

ENJOYING VISUAL TECHNOLOGY

**SYDNEY VIDEO  
MAKERS CLUB**

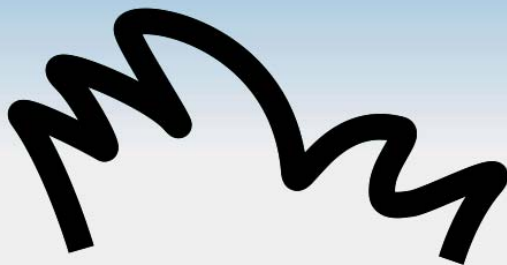


# **ELECTRONIC EYE**

**N E W S L E T T E R**  
**JULY, 2014**

**2012**

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**Next Meeting**  
**Wednesday**  
**23rd July, 2014**

**[www.sydneyvideomakers.org.au](http://www.sydneyvideomakers.org.au)**

# Presidents Message

These last few months have been fairly hectic as we've picked up from where Andy left off and got back onto an even keel with the programme and so on.

Since Andy's last President's Message we've had both Canon and Panasonic visit, taken a look at the club's audio kits, found out about Starnow, looked back at last years shared script entries and seen some cinematography tips for making documentaries. It's been busy and looks set to continue!

Coming up in the next couple of months you'll be pleased to hear I won't be saying very much at all and we will instead have the wisdom and insight from some **excellent external speakers** on a range of subjects.

First up is an **audio visual specialist from Dragon Image** who's also going to bring along some equipment you'd typically associate with productions at the next level to many of ours, for example dollies, cranes and so on. It promises to be very interesting and a chance to see up close quite what this type of equipment can do.

After that we will have a talk from a **professional editor** who, along with some general insights, will also give us some tips based on having watched a few of our productions beforehand.

Then, in October, we have an **experienced amateur scriptwriter and director** coming in to give us her perspective on those two essential parts of great storytelling. So, a full agenda which promises to be very interesting.

In September Ian Scott will again be running the **Travel Video Focus Night** and so if you have anything you'd like to show in that just let Ian know, the earlier the better.

On a different note, many of you may have seen the recent emails referring to the **Light Horse shoot** on Sunday 6th July.

Under the expert guidance of Ian Scott many members responded to a very last minute and challenging call to assist in filming this event.

The timescales were very short and, to make the whole thing even more challenging, the location was within an area locked down by police with access by security vetted pass only! In the end I think we had around 4 cameras running to record various parts of the parade and VIP inspection. Ian showed some clips at the last Focus Night and I'm sure we will see more soon.



For any of you who haven't noticed our **next competition** is a simple documentary on any subject you like in up to 5 minutes. We saw some great tips on documentary camerawork recently and, as Don Reade pointed out, one of the key theme's that came through from those tips was how to 'tell the story through the visuals rather than just the voiceover'.

**VOTY** is of course just around the corner and this year we will again be competing with the 3 other local clubs in the NSW Drama Competition. Last year of course we won but, I thoroughly expect them to be back this year with a vengeance!

As many of you will know, 1st place in this years Documentary Category at VOTY has been renamed the **Andy Doldissen Documentary Trophy** and there will be a cup awarded to the winner. This will be a perpetual cup similar to the Ted Northover Cup which is awarded to 1st place in drama.

Momentum on the **club script for Tropfest** has fallen a little and could really do with some more people to get involved and help. At the moment it is with Eddie, Ilma and Ami and they would ceretainly welcome some help so, if you are interested please do speak to them.

The **second club shoot is a 2 min script entitled 'Young Love'**. The plan here is to provide members with everything they need to be able to direct and shoot the script. This includes the script, cast, location, audio equipment and lights. The shoot will be in or around North Sydney in August (date TBC) and so if you;d like to be involved please let me know asap.

On a final note, there was no EE last month as there was not much content for it. This has led to discussion within the Committee around **whether it should be continued at all, change format, take a fresh approach to content, etc.** If you have a point of view on this please let me know. Please do bear in mind that, key to its ongoing success is support from more than just a few members to generate content for it.

