

# Video Filming with HD SLR

and cinematography tools



- In 2008, Nikon D90 was born with an extra feature: HD video recording.
- The whole world changed as still photographers are now able to shoot stunning video similar to those cinema video cameras with existing gears.
- The term – ‘HDSLR’ has since then appeared when more and more SLRs surfaced with better video recording capability.

## What is HDSLR?

- Large sensor.
- Plenty of lenses to choose from for creating difference effects.
- High quality footage.
- Small footprint.
- A lot cheaper compare to cinema/broadcast quality camera system that produce similar results.

**Why HD SLR?**

- A video capable SLR
- Big and fast memory cards
- Extra batteries
- Supporting equipment such as Tripod, monopod and etc
- Software such as Adobe Premier Pro, Apple Final Cut Pro, Sony Vegas and etc

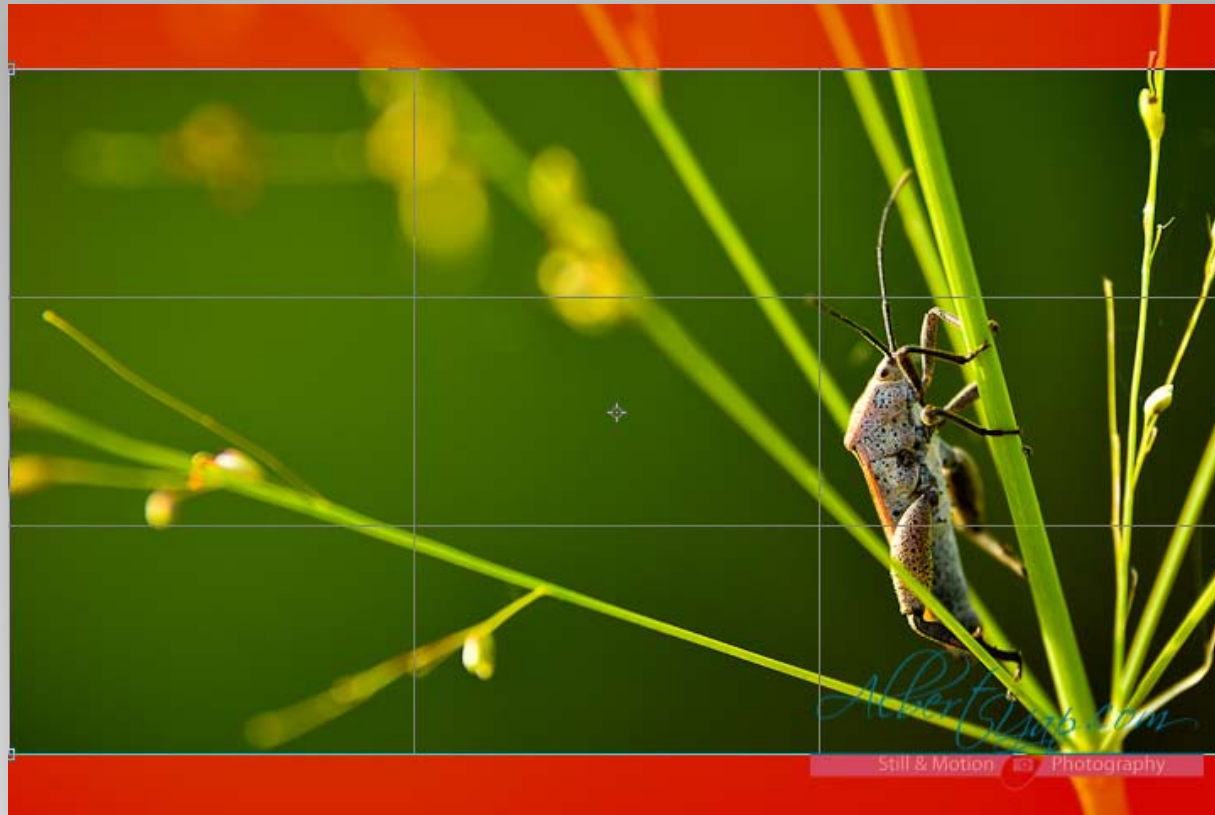
**How do I get Started?**

- Standard Definition versus High Definition (HD)
- Options for HD videos
  - 720p
  - 1080p
- NTSC versus PAL
- Frame-rates
  - 24p
  - 25p
  - 30p
  - 60p



**Understanding the Video Standards**

- Most camera has a sensor of 3:2 aspect ratio.
- HD video standards is shot in 16:9.



**Composition differences**

- If you need to use auto-exposure, meter and lock the EV before start shooting.
- For manual operations, aperture controls the depth of field similar to still photography.
- ISO also work the same as to stills.

## Basic Information

- Shutter speed does not affect the frame rate, which is completely separate and in most cases always stays the same.
- Higher shutter speeds is that individual frames appear sharper, due to the minimization of motion blur.
- By following '180 Degree Shutter Rule', we normally shoot with a shutter speed double of the frame-rate.

## Shutter speed & it's effects

- Unlike CCD, CMOS read signal line by line top down
- The upper part of the image is captured first follow the lower part of the image.
- As the subject is moving faster than the data reading, thus distortion appeared.



## Rolling Shutter Effect of CMOS

- Camera's VR, IS, MOIS, Anti Shake and etc
- Tripod
- Monopod
- Stabilizer Systems to create moving action shot that are smooth and steady



## Video Stabilization

- Instead of Strobes, you will now need continuous beams.
- Brighten subjects as fill in lights



## Lights

- Allowed simple, smooth and impactful panning shot to be captured at a fixed direction.



## The 'Slider'

- Built-in Mic
- External Mic
- Field Recorder



# Audio Recording

- Jib Arm / Crane
- Follow Focus
- External Monitor
- Matte Box
- And many more...



**Other tools**

- Camera Stability!
- If you need to pan, pan slowly in one direction.
- There's rarely a need to change the focal length during a single scene.
- Check your focus before start shooting, use the magnification feature.
- Practice your manual focus skills.
- Plan your panning movement before recording.

## Guideline on Video Shooting

- All current HDSLR capture and store audio in uncompressed PCM format resulting in huge file size.
- Additional tools such as HandBrake can be used to compressed the audio into AAC while maintaining the video quality into a much smaller file size.
- Get details @ <http://handbrake.fr/>

**Handling Huge clips from HDSLR**

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Still & Motion  Photography

**Useful References Websites for filming with HDSLR:**

- <http://www.cinema5d.com/>
- <http://dslrvideoshooter.com/>
- <http://hdslr.bhphoto.com/>
- <http://cheesycam.com/>