



August 2010

MOVIE MAKERS NEWSLETTER

CLUB MEETINGS

**First & Third Thursday of Each
Month at 7.30pm**

**Figtree Heights Primary School,
St Georges Avenue & Lewis Drive,
FIGTREE**

**Vehicle entrance in Lewis Drive,
FIGTREE**

**Club Address: PO Box 193,
FIGTREE, NSW, 2525**

Club Web Site:
<http://www.wollongongclub.org.au>

Editor's email address:
mmnews@wollongongclub.org.au

Club's YouTube Site:
www.youtube.com/wollongongmm

How do Camcorders Measure Up?

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Last Month at the Club

The July meeting began with 15 members in attendance. The chairman, John Devenish, gave a report on the visit to South West Video Club which had been a success. John also mentioned the Club's exhibition that was on the weekend of the 10th and 11th of July at the Old Court House in Wollongong. Material had been sort from members to make up a video on the topic *Nature in the Illawarra*.

Brian Harvey reported on a website that sells batteries:

<http://www.camera-battery.com.au/s/camcorder-battery/>

and on another website that has some useful accessory software that can be had for free from: <http://www.piriform.com/>

As the website states they have four very useful software items:

CCleaner is the number-one tool for cleaning your Windows PC. Keep your privacy safe online, and make your computer faster and more secure

Defraggler to defrag your entire hard drive, or individual files. This compact and portable Windows application supports NTFS and FAT32 file systems.

Recuva recovers files deleted from your Windows computer, Recycle Bin, digital camera card, or MP3 player

Speccy is an advanced System Information tool for your PC.

Brian spoke of the last item which will provide a specification list of everything in your computer.

John Devenish then reported on a Do-It-Yourself teleprompter.

The *Hot Spot* for the evening was from Warren Flinn who showed, very clearly, how important it is to choose the correct musical track to accompany our videos. Warren selected four members' videos that had been shown previously at the Club, but this time he changed the musical soundtrack. The result varied from the music being totally inappropriate to that of creating a different mood compared to the original video. Warren then showed a video of the closure of Paddies Market, with and without the narration. The importance of carefully worded narration was obvious. Thank you Warren for a very creative way of showing us how important it is to get the post-production sound not only right for the video content but also to set the appropriate mood.

In the members *Show Time & Works in Progress* section of the meeting, Ian Simpson showed two videos. The first one was made by his son, David, as a school assignment on the the Green Bans in Sydney and the Role of Jack Munday and the BLF. This 9 minute video used the green screen technique at the introduction and conclusion of the video so as to mimic a *Lateline* report. How school assignments have changed in 40 years! The second video Ian showed was one from his current project of converting his Super 8 film to video. This particular film was originally shot in 1985 and also involved re-creating the sound track that was originally recorded on compact cassette. As the Noris Super 8 projector recorded two tracks on the full width of the tape in one

direction, it was necessary, when using a tape deck to recover the tracks, to reverse one of the tracks to make it intelligible.

The rest of the meeting was in John Devenish's hands as he took members through the process of setting up a YouTube channel. Recent changes to the YouTube site made the process more complicated than it had previously been for John when he set up the Club's channel. The members of the Movie Makers section of the Club owe a big debt of gratitude to John for the efforts he has done to not only put this Club into a social context with the many community activities he has initiated but also, in this case, present the members' efforts to a world-wide audience. Well done and thanks John!

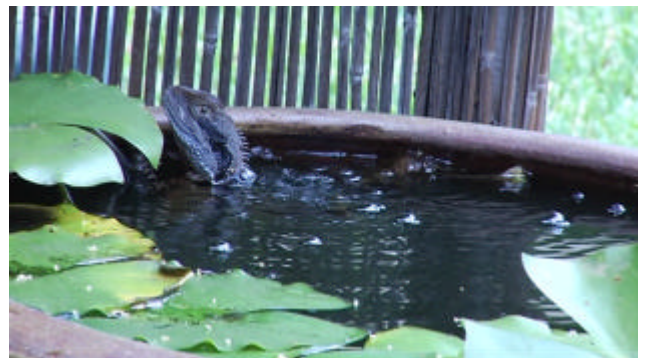
Nature in the Illawarra 9th to 11th July 2010

The combined members of the Wollongong Camera Club put on an exhibition of nature photography at the Old Court House at Belmore Basin in Wollongong. The contribution from the Movie Makers was a 10 and half minute long video, with the majority of the material being supplied by Ray White. Thanks Ray for making such a fine short video.

The video would have been longer had there not been problems in adding John Devenish's fine images of a water dragon, only two scenes could be successfully included.