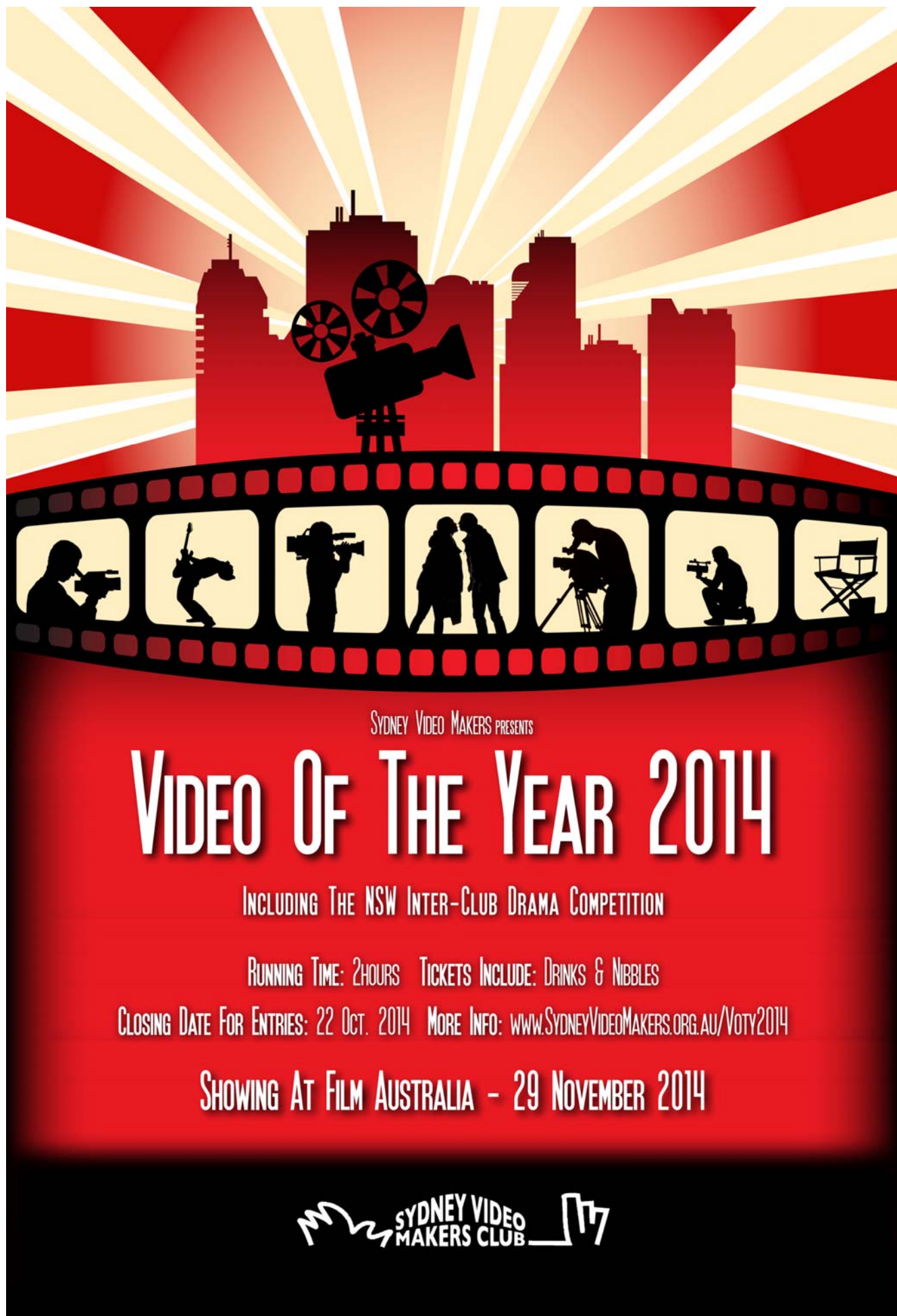
Whilst expert content on a particular subject is of course excellent, **content for the EE can be written by any member** on any film related topic.

For example, an article about a new piece of equipment you've invested in and why you chose it would be great, as would a piece about a filming or editing challenge you had and perhaps how you overcame it. Similarly, something simple on which web sites you use and find helpful could well be a godsend to a member facing the same challenge.

Whatever the topic, the **EE can only continue with support from us all** so please do try and contribute something, even if it's just once a year it will make a difference.

See you next Wednesday.

*Ruskin*





# ONE HUNDRED YEARS AGO

As I am sure you all know on 8<sup>th</sup> August 1914 the World was plunged into war and Australia punched well above its weight as a participant in that war. The first contingents to go to war were in fact volunteers. A very famous component in that first contingent was the Australian Light Horse.



Cathedral Square

Each year all round Australia serving and retired Army Reserve personnel parade to recognise their unit contributions to Australia's Defence during peace and war. This year the parade was on Sunday the 6<sup>th</sup> July 2014 a century after the start of World War 1. As a special feature a "Light Horse Heritage Troop" (20 strong) aptly named the "Chauvel Troop"

participated in Reserve forces parade. Chauvel was the commander who ordered the successful Light Horse charge into the enemy held Beersheba, the last successful cavalry charge in World History.

