

Photographic Terminology:
for still and moving images

ECU Extreme Closeup/Macro (eye or ear or ???)

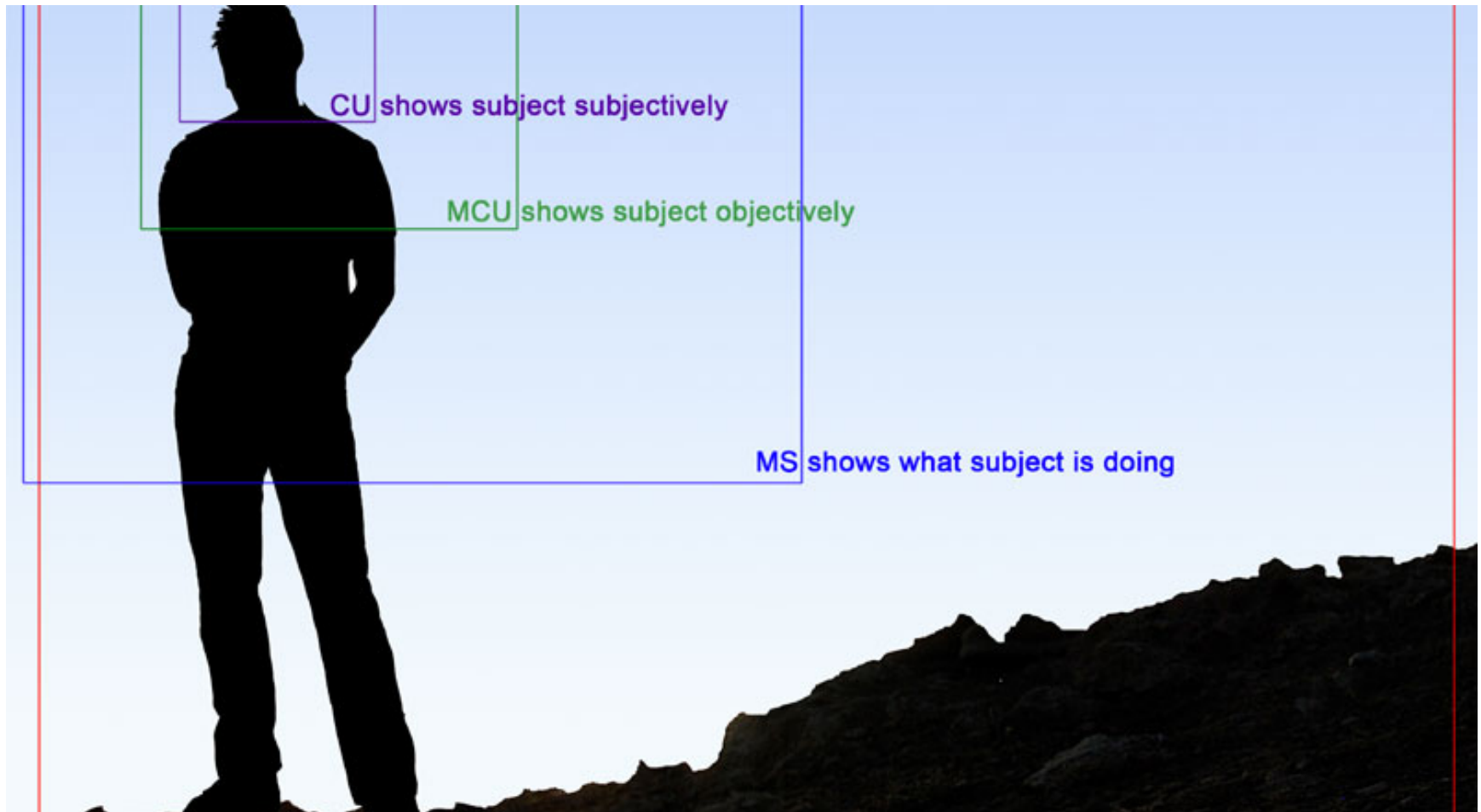
CU closeup (head)

MCU medium closeup (head and shoulders)