Once again Sturman Electronics came to our aid and loaned us a 34" TV so we could show our video. *We wish to thank Peter Sturman for being so willing and generous in providing the TV.*

The exhibition was a hit with the public, with some 420 people viewed the exhibition over the two days and there were many enquires on membership.



The above images are from Ray White and John Devenish's Nature Studies of the Illawarra.



Thank you for allowing others to take a closer look at our videos

How do Camcorders Measure up?

by Ian Simpson

When on the search for a new high definition camcorder to buy, how do you go about finding out which model is best for you? Are you swayed by review comments such as:

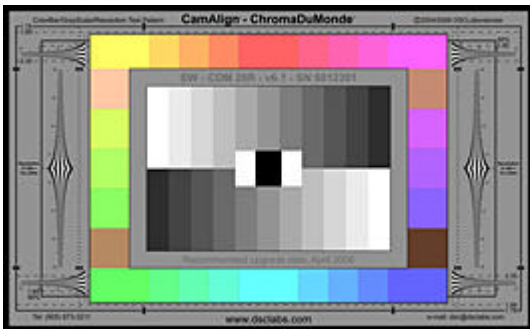
A brilliant camcorder with lots of manual options. It's easy to use, compact and produces excellent quality video. (Seth Barton, Expert Reviews Ultimate)

Or do you look for quantitative test results that allow camcorder models to be compared? As most reviews consist of mainly subjective comments, often coloured by the reviewer's own bias, it is often difficult to sort the "sheep from the goats". One internet based reviewing organisation has attempted to replace subjective comments such as;

Noise levels in low light situations are also impressive, possibly the best we've seen from any camcorder, and colour holds up well in such challenging conditions too.

Camcorderinfo.com have set up a series of tests to "put a number" to a camcorder's performance in both bright and low light conditions, measuring colour accuracy, colour saturation, resolution and noise. How useful these numbers are in comparing camcorder models and manufacturers depends on how reproducible each test is to conduct. An inconsistent testing regime is no improvement over subjective comments. However **Camcorderinfo.com** only quote one number for each test on each camcorder, so this makes it difficult to assess the variation in the test result if the test were to be performed a number of times on the same camcorder. But all is not lost, some assessment of this variability can be had by comparing the results of tests listed on both the USA and UK **Camcorderinfo** sites for the same model camcorder, remembering of course that although the high definition camcorder model may be the same, its recording system will be capturing at different frame rates; either 60p or 60i for the USA and 50p or 50i for the UK.

A full description of the testing regimes used by **Camcorderinfo.com** can be had from: <http://www.camcorderinfo.com/content/How-We-Test-Camcorders-36180.htm>



However, briefly the colour test employs a *ChromaDuMonde* chart which is lit with either 3000 lux for the bright light tests or 60 lux for the low light tests. The camcorder is placed in a fixed location relative to the chart and footage is obtained with automatic exposure, a manual white balance setting and using at least a frame rate of 60i for USA tests or 50i for UK tests. The footage is loaded into a computer for processing to determine the "Error" or

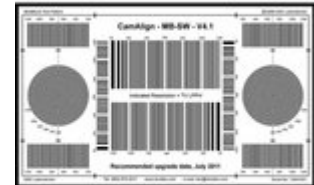
difference between the chart colour and the colour the camcorder produced. Also the direction of the error is noted as to whether it is increasing or decreasing the saturation

of the colour. There are 28 colour patches on the chart and so the final “Colour Error” value is the mean of the 28 deviations.



To measure “noise” in the image another chart, the *X-Rite Colour Checker* is used. The camcorder settings are the same as for the previous colour chart. Computer processing of the footage measures the noise in each of the four channels, red, green, blue and luminance, and a mean value is reported.

The “sharpness” of the captured images is determined from panned footage across a *DSC Labs Multiburst* chart lit at 3000 lux. This method of measuring the sharpness of a moving image highlights the differences between interlaced frame rate capture (60i and 50i) and progressive frame capture (50 I and 50p).



Now that we have an idea of these tests, let’s look at the differences between UK and USA camcorders of the same model. The following table gives the colour tests for four camcorders. Unless otherwise stated the test results are for a frame rate of 60i for the USA tests or 50i for the UK tests.