We were asked, at short notice, to take some video of the Troop rehearsing at the St Ives Show ground on the Saturday 5<sup>th</sup>. We were also asked to video the parade



C ommander



Arriving Government House

progress from Victoria Barracks to Macquarie Street and an inspection by the NSW

Governor at Government House.

I am pleased to say that a number of members responded to the call for assistance and a significant amount of good footage was obtained.

A professional video crew was hired by the committee in control of the event to capture footage and edit the proceedings at the saluting base in front of Parliament House Macquarie Str. The professional team was not involved in any other Light Horse footage capture that day. We hope to negotiate some clips



Entering Macquarie Street.



Cross Intersection

from that crew to complete the coverage needed to edit a documentary of the Light Horse Participation .I did produce a logline and suggested camera tasking to enable us to assemble and edit a reasonable video of the heritage Light Horse behind the scenes participation. It did infer interviews and lots of close ups of

in-

horses and their elderly riders.

Because of the large amount of material collected and because some of it is not yet in my possession I am unable to see just how well we did but what is to hand already looks very good.

I have included some frame grabs of the parading Troopers. I have also attached the log line, produced at very short notice and with limited information.



Taylor Square.

Ian Scott

Monday, 14 July 2014



# **LIGHT HORSE DOCUMENTARY**

## **CONTEXT DETAILS**

### **LOGLINE**

Retired army major Dick Adams has overcome many obstacles to form a Light horse troop manned by volunteers and equipped and mounted exactly as they would have been in 1914. The culmination of this effort will be achieved as the “Chauvel Light Horse Troop” participates in the Reserve Army Parade on July 6 2014 to commemorate the involvement of Australian Troops in the First World War.

### **CONTEXT MATERIAL**

The documentary should concentrate on the men in the troop and the effort they expended to make it all come about. Against a background of plenty of general interest footage as they rehearse on Saturday 5<sup>th</sup> at the St Ives showground, we need interviews with the men. Plenty of CU of men and horses. Leonard Lim is coordinating our participation on Saturday please make contact with him.

The final part of the doco will be scenes from the Parade, this is fixed by the parade timings and route is not open to us to alter. Locations for cameras are already defined.

### **SATURDAY AND SOME SPECIFICS**

1. An interview with Major Dick Adams is a must.
  - a. Why is he doing this
  - b. When did it all start
  - c. How did they get all the 1914 equipment
  - d. Will the troop disband or live on
  - e. Why “Chauvele Troop”
  - f. How did he find the voluntary troopers
2. Interviews with troopers could be used to enlarge on;
  - a. How did you get involved
  - b. Why are you doing this



- c Are you a War veteran
- d Do you represent a know 1914 trooper, perhaps a relative or local hero.
- e is you uniform and equipment original or carefully re-crafted
- f is your mount yours , or did you just match up for this event

3. The NSW mounted police will have officers at the rehearsal to assess the safety competence of the mounted troopers for participation in the Parade.

Perhaps we could get an input from one of the police

- a Will you be parading tomorrow
- b What do you think of the volunteer Heritage Troop project
- c ??? etc.

# Zoom H6

Audio Recorder Par Excel-lance



# Audio Recording

High quality, on a budget

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## Introduction

I have recently had an attack of G.A.S. again. I know that this condition is no stranger to some who are reading this. I am not talking about a digestive condition, but Gear Acquisition Syndrome! However I have received counseling from my wife, and I am getting better. Anyway, after careful consideration, I purchased a Zoom H6 digital audio recorder. Here is my story...

## Summary

You don't have to go to the article's end to read the conclusions. Here they are: The Zoom H6 is a versatile, high quality digital audio recorder, which is available locally. It brings numerous useful functions to making quality audio, and can be purchased for **\$350**. The Zoom H6 is highly recommended by me.

## Disclosure

I purchased my unit from Big Music, in Crows Nest, (sadly) using my own money. I have no financial interest in either the product or the supplier.



## Purchasing Criteria

Whenever I am about to buy some new gear, I ask myself some searching questions:

What will it do better, then existing gear?

What new functions will it provide, that I currently cannot do?

Is it cost effective and can I afford it?

Is the in-country support for warranty?

Will it last the distance?

Is it a respected brand/model?

For me, the H6 ticked all of the boxes.

## Reasons to be Cheerful

I am no stranger to the Zoom brand of recorders, as I have had a Zoom H4n for a couple of years. The H4n provides similar functions to the H6, however the H6 extends and improves on the H4 in every way, so I would not recommend buying an H4n. Recently, I found a purchaser for my H4n, so it gave me an opportunity to upgrade.