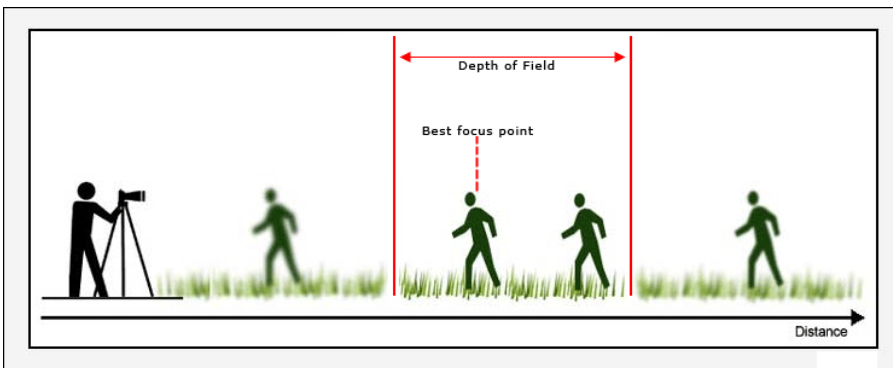
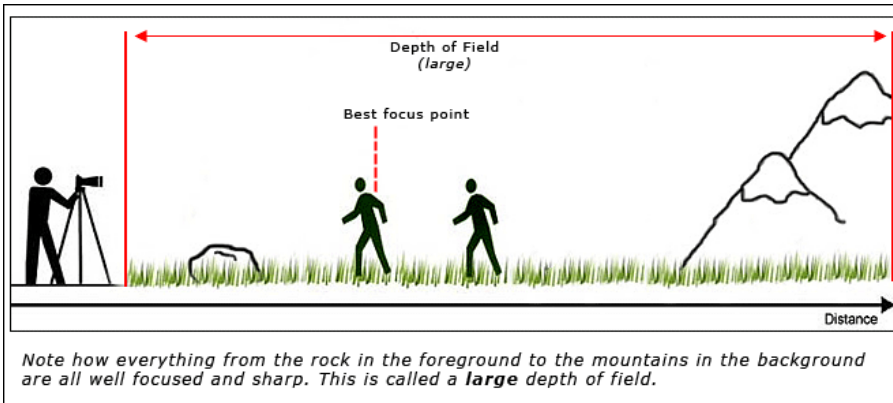
MS medium shot (torso)

LS long shot (full body)

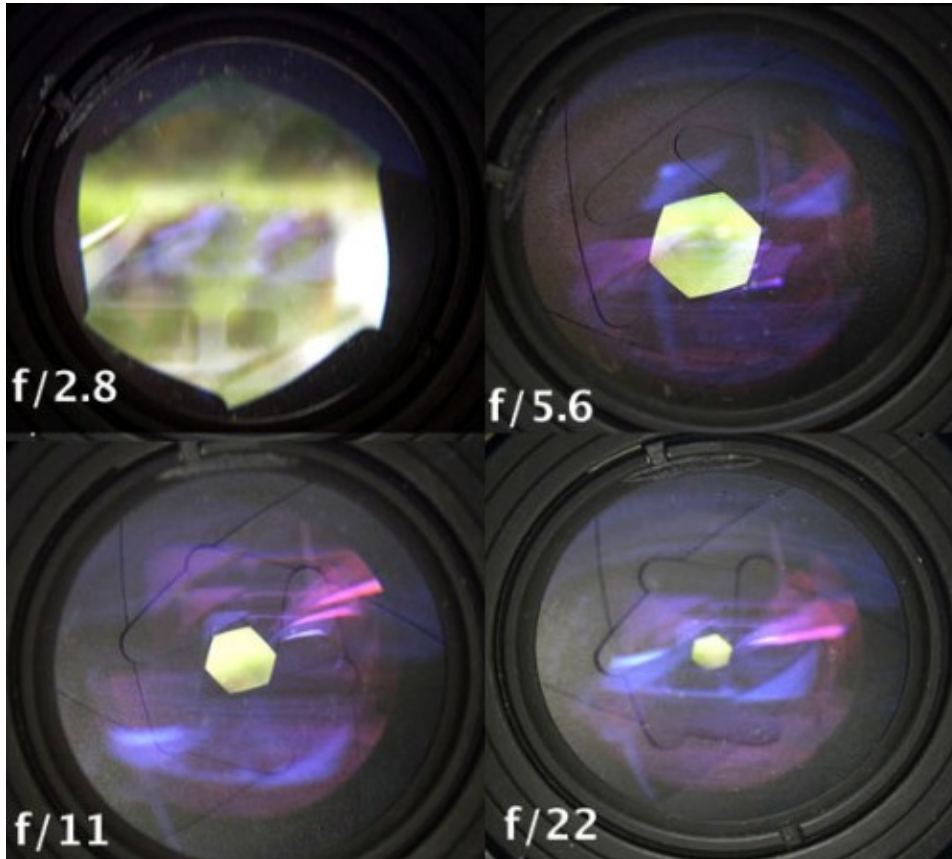
WS Wide Shot / Establishing shot show surroundings/context