Table 1 – Results of Camcorder Tests by *Camcorderinfo.com*

Test Site	Camcorder Model	Bright Light (3000 lux)			Low Light (60 lux)		
		Colour Error	Colour Saturation (%)	Noise (%)	Colour Error	Colour Saturation (%)	Noise (%)
USA	Panasonic HDC-TM700	2.92	98.39	0.47	4.96 (60i)	80.92 (60i)	0.6875 (60i)
					5.19 (24p)	84 (24p)	0.5275 (24p)
UK	Panasonic HDC-TM700	2.92	98.39	0.52	4.17 (50i)	74.81 (50i)	0.83 (50i)
					4.15 (25p)	75 (25p)	0.715 (25p)
USA	Canon HF S21	5.06	84.27	0.75	5.83	65.13	1.78 (60i) 1.225 (24p)
UK	Canon HF S21	4.35	84.72	0.8	5.59	65.13	1.99 (50i) 1.1 (PF25)
USA	Sony HDR-XR520V	4.79	80.8	0.37	4.89	77.11	0.8725
UK	Sony HDR-XR520V	4.56	93.47	0.39	5.3	85.14	0.89
USA	Panasonic HDC-HS300	3.5	97	0.43	5.2	64.25	1.42 (60i)
UK	Panasonic HDC-HS300	4.37	108	0.4	7.28	60.53	0.82 (50i)

Table 2 – Absolute differences between test results from *Camcorderinfo.com*

Test Difference	Camcorder Model	Bright Light (3000 lux)			Low Light (60 lux)		
		Colour Error	Colour Saturation (%)	Noise (%)	Colour Error	Colour Saturation (%)	Noise (%)
USA - UK	Panasonic HDC-TM700	0	0	-0.05	0.79	6.11	-0.1425
USA - UK	Canon HF S21	0.71	-0.45	-0.05	0.24	0	-0.21
USA - UK	Sony HDR-XR520V	0.23	-12.67	-0.02	-0.41	-8.03	-0.0175
USA - UK	Panasonic HDC-HS300	-0.87	-11	0.03	-2.08	3.72	0.6

Table 2 reports the differences between each test result for each camcorder model. To better appreciate these differences between test results, I have expressed the difference as a percentage of the mean value for each test as can be seen in the following table.

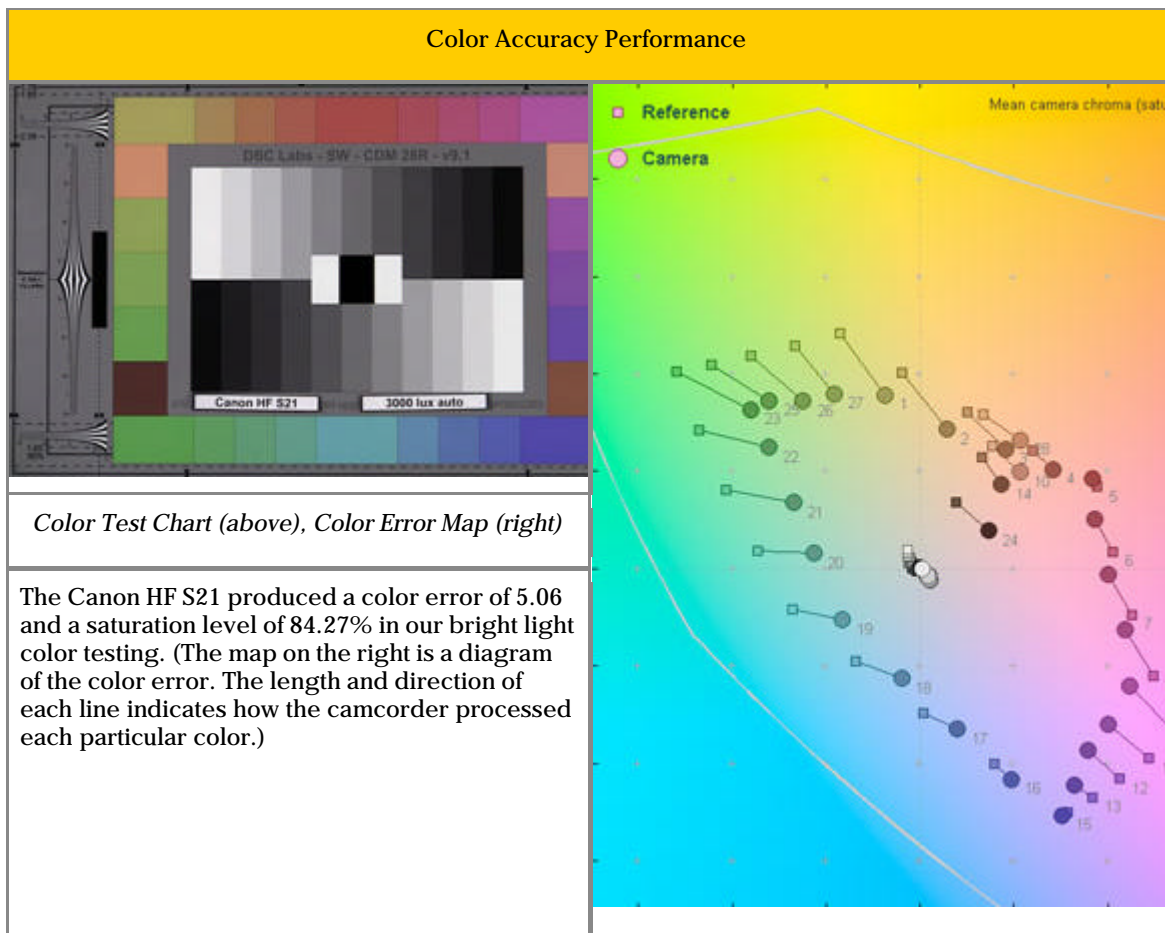
Table 3 – Relative magnitude of the difference between tests as a function of the mean

