

*Audio waveforms
in Soundtrack Pro*

AUDIO: IT'S EASIER THAN YOU THINK



*Nick Wilcox-Brown explains how
to tell your Dead Cat from your Blimp*

Photographers are, by necessity, versatile. Simultaneously creative, technical, accountants and marketing specialists, the last few years have taxed the best with the rapid pace of change in the industry.

Having mastered and survived digital, enter moving image: at first glance all would seem to be relatively familiar. Camera, lens, tripod, lights; no problems there. Audio...

Terms like compression, phantom power and cardioid only serve to re-

enforce the fact that audio is utterly different and outside of our experience.

Or is it?

Capturing good audio is actually much easier than you might think:

Take one microphone, a stand (or a DSLR), a cable and an audio recorder. Add CF / SD card for storage, some batteries and Bob's your uncle. For inclement weather (wind) simply add a "Dead cat" or a "Blimp". What more do you need to know?

OK, lets be a little more prescriptive: most people use DSLRs like the EOS 5D Mk II. A great camera, video was an afterthought and sound probably somewhere down the queue from that. The blessing is that it is now possible to control audio levels, so we do have some control.

To capture basic audio on a 5D you have two choices; capture audio to the camera or capture to an external recorder and try and "sync" sound to picture later. For anyone who has really tried to do it, the latter is not

an easy way of working. For that reason, my recommendation is to capture audio to the camera and the easiest way to do that is to add the great quality, but cheap as chips Rode VideoMic. Costing around £70, the Rode has its own power supply (a 9V battery) and a simple jack-plug that plugs straight into the camera. With no microphone plugged in, the camera records through the built in microphone, giving a distinctly thin sound, with plenty of handling noise. Plug in the Rode and the sound is full and professional sounding.

Top left: So-called Shotgun Mics are "hypercardioid"; they have a high sensitivity to sound in a forward direction, but reject sounds from the sides and rear. They are excellent for use on camera or on a boom pole to place them closer to the sound source.

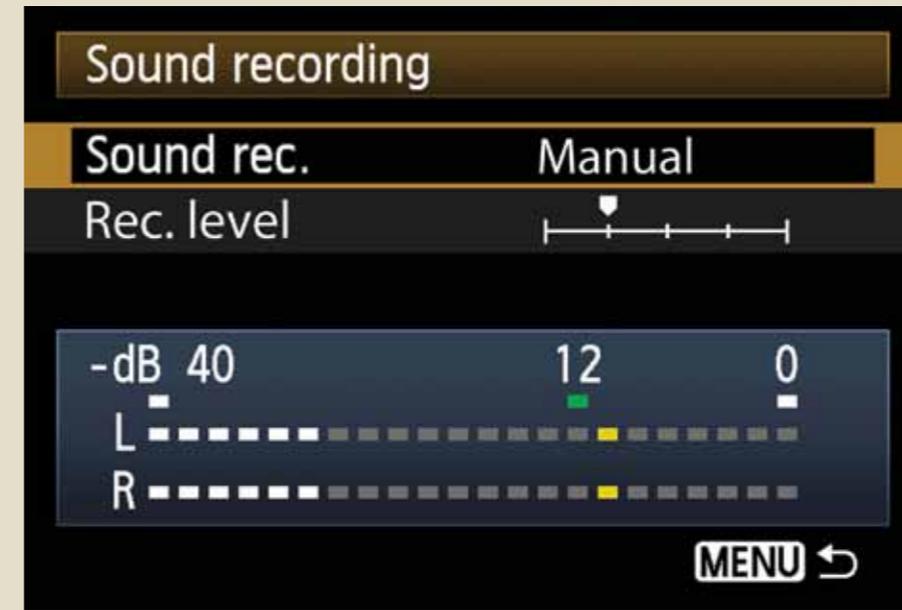
Top right: The Blimp is used in low wind to provide screening for the microphone within.

Bottom left: The Dead Cat adds a low cost means of screening a camera microphone from low breezes.

Bottom right: When the wind is higher an elasticated synthetic fur cover known as the Dead Wombat is used with the Blimp to provide additional screening. This allows the recording of good quality audio in medium wind without loss of quality.

Below: Recording an interview on the Stills > Digital Workshop at Coombe Lodge. The blimp, mounted on a boom pole was used for simplicity. Inside we used a Rode NTG-3 Broadcast quality shotgun mic.





Above:
Canon EOS 5D MkII with Rode VideoMic

Above right:
Audio controls allow manual setting of audio levels on the EOS 5D MarkII

Ensure the microphone is turned on, with the switch in the middle position. Handling noise is all but eliminated as the Rode VideoMic has a built in microphone suspension system, a “Shock mount” to isolate it from vibration and the sound of hands on the camera. The one thing it will not eliminate is the sound of the AF system if you choose to use an older “whirring” lens.

Turn on the camera and in the menu select:

Settings 2 (Yellow Spanner) >
Live View/Movie func. set >
Sound recording
Set “Manual” and then, with your

sound source present, set the level according to the bars.

The level should be around half or three quarters of the way to the right. If they go all the way to the right, the audio will be clipped and distorted. Think camera histogram, but there is no fix for clipped audio!

Here though we encounter our first problem. The key to good audio is to listen to it. A microphone hears many things that we ignore or don’t hear. The problem is that the EOS 5D Mk II has no way to monitor the audio. Rather than splashing out money, work with what you have, get used to having the microphone on the camera and thinking

about what sounds you are capturing with your video clips.

To play them back, use Quicktime on Mac or PC. Experiment with using the built-in mic and the VideoMic and note the differences in the recorded sound and the effect of wind.

Now you have heard what your camera can record with only the most minimal addition, it is important to dispel a big myth:

“EOS cameras (and indeed DSLRs in general) cannot record good audio”. Yes, they can, you just need to add a few extras to help them along. The standard for CD audio is 44.1 Khz,

16bit stereo audio, for Video it is 48Khz in 16bit stereo (2 channels x 8bit, think still images). The EOS cameras record to CD standard and the recording quality is fine, the issue is that the microphone pre-amps are poor (these are amplifiers used to boost the basic signal from the microphone to a level that is usable by the camera).

The absence of a way to monitor audio is also a major omission: a few weeks back, I was filming an interview with the Archbishop of Canterbury for a Russian TV network (don’t ask). It was fascinating, but every so often the Archbishop paused while he was speaking. Had I not been monitoring my audio, I would have been

extremely puzzled, but fortunately I could hear all that was being recorded; in the distance a helicopter was buzzing around, and the microphones, and the Archbishop, picked it up clearly. To the interviewer it was not audible and he gave me several puzzled looks.

Aside from using a video camera, which has high quality microphone pre-amps and monitoring built-in, the quickest way to improve your audio experience with

DSLRs is to add a relatively inexpensive audio interface. This will not only provide the missing features, but it adds the ability to use a very wide range of professional microphones that require “phantom power” to power the more sensitive components.

Nick Wilcox-Brown
www.theimageconsultancy.com

Next month: external connectivity and other types of microphone.

Nick will be running a series of one-day workshops Introduction to Video for DSLR in conjunction with Jacobs ProSales. The first one will be held at the New Oxford Street branch, London on Thursday, 5 May. Booking via 0207 436 6996.

Following on from the successful Stills > Video series, the next event will be held at Coombe Lodge near Bristol, commencing 11 May. See website for full details: www.theimageconsultancy.com Additionally a dedicated audio workshop with John McCombie of www.pinknoise-systems is offered as an optional third day.

The recent Stills > Video workshops provided a thorough grounding in moving image capture, edit and audio technique with DSLR and broadcast quality camcorders.