Depth of field: *The depth of focus in the image. A short depth of field allows emphasis on the subject in focus while the rest of the image is blurred. A large or deep depth of field shows detail in more of the image.*



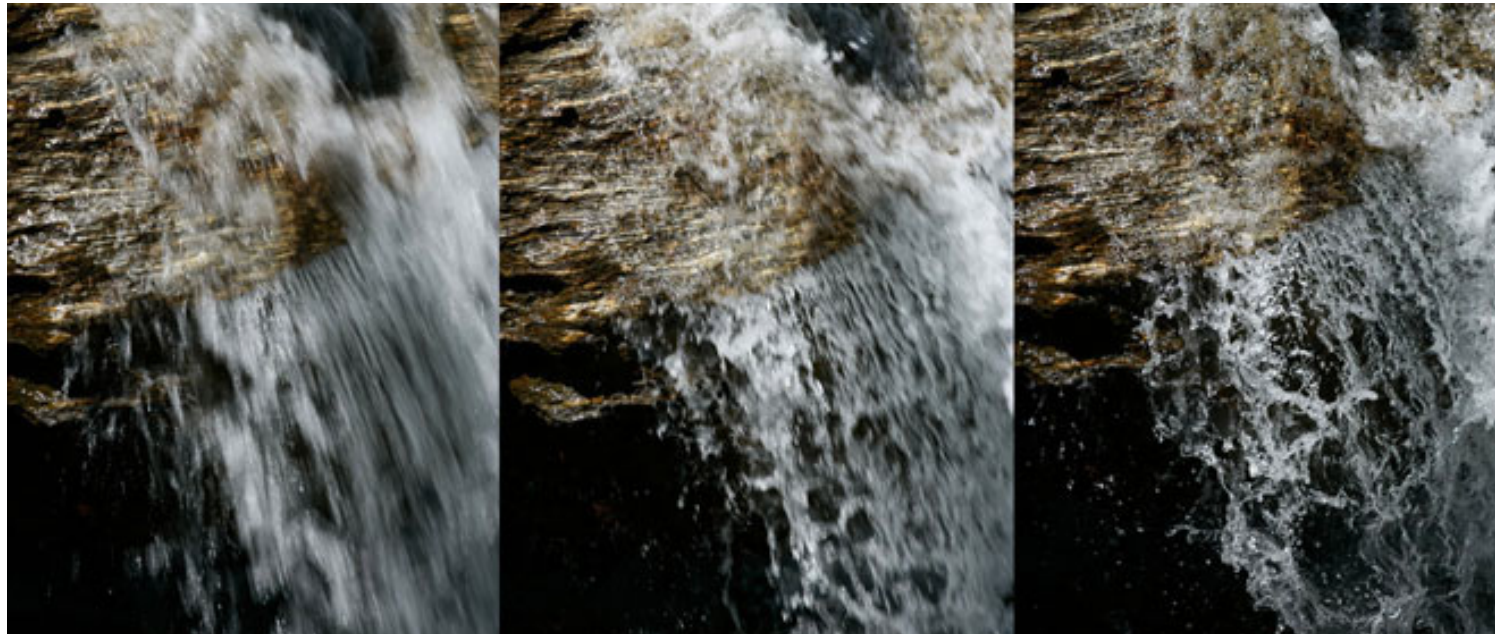
Aperture: *the size of the hole that lets the light in to the sensor*



The smaller the number
The larger the hole
The less time it needs to
Stay open to receive light
And the shallower the
Depth of field.

The larger the number
The smaller the hole
The more time it needs to
Stay open to receive light
And the larger the
Depth of field.

Shutter Speed: *how fast the aperture opens and closes. The faster, the more crisp the action (especially good for moving images) the slower, the more blur from movement is possible.*



Images from idigitalphoto.com and other websites

Focal Length: *the wider angle, the larger the depth of field. The more telephoto, the smaller the depth of field. Wide angle lenses can distort geometry, faces, etc. Telephoto images can be harder to focus. On our digital cameras,*



28/20mm lens 8 inches away 85/55mm lens, 4 ft away

	Ultra wide	Wide	Normal	Portrait tele	Telephoto	Long Tele
APS-C Sensor	10-14mm	17-24mm	28-35mm	50-70mm	100-200mm	300mm+
35mm Format	15-20mm	24-35mm	40-60mm	80-105mm	135-300mm	400mm+

Image borrowed from www.ontakingpictures.com and photo.net and homephotog.com

ISO: light sensitivity of film or digital sensor. Lower numbers show less sensitivity but finer “grain”. Higher numbers are more sensitive allowing the capture of low light or fast moving images but have digital “noise” showing pixels.