Test Difference	Camcorder Model	Bright Light (3000 lux)			Low Light (60 lux)		
		Colour Error	Colour Saturation	Noise	Colour Error	Colour Saturation	Noise
USA - UK	Panasonic HDC-TM700	0	0	10.1	17.3	7.8	18.8
USA - UK	Canon HF S21	15.1	0.53	6.5	4.2	0	11.1
USA - UK	Sony HDR-XR520V	4.9	14.5	5.3	8.0	9.9	2.0
USA - UK	Panasonic HDC-HS300	22.1	10.7	7.2	33.3	5.9	53.6

An examination of the above table indicates that the repeatability between USA and UK when testing the same camcorder model can be either extraordinarily good or quite poor. A repeatability difference within 5% of the mean on any one of the tests could be considered acceptable. However when the magnitude of the difference between repeat tests is 20 to 50% of the mean, then there is serious doubt as to the veracity of the test. In this small sample of camcorder models tested, it is the tests on *Colour Error* and *Noise* that are most subject to poor repeatability.

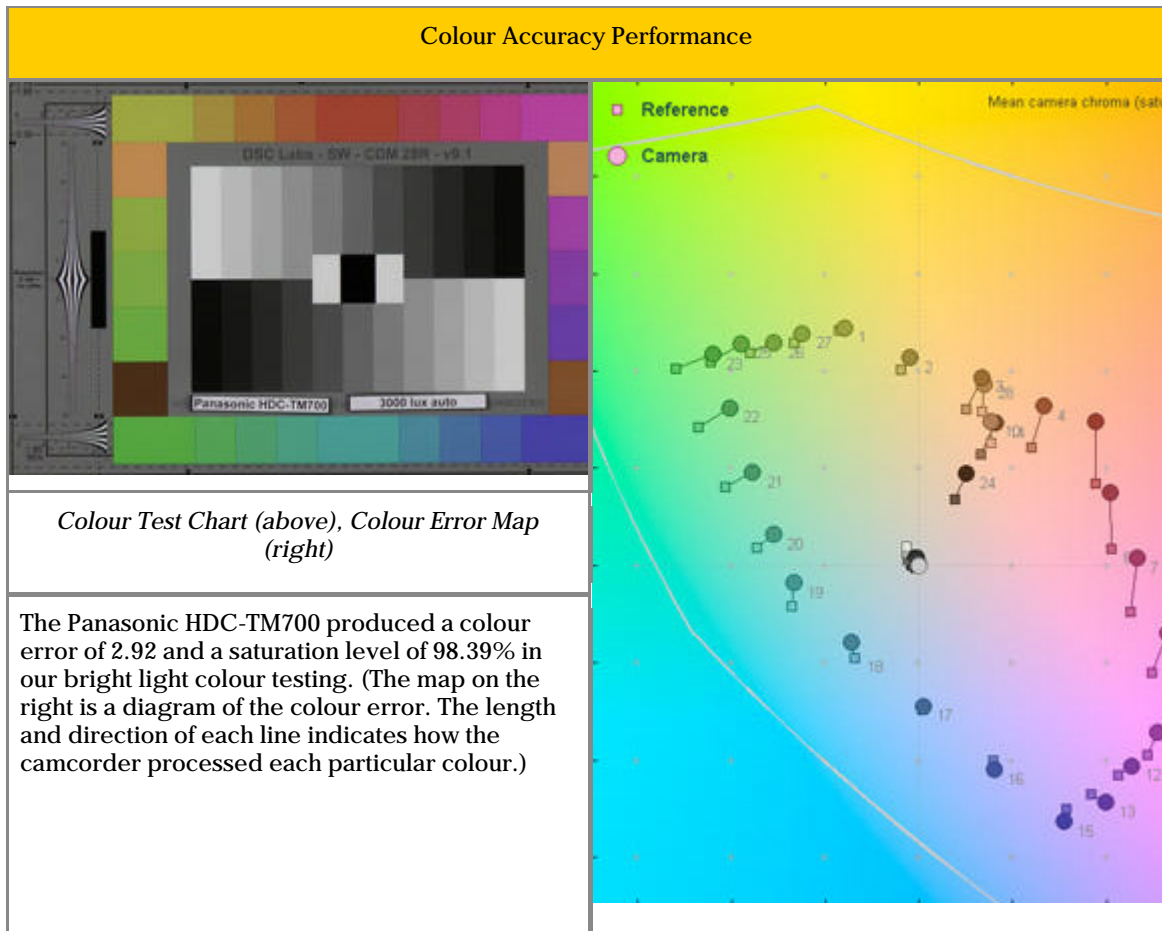
So after all of this examination of quantitative testing is the subjective review just as reliable? When a reviewer says the *colours are bright* and *colour holds up well in such challenging conditions too*, is this any better than saying the colour saturation is 98% in bright light and 80% in low light? The simple answer is no for some of the tests that

