

know your tools

by Marc Baleiza

If you've not heard about the recent buzz around HD/SLR cinematography (Canon 5D MK II, Canon 7D etc), then you may have been hiding under a rock!

Just to give you a bit of background, in the last 12 months the Canon Digital SLR cameras capable of shooting High Definition video have taken the broadcasting and filmmaking industry by storm. Because of the size of the sensor's in this camera's they are able to generate an incredibly shallow depth of field, making the pictures look very much like film and overall being very appealing to the eye, despite the significant compression which the camera uses to record video with.

These camera's are incredibly handy - and having shot with one myself, I can tell you now the pictures look incredible, and for the price ... let's just say there is one on my Christmas list ...

However, this is the real world, and there is always a catch, and this one is worth knowing. Because of the way the image is sampled from the large sensor (which is far greater than HD), there is a significant amount of aliasing in images coming out of these camera's.

Hold on, what is aliasing? To put it simply, I'd like to quote the dictionary:

"the misidentification of a signal frequency, introducing distortion or error."

or - even simpler, from the web:

"Aliasing occurs when you observe, or *sample*, something infrequently enough that you create an impression of something that wasn't there." Stu Maschwitz

So, what does that mean to you, the proud new owner of a Digital SLR camera which has the ability to shoot High Definition video? Probably nothing, other than you need to be very careful of moiré' in your video. BUT, if you are considering using this camera for delivering in larger markets, be aware that some larger channels such as the BBC Worldwide will not accept Canon 5D footage as High Definition.

This is primarily due to the artefacts which occur as a result of the aliasing, when the image is compressed for broadcast.

These cameras can record some lovely images, but beware of the limitations in which you will need to operate. As with any camera, make sure you understand the broader implications of its use before you shoot a single frame, rather than being in for a nasty surprise later.

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