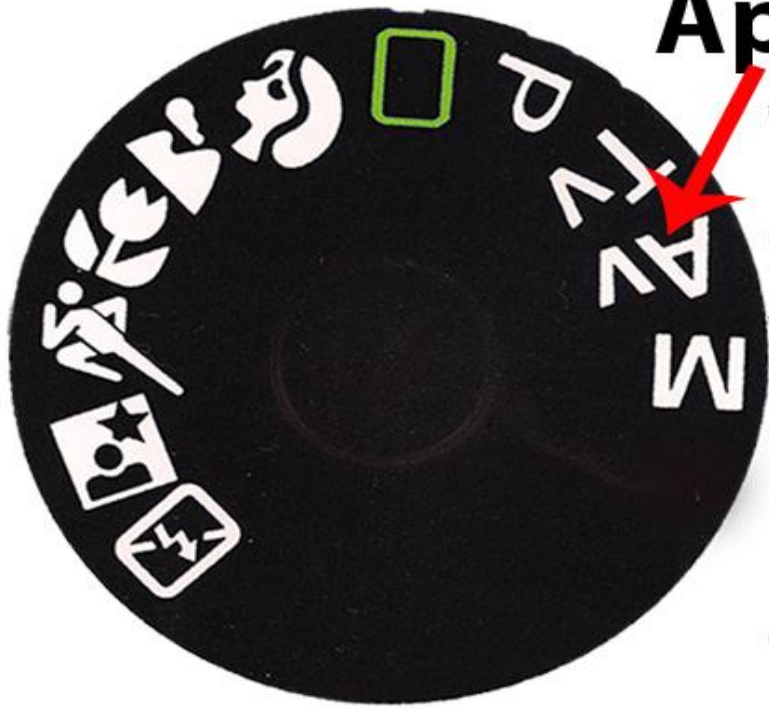


You now take more control of your camera in this mode. Camera will still set the aperture, shutter speed depending on the ISO you have set. Many of the menu items that were grayed out in "Auto" will now be available to you.



“Time Value” or “Shutter Priority” Mode

In this mode you are now going to take charge of one of the functions your camera has been doing for you automatically. This is the shutter speed or how slow the shutter will travel which is how long you will allow the light to enter the camera. Used also to blur or freeze motion.



Aperture Priority Mode

This mode controls the size of the opening on the lens which controls the volume of light that will enter the lens. Small opening - small amount of light. Large opening - large amount of light.

Useful to control also the "Depth of Field" in a photo which is the amount of area in the photo that appears to be in sharp focus or blurred.

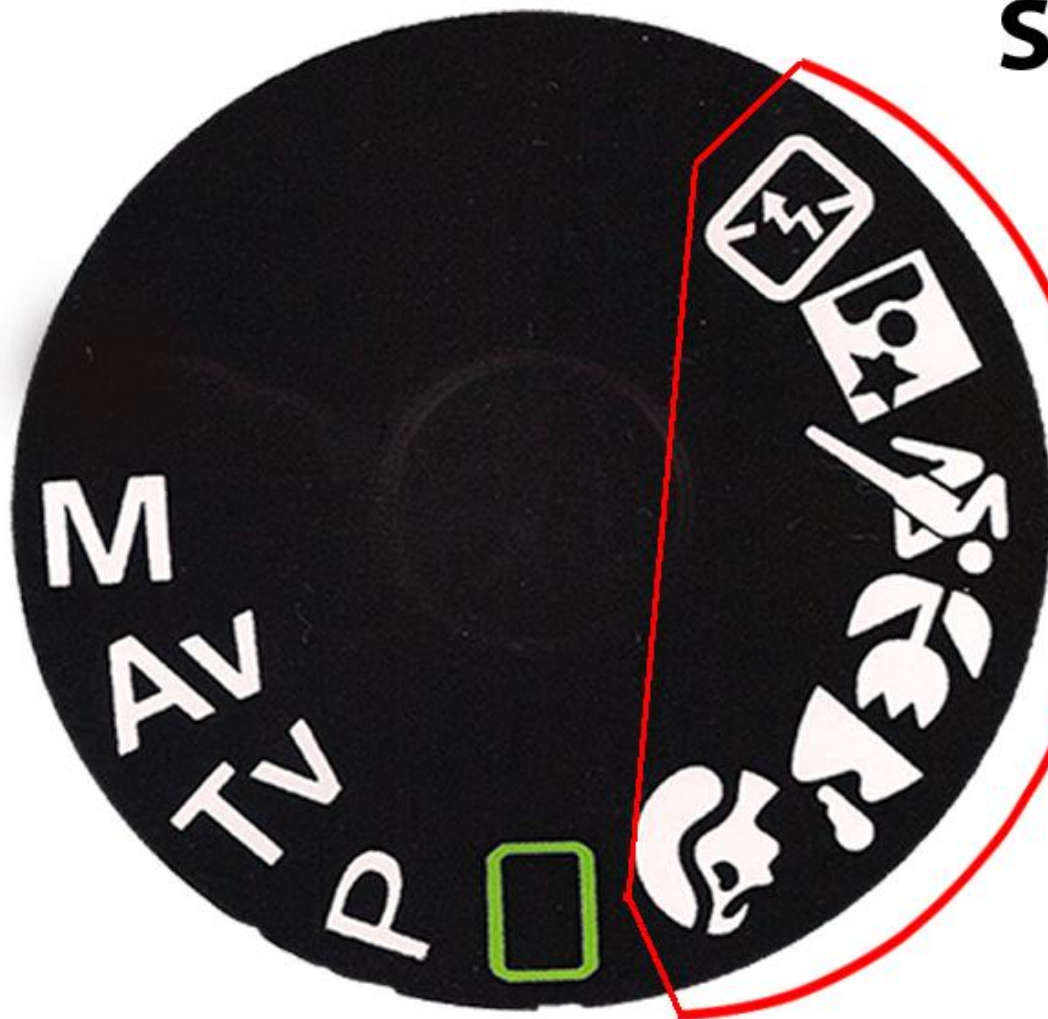
Manual Mode

In this mode you now take complete control of the camera.