Images from digitalphotographyschool.com

Raw

vs.

jpg



Bracket: to shoot several versions of the same image, changing parameters on either side of what you think is the correct exposure. The lighter image shows detail in shadow areas, the darker image preserves details in the light areas.



The bracketed shots can be combined in Photoshop
In a High Dynamic Range Photo.



ISO

Degree of sensitivity to light
From about 100 (less sensitive, less grain)
To 3200/6400 (more sensitive, more grain)



Exposure Triangle



Shutter Speed

How fast the shutter opens/shuts
Controls light and motion look
Higher shutter speed freezes still images
But can cause jitter in video
Lower shutter speeds blur motion, but smooths video

Aperture

Size of hole for light to enter
From 1.. (bigger hole, more light, shorter focus depth)
To 32 (smaller hole, less light, deeper focus)

Sequence for setting proper exposure for Video/ Film

1. Decide on Frame Rate for your project:

24 fps gives filmic look

30 fps gives a video look

60 fps allow for better slow motion but takes more storage

2. Use this info to choose your shutter speed:

For Realism, double the frame rate and invert as a fraction:

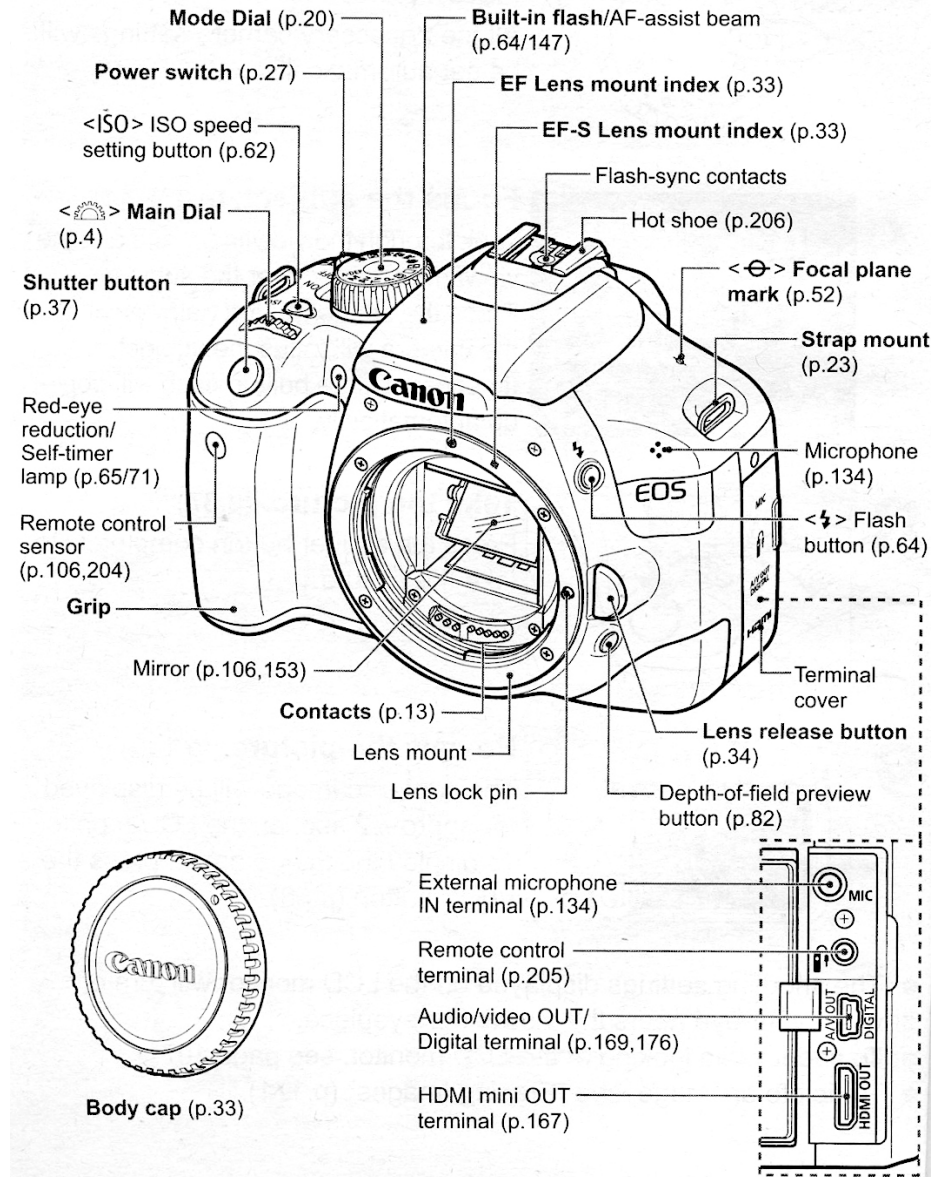
24fps= $1/48$ (but the nearest setting on cameras is $1/50$ fps)