Camcorderinfo.com conduct, because these figures can be compared to another camcorder that might only register 84% and 65% under the same test conditions. As the *Colour Saturation* test shows, at worst, a difference in repeat tests of about 15% of the mean, this would indicate that there is a good chance that the 98% recorded on the Panasonic HDC-TM700 is an improvement over 84% recorded for the Canon HF S21 and that respectively the 80% is an improvement over the 65%. However, if we were to try to make similar comparisons with the other test parameters we could run into difficulties due to these tests' poorer reproducibility. In these situations it is often better to put the numbers aside for the moment and use the eye and brain to decipher the differences in the colour maps that *Camcorderinfo.com* provide in their reports. For the Canon HF S21 it is:



Whilst for the Panasonic HDC-TM700, *Camcorderinfo.com* produced the colour response reproduced on the following page. As *Camcorderinfo.com* explains the greater the distance from reference colour to camcorder colour the greater the *Colour Error*. Also if the camcorder colour is on the map centre side of the reference then it is less saturated than the reference. Alternatively if it is on the outside of the reference point towards the edges of the chart the camcorder colour is more saturated than the reference colour. With these points in mind, it can be seen that the Canon HF S21 produces in bright lighting conditions colours which are less saturated than the reference colours.

In the case of the Panasonic HDC-TM700, the warm colours are more saturated and the cool colours are either reproduced accurately or are slightly de-saturated.



Thus based on both the figures and the subjective assessment of colour maps, all courtesy of *Camcorderinfo.com*, the Panasonic HDC-TM700 is a highly performing camcorder. However, the next question is how does this top performing camcorder compete with the new crop of video capable DSLRs?

To answer this we need to compare the test results for three of the new breed of still cameras with the Panasonic HDC-TM700. The cameras chosen for the comparison, together with their vital statistics are given in Table 4.

Table 4 – Lens and Sensor details of the cameras and camcorder comparison

Make & Model	Lens			Sensor		
	Max F stop	Zoom Range (mm)	35mm Equivalent Zoom Range (mm)	Size (mm)	Gross Megapixels	Approx. Pixel Size (µm)
Canon 5D Mk II	4	24 – 105	24 – 105	36 x 24	22	6.4
Panasonic DMC GH1	4 – 5.8	14 – 140	28 – 280	13.5 x 18	14.0	4.17
Sony Alpha NEX-5	3.5 – 5.6	18 – 55	27 – 77.5	22.3 x 14.9	14.6	5
Panasonic HDC-TM700	1.5 – 2.8	3.45 – 41.4	35 – 420	1 / 4.1 (")	3 x 3.05	1.78

All three still cameras have larger sensors and larger pixel sizes compared to the Panasonic HDC-TM700 camcorder. This advantage shows up in the more saturated colours in the low light test. However, what is surprising is how well the Panasonic HDC-TM700 performs in the bright light test. Its *Colour Error* is almost the same as the Canon 5D Mk II with its full size sensor. Also the Panasonic camcorder's *Colour Saturation* is not that far behind the Canon's value. Another surprising result in this table is the low *Noise* value of the Panasonic camcorder in the low light test, beating both the Sony and the Panasonic DMC GH1. Given the poor reproducibility of this parameter this may be only an imaginary win but we can have some faith in this figure if we look again at Table 4. The Panasonic camcorder has nearly a three F stop advantage over the zoom lenses of the still cameras which must help in balancing the poorer low light performance of its smaller pixels. A measure of the success of this balancing act can be seen in Table 6, where the low light sensitivity of the camcorder is equal to or better than that of the still cameras.