You set the aperture, the shutter speed and the ISO.



Scene Modes



Can be found on the camera's dial and or in the menus. These are automatic modes installed by the camera manufacturer and are not usually changeable but check your manual to make sure. Experiment with these and see if they work for you or not. You can also use these to educate

yourself by taking a picture and then reviewing the metadata and see what the camera manufacturer thought what settings should be used.

Exposure Compensation Control

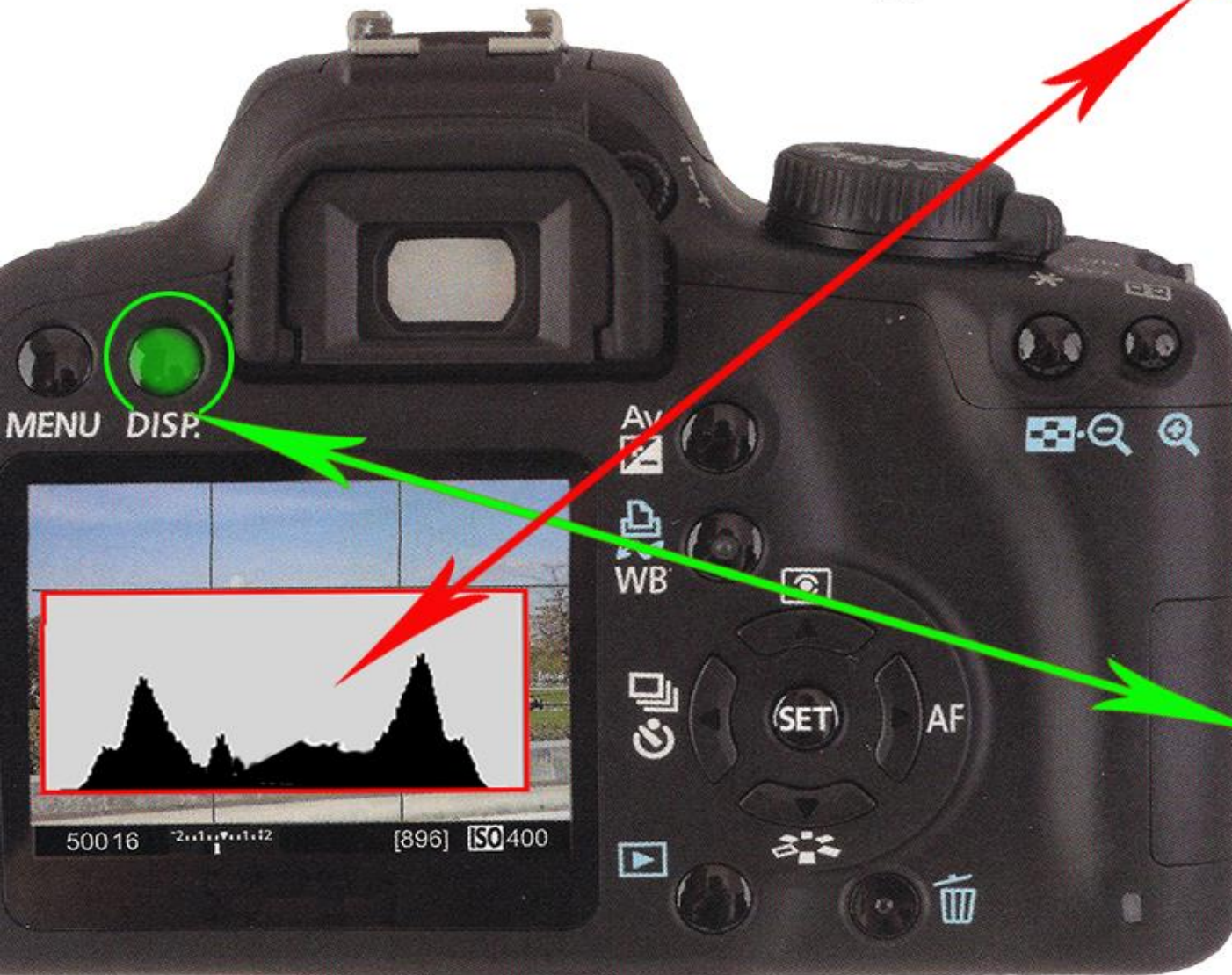
Can be located on the outside of the camera as a button, accompanied by a black and white square with a plus and minus sign in it. Some times found in the menus.

Used to add or subtract light from your settings. You can usually add two stops of light or subtract two stops of light by 1/3 increments.

Does not work in "Manual Mode" where you make the changes yourself © Ben Anderson 2012



Histogram (Light meter)



Can be turned on or off in the menus to show in the instant review .
In the preview mode you can use the "Disp." (display) button to turn it on and off.

Note: Some cameras will give you a Histogram before you take the photo - check your manuals