30 fps= $1/60$

3. Adjust aperture to let in enough light and have desired Depth of Field


4. Balance this with necessary ISO, using the lowest ISO possible

Canon Rebel Family



FOCUS

When using viewfinder look for red lights
 When using LCD monitor, look for green box.
 ON Ti2 hold down shutter button half way for both viewing methods
 ON Ti1 Press * to focus when using LCD, use shutter when using viewfinder

Manual Focus: Set switch to MF on lens
 Press  once or twice to enlarge, use focus ring.

Use Main dial to choose settings

Use ISO button to change sensitivity. Use higher the numbers for dark or fast scenes. (but they will get grainier) In basic modes this is automatic.

The higher the ISO the farther the flash will reach. In bright light decrease ISO

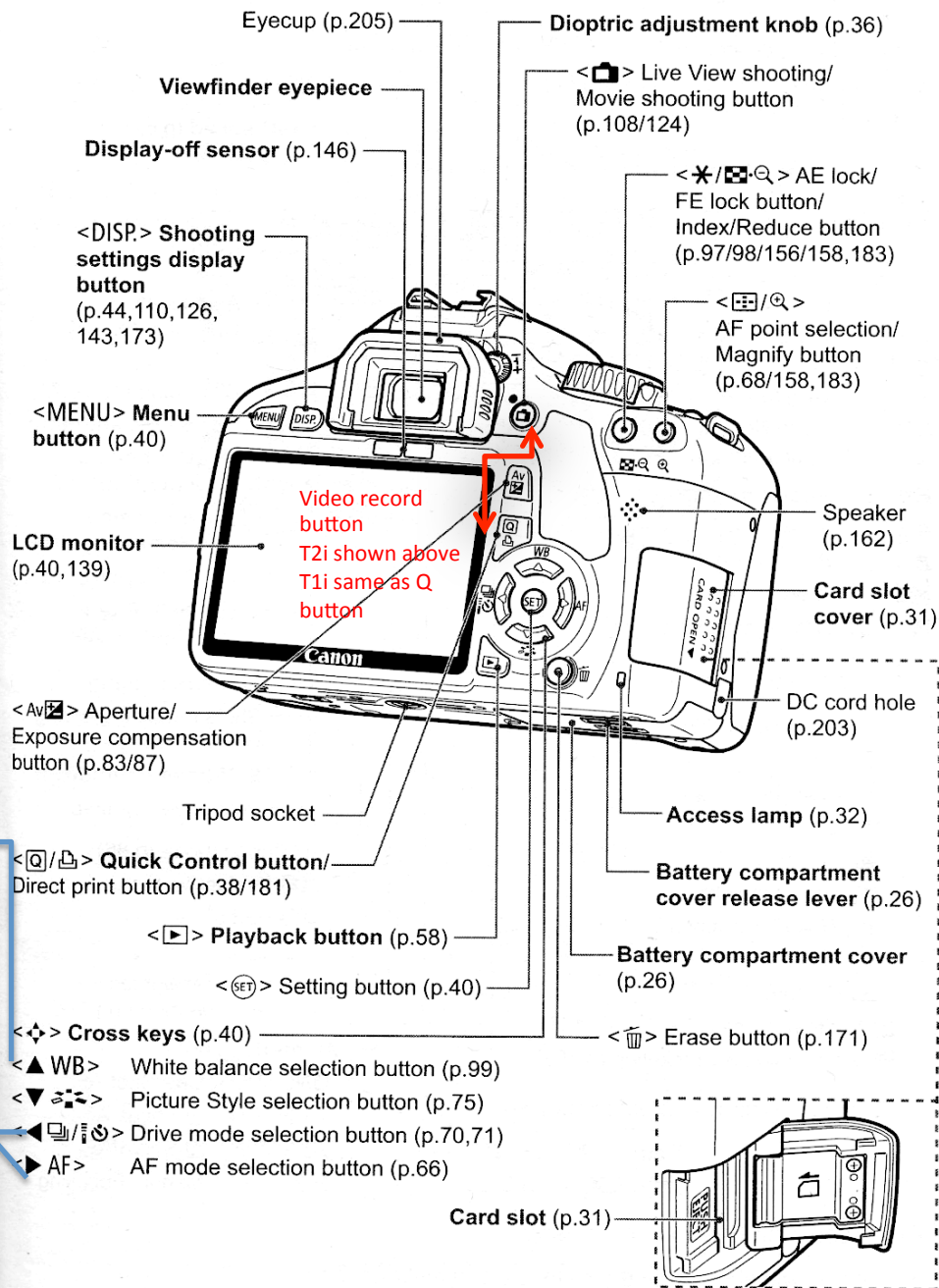
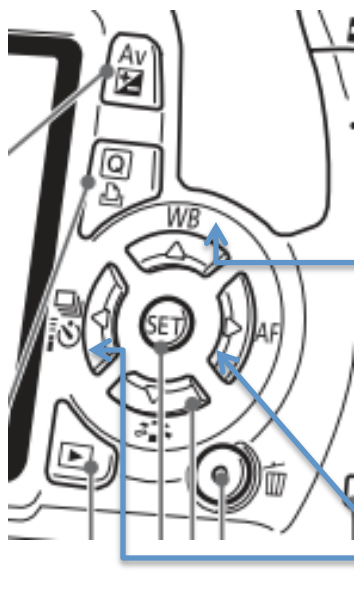
The menu button:

If you want to use live view, make sure it is enabled in the menu.
(It will cut your battery life in half)

It is the live view function that allows Dragon to work with these cameras.

To see menu items on LCD while in live view press DISP or Q button, navigate, set, change.

To review images press the playback button.

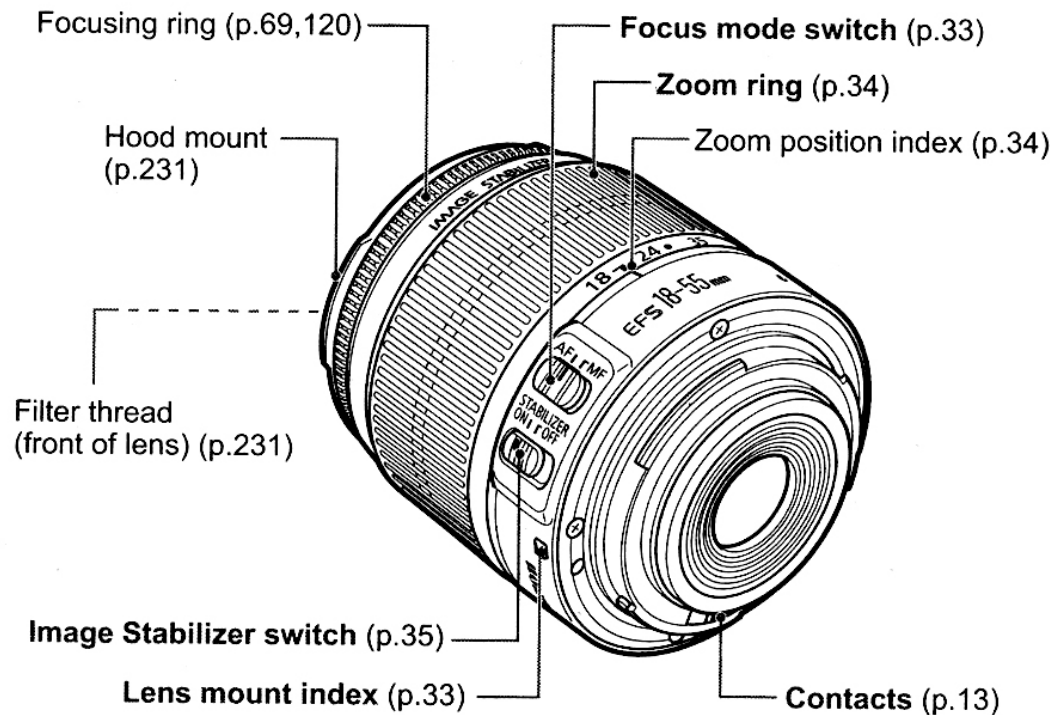


Use AC adaptor for Dragon, not battery. Goes in same compartment.

Push to install and to remove.

Lens

Lens without a distance scale






Set Zoom First, then focus

Can set auto focus, then switch to manual to maintain same focus through multiple shots.
Do not manually focus when in auto setting!

Use stabilizer without tripod,
Turn off when using tripod or copy stand.

In AF mode:
Select "one shot" for still images
Hold shutter ½ way to focus and set exposure.

AI Servo for moving subjects:
(holding shutter half way continually focuses)

Choose focus point: Press 3x 
Then use  to choose area of image to  focus on. Hold shutter button ½ way to focus.