Table 5 – Comparison of colour performance in Bright and Low Light from *Camcorderinfo.com* data

Make & Model	Bright Light (3000 Lux)			Low Light (60 Lux)		
	Colour Error	Saturation Level (%)	Noise (%)	Colour Error	Saturation Level (%)	Noise (%)
Canon 5D Mk II	2.76	106.6	0.5	2.08 (30p)	104	0.5 (to 800 ISO)
Panasonic DMC GH1	4.15	88.06	0.8	4.6	94.82	0.8 (to 800 ISO)
Sony Alpha NEX-5	4.40	101.8	0.49	7.20	94.65	0.9575
Panasonic HDC – TM700	2.92	98.39	0.47	4.96	80.92	0.6875

Table 6 – Comparison of Sharpness and Low Light sensitivity from *Camcorderinfo.com* data

Make & Model	Video Sharpness (line widths per picture height)		Low Light Sensitivity (Lux to reach 50 IRE)	Lens Max F	Approx. Pixel Size (µm)
	Horizontal	Vertical			
Canon 5D Mk II	700	650	13	4	6.4
Panasonic DMC GH1	750	650	17 (24p)	4	4.17
Sony Alpha NEX-5	700	650	11	3.5	5
Panasonic HDC – TM700	1000 (60p)	900 (60p) 650 (60i)	11 (60p) 8 (24p)	1.5	1.78

The way that *Camcorderinfo.com* do their *Sharpness* test has thrown up an interesting consequence of the test. As horizontal and vertical resolution measurements are taken from panned footage, the lower resolution of interlaced frame rates compared to non-interlaced progressive frame rates is evident in the extraordinary high values for the Panasonic HDC-TM700 in the 50p or 60p mode.

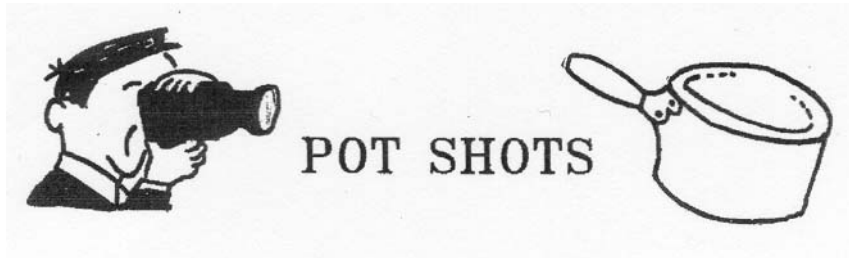
After this journey through facts and figures you may think that perhaps the subjective review with the occasional superlatives is easier reading and less demanding on the reader. But like all things in life you only get out of something what you are prepared to put into it. So if you really want to find the best camera or camcorder for your high definition videoing then a little time spent comparing models using both data from tests and comments from reviews will always be beneficial.

The following tables are compilations of test results from *Camcorderinfo.com* on a number of camcorders.

Make & Model	Video Sharpness (line widths per picture height)		Low Light Sensitivity (Lux to reach 50 IRE)	Lens Max F	Approx. Pixel Size (µm)
	Horizontal	Vertical			
Canon HF S100	800	650	6 (24p) 16 (60i)	1.8	1.63
Canon 5D Mk II	700	650	13	4	6.4
Canon HF20	800	900	22	1.8	1.58
Canon HF S11	800	650	17 (60i) 8 (30p) 6 (24p)	1.8	1.63
Canon HF S10	800	650	15 (60i)	1.8	1.63
Canon HF S21	900	650	14 (60i) 7 (30p) 5 (24p)	1.8	1.63
Canon HV40	700	600 750 (still)	12 (60i) 6 (30p) 5 (24p)	1.8	
Canon XH-A1S	800	650	7 (60i) 4 (30p) 3 (24p)	1.6	
JVC GZ-HD300 / 320	550	600	29 (60i) 27 (50i)	1.9	1.78
JVC GZ-X900	1000	650	56 (60i)	3.4	1.65
JVC GZ-HM400	1000	650	31 (60i)	2.8	1.65
Panasonic AG-HMC40	800	650	9 (60i auto gain) 8 (30p & 24p)	1.8	1.78
Panasonic HDC-HS300	750	650	8 (24p) 9 (60i)	1.8	1.78
	750	650	8 (25p)		
Panasonic HDC-TM300	750	650 (60i)	9 (60i) 8 (24p)	1.8	1.78
Panasonic HDC - TM700	1000 (60p)	900 (60p) 650 (60i)	11 (60p) 8 (24p)	1.5	1.78
Panasonic HDC-TM10	600	550	30	1.8	1.7
Panasonic HDC-HS100	600	600	16	1.8	2.7
Sanyo VPC-HD2000	650	700 (60p)	9 (60p)	1.8	1.74
Sony HDR-XR520V	650	700	16 (60i)	1.8	1.53
	650	700	15 (50i)		

Make & Model	Lens			Sensor		
	Max F stop	Zoom Range (mm)	35mm Equivalent Zoom Range (mm)	Size (")	Gross Megapixels	Approx. Pixel Size (µm)
Canon HF S100	1.8 – 3	6.4 – 64	43.5 – 435	1 / 2.6	8.59	1.63
Canon HF20	1.8 – 3.2	4.1 – 61.5	39.5 – 592.5	1 / 4	3.89	1.58
Canon HF S11	1.8 – 3	6.4 – 64	43.5 – 435	1 / 2.6	8.59	1.63
Canon HF S10	1.8 – 3	6.4 – 64	43.5 – 435	1 / 2.6	8.59	1.63
Canon HF S21	1.8 – 3	6.4 – 64	43.5 – 435	1 / 2.6	8.59	1.63
Canon HV40	1.8 – 3	6.1 – 61	43.6 – 436	1 / 2.7	2.96	
Canon XH A1S	1.6 – 3.5	4.5 – 90	32.5 – 650	1 / 3	3 x 1.67	
JVC GZ-HD300 /320	1.9 – 2.9	2.9 – 58		1 / 4.1	3.05	1.78
JVC GZ-X900	3.4 – 5.6	6.7 – 33.5		1 / 2.33	10.29	1.65
JVC GZ-HM400	2.8 – 4.5	6.7 – 67		1 / 2.33	10.3	1.65
Panasonic AG-HMC40	1.8 – 2.8	4 – 48	40.8 – 490	1 / 4.1	3 x 3.05	1.78
Panasonic HDC-HS300	1.8 – 2.8	4 – 48	44.9 – 539	1 / 4.1	3 x 3.05	1.78
Panasonic HDC-TM300	1.8 – 2.8	4 – 48	44.9 – 539	1 / 4.1	3 x 3.05	1.78
Panasonic HDC-TM700	1.5 – 2.8	3.45 – 41.4	35 – 420	1 / 4.1	3 x 3.05	1.78
Panasonic HDC-TM10	1.8 – 2.8	2.95 – 47.2	44.1 – 706	1 / 6	1.47	1.7
Panasonic HDC-HS100	1.8 – 2.8	2.95 – 35.4		1 / 6	3 x 0.61	2.7
Sanyo VPC-HD2000	1.8 – 2.5	6.3 – 63	44.4 – 710	1 / 2.5	8.1	1.74
Sony HDR-XR520V	1.8 – 3.4	5.5 – 60	43 – 516	1 / 3.15	6.631	1.53

Make & Model	Bright Light (3000 Lux)			Low Light (60 Lux)		
	Colour Error	Saturation Level (%)	Noise (%)	Colour Error	Saturation Level (%)	Noise (%)
Canon HF S100	3.49	88.13	0.88	5.43	58.01	1.3525
Canon HF20	4.18	91.48	0.93	5.87	62.84	2.53
Canon HF S11	4.19	83.64	0.7225	5.06 (60i) 5.15 (30p) 5.09 (24p)	64.79 (60i) 75.26 (30p) 77.93 (24p)	1.1325 (60i) 1.1 (30p) 0.95 (24p)
Canon HF S10	3.42		0.78	5.20 (60i)	58.5 (60i)	0.98 (60i)
Canon HF S21	5.06 4.86	84.27 -Auto 93.84 -Vivid	0.75	5.83	65.13	1.78
Canon HV40	4.38	96.76	0.48	5.3 (60i) 5.8 (30p) 6.09 (24p)	74.9 (60i)	1.5325 (60i) 1.4675 (24p) 1.275 (30p)
Canon XH A1S	4.06 3.73 (video C)	84.63 85.91	0.47	6.98 (0dB) 4.07 (6dB) 3.77 (12dB) 4.19 (Auto)	43.86 (0dB) 89.98 (6dB) 92.97 (12dB) 87.53 (Auto)	1.81 (0dB) 2.33 (6dB) 2.24 (12dB) 1.19 (Auto)
JVC GZ-HD300 / 320	2.13 2.04	98.41 96.51	0.72 0.56	5.15 5.05	55.87 57.48	1.315 0.5
JVC GZ-X900	3.58	75.33	0.595	7.54	48.68	2.985
JVC GZ-HM400	3.54	92.26	0.6225	6.27	60.11	1.7475
Panasonic AG-HMC40/41	3.39	94.6	0.46	4.69	77.75	1.01
Panasonic HDC-HS300	3.5 4.37	97 108	0.43 0.4	5.2 7.28	64.25 60.53	1.42 (60i) 0.82 (50i)
Panasonic HDC-TM300	3.67	96.2	0.55	4.90	65.09	0.78
Panasonic HDC - TM700	2.92	98.39	0.47	4.96	80.92	0.6875
Panasonic HDC-TM10	4.65	84.9	0.5575	7.21	41.6	0.8075
Panasonic HDC-HS100				13.3	59.65	0.76
Sanyo VPC-HD2000	3.48	107.6	0.6275	2.84	104.9	1.15
Sony HDR-XR520V	4.79 4.56	80.8 93.47	0.37 0.39	4.89 5.3	77.11 85.14	0.8725 0.89