(alternative, move camera so subject is in center, set focus, move to manual focus, then reframe the image.)

In creative zone modes you can add flash by pressing flash button on front.


If numbers flash in viewfinder, you need to change setting for proper exposure.

P; camera sets aperture and shutter speed auto. Change ISO or add flash if too dark.

Tv= to freeze action with shorter shutter speeds (1/2000) or blur action with longer shutter speeds (1/15) (viewfinder only display's denominator)

Av:For less of image in focus, (smaller DOF) you can choose telephoto and lowest number F stop. For more in focus (longer DOF) choose wide angle and higher number F stop. closer to subject, shorter DOF.

Options: T2i f 5.6-36 T1i f 4.0-25

M= set shutter speed with main dial
Set aperture with main dial plus :

Move independently, *press shutter half way* to see exposure level change if it doesn't appear.

Mode Dial

The Mode Dial includes the Basic Zone modes, Creative Zone modes, and Movie shooting mode.

Creative Zone

These modes give you more control for shooting various subjects.

- P** : Program AE (p.60)
- Tv** : Shutter-priority AE (p.78)
- Av** : Aperture-priority AE (p.80)
- M** : Manual exposure (p.83)
- A-DEP**: Automatic depth-of-field AE (p.85)

Basic Zone

All you do is press the shutter button. Fully-automatic shooting suiting the subject.









- : **Full Auto** (p.46)
- : **Creative Auto** (p.55)

Image Zone

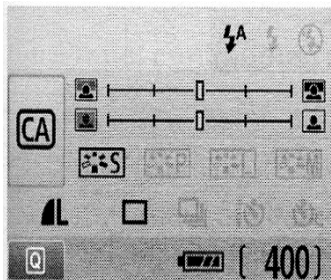
- : **Flash Off** (p.49)
- : **Portrait** (p.50)
- : **Landscape** (p.51)
- : **Close-up** (p.52)
- : **Sports** (p.53)
- : **Night Portrait** (p.54)

Flash will auto set to sync with aperture and shutter speed.

Set to movie mode
press shutter ½ way to focus,
Press Live View button to record/stop.
Use tripod, move slowly, avoid pan.
Use class 6-10 SD card.

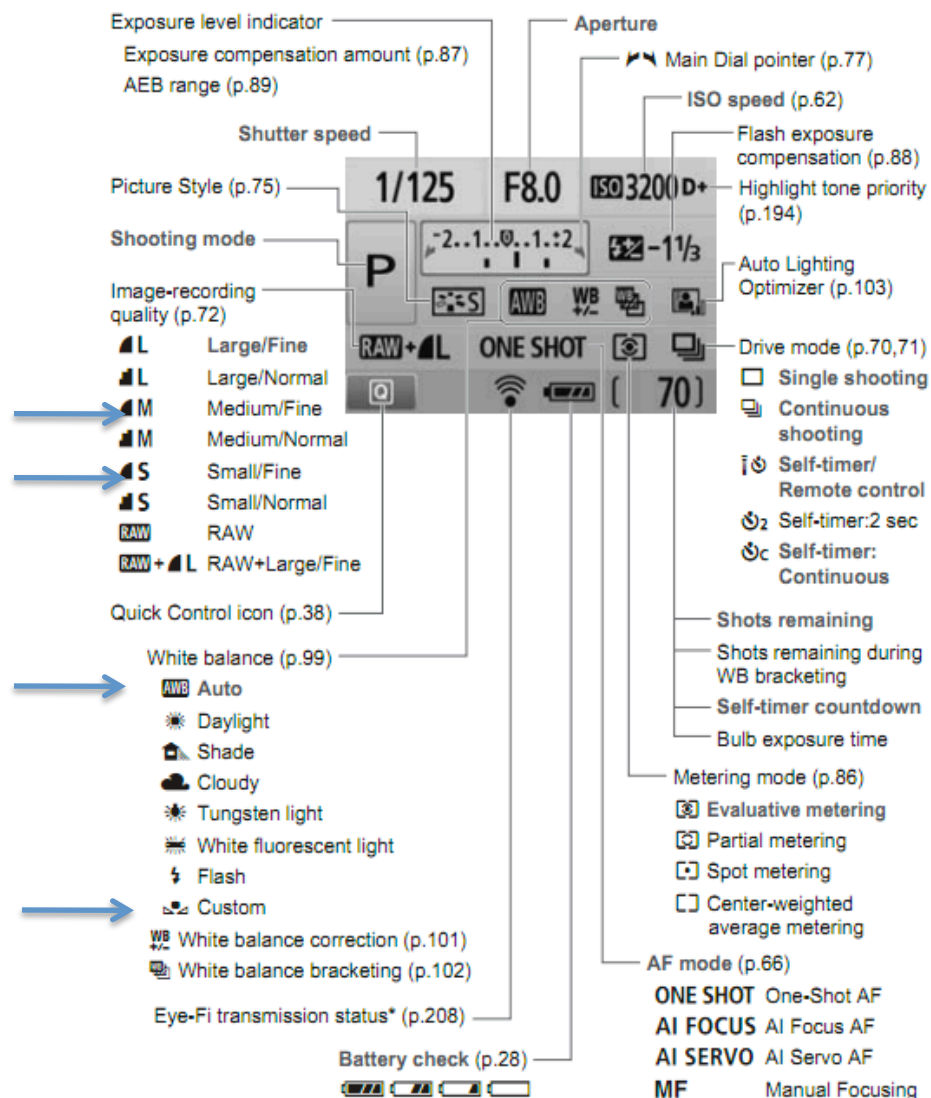
: **Movie shooting** (p.123)