What will be the form and features of the New Panasonic GH2?

The forums are rife with suggestions of what features the new Micro Four Thirds pseudo-DSLR camera from Panasonic will exhibit. A revolutionary global shutter is high on the list of rumours. The replacement of the mechanical shutter in the GH1 will also mean changes to the sensor. Principal of these will be how to capture the image without introducing vertical skewing of the image. The current sensor reads the image line by line and so to avoid any movement in the image whilst this process is occurring the mechanical shutter limits the time and amount of light reaching the sensor. Increasing the readout from the sensor requires a higher power demand and hence the sensor will run hotter. All of these problems Panasonic need to tackle before introducing the new GH2 camera.



Another rumour is that the green pixels of the new sensor will be exposed four times longer than for the red and blue pixels. This will have the effect of increasing the sensitivity of the sensor so that it is equal to, or superior to, that of the full sized sensor in the Canon 5D Mk II. Motion artifacts introduced by the longer exposure on the green pixels will need to be corrected by signal processing. How correct all these rumours are will be decided later this year when the GH2 arrives on the shelves.

Phone your holiday movies home to the relatives?

I guess it had to happen, director Michael Koerbel from Los Angeles has completed a short film entitled "[Apple of My Eye](#)" which was shot and edited completely on the iPhone 4. The roughly one minute and 15 second video cost \$103US and took 48 hours to make, using the iPhone 4's 720p HD video recording capabilities and Apple's iMovie for iPhone video editing application. Using the iPhone's compactness to advantage, the iPhone was packed into the front of a model railcar and used to get 'traincam' shots. Further the director used a dolly and other equipment to achieve his iPhone first. But it does look strange to see the small rectangular iPhone attached to a big tripod. So for travellers the *postcard* is history the iPhone *videocard* is the future.

Optical Disc Storage – the future is bluey

The Blu-ray Disc Association has released two new versions of the Blu-ray disc. The first called BDXL raises the 50GB capacity of the current two layer disc to 128GB for a four layer burnable disc. A rewritable disc will have 100GB capacity. The second format, called Intra-Hybrid Blu-ray (IH-BD for short), will consist of two layers one of which is re-recordable and one that is read only – great for game applications.

Viewfinder NZ goes free and online.

Now New Zealand has its own online videomakers' magazine and it's free, just sign up on:

<http://www.viewfinder.net.nz/>



2010 Programme

5 August	<i>Members videos & Works in Progress</i> <i>Hot Spot – Philip Richardson</i> Topic – Green Screen with Actors (theatre sports like) Member participation with cameras and tripods.	School	John Devenish Co-operative Workshop
2 September	<i>Members videos & Works in Progress + Green Screen Videos</i> <i>Hot Spot – Max Davies</i> Topic – High Definition Video – Visit or Guest Speaker	School	TBA
7 October	<i>Members videos & Works in Progress</i> <i>Hot Spot – Bob Kennedy</i> Topic – Turning a Travelogue into a Documentary	School	TBA
16 October	<i>Combined Clubs Meeting – Scripted Video no longer than 10 minutes</i>	Mollymook Golf Club	
21 October	<i>Topic – Computer Editing – Advanced Editing Techniques</i> <i>Guest Speaker from U of W</i>	School	TBA
4 November	<i>Members videos & Works in Progress</i> <i>Hot Spot –</i> Topic – (spare night if programme needs to be re-jigged)	School	TBA
18 Nov	<i>Topic – Computer Editing – Special Effects</i>	School / Home	TBA
2 Dec	<i>VOTY Entries</i>	School	
14 Dec	<i>Annual Dinner</i>	Figtree RSL Club	

Colour Code: Normal Monthly Meeting Extra Monthly Meeting Special Meeting



The Shot