Full auto without flash
Short DOF/fleshtones stronger
Long DOF/ bluegreen/no flash/ nightscenes
Short DOF/might flash/zoom in/watch for shadow from flash.
Fast shutter speed
Use tripod/wideangle/bkgd good exp



CA: press Q button or set use up/down arrows/set / wheel to navigate
Flash(off, on, auto),
Aperture, shutter speed
Image effect (keep Standard)
Size, Timer

Shooting Settings Display



When using Dragon Stop Motion
Many of these settings can be controlled in the software.

Chose Medium or Small HQ for stop motion
Chose Large+RAW for ultimate still images.

Auto white balance is fine for most shots,
but you will set custom white balance for
Dragon or changing environments.

Self timer: enter with left cursor:
10 sec (first) , 2sec or number of
continuous shots after 10 seconds.

* Displayed if an Eye-Fi card is used.

The display will show only the settings currently applied.

Some adv. Considerations:

MENU Menu Operations

You can set various functions with the menus such as the image-recording quality, date/time, etc. While looking at the LCD monitor, use the <MENU> button, <◀▶> cross keys, and <SET> button on the camera back.



Menu Screen

Basic Zone modes

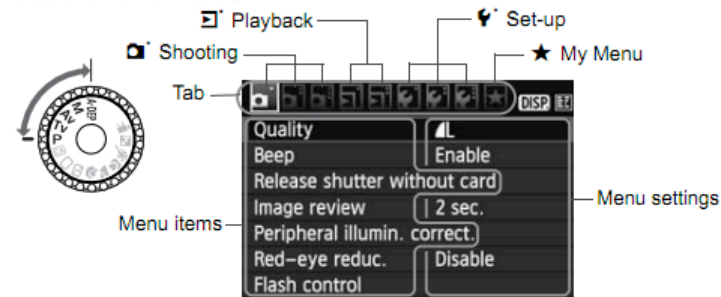


Movie shooting mode



* In Basic Zone modes and Movie shooting mode, the tabs and menu options displayed will be different.

Creative Zone modes



YouSendIt: The Leader in File Delivery.
<http://www.yousendit.com/>

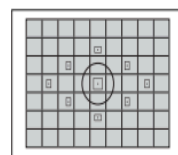
1 Select [Metering mode].

- Under the [METERING] tab, select [Metering mode], then press <SET>.



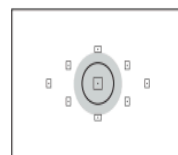
2 Set the metering mode.

- Press the <◀▶> key to select the metering mode, then press <SET>.



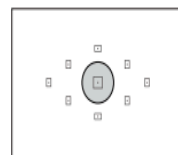
Evaluative metering

This is an all-around metering mode suited for portraits and even backlit subjects. The camera sets the exposure automatically to suit the scene. This metering mode is set automatically in Basic Zone modes.



Partial metering

Effective when the background is much brighter than the subject due to backlighting, etc. The gray area in the figure is where the brightness is metered to obtain the standard exposure.



Spot metering

This is for metering a specific part of the subject or scene. The gray area in the left figure is where the brightness is metered to obtain the standard exposure. This metering mode is for advanced users.



Center-weighted average metering

The brightness is metered at the center and then averaged for the entire scene. This metering mode is for advanced users.

entire manual at;
http://static.highspeedbackbone.net/pdf/Canon_EOS%20Rebel_T2i-Manual.pdf