The H6 successfully addresses some recording challenges for me:

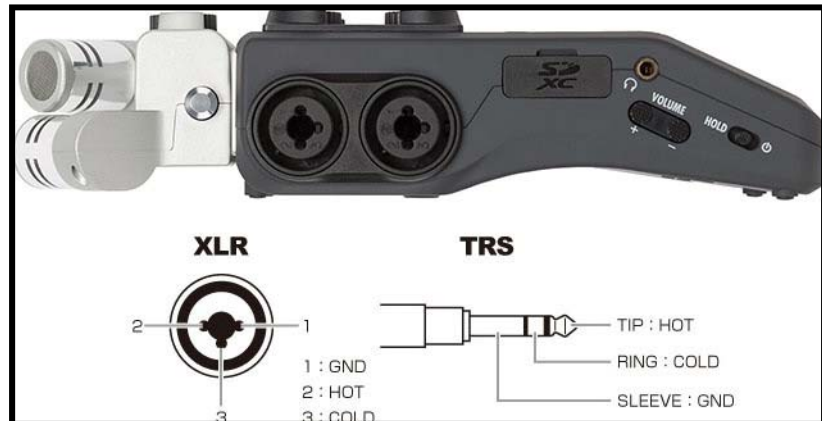
**Sound Quality** - has to be the #1 criteria, when making recordings. Video cameras and DSLRs often have some audio recording capability, however unless you venture into the very pricey pro gear, they suffer from poor sound, with noisy mics. often mono only, and often not able to take external input, or allow headphone monitoring, always limited to 1 or 2 channels of sound.

The H6 has high quality very quiet pre-amps, resulting in excellent clarity, and comes with two modular mics as well as the facility to record 6 separate channels of audio, which can be edited later in post production.

Audio quality is further enhanced by being able to use professional mics, that use Canon XLR connectors and may require 48V phantom power. (discussion of mics is a huge subject and is material for another article.)

**Zoom mics** - the H6 has a modular design, and ships with two mic capsules. A very high quality X-Y stereo mic, with selectable angle of 90deg or 120deg, and a Mid-Side (MS) capsule with user variable stereo/mono angle of incidence.

**3.Inputs** - 4 XLR combo connectors are on-board. These can take both Canon 3 pin balanced XLR connectors with switchable phantom power, AND ¼" line input (sometimes referred to as guitar jacks).



Further 2 XLR combo connectors, but without phantom power, can be added by an optional extra module, which replaces the detachable Zoom mic capsule.

3.5mm stereo input, with switchable power, is available on the X-Y mic capsule. This allows the use of Rode Video Pro mics or similar.

**4. Monitoring/output** - two 3.5mm stereo sockets are provided. More on the latter a bit later.

One is line level (i.e. fixed volume) and is ideal to feed into the

camera's input, and the other is for headphones and has adjustable volume. Visual level monitoring is provided by an excellent angled colour screen.



**5. Controls** - are provided by discreet rotary wheels for setting recording level. These are clearly marked with number 0 to 9, making it easy to match channels or return to a previous settings. A Menu button and Jog controller take care of a myriad of



additional settings, such as setting high pass filters, limiter or compressor settings, etc. etc.

**6. Power** - is provided by either 4x AA batteries (I use [Eneloop](#) Black XX) or a Mini USB lead. The 4 batteries are claimed to provide up to 20hrs of recording, which is more than I could ever need in a session. I would always start with freshly charged batteries, but it means that worrying about running out of juice is a thing of the past. The USB option is great if you are using the device in a studio or desk environment.





**7. Mounting** - the H6 on a tripod is easy via the 1/4" threaded tripod bush. I bought a hot shoe adaptor on eBay for a few bucks, which allows putting the recorder on a camera or a cage. Pity that this inexpensive accessory is not bundled with the kit!

**8. Accessories** - include a modular Zoom Shotgun mic capsule, an additional 2x XLR input module, cabled remote controller and



a furry wind shield (a.k.a. dead kitten).



**9. Supplied** - in the box, are the Zoom H6 unit, an X-Y mic capsule, a Mid-Side mic capsule, an open pore sponge type wind shield, all in hard plastic case. The case has little extra space and can accommodate a tripod adaptor or batteries.



## Usage Scenarios

I typically use my H6;

**1. Attached to a camera** and feeding the output into the camera's input. This provides good quality location sound and I can then either use the camera's soundtrack which was provided by the H6, or take the H6 native recording off it's own SD card and mix it in post.

**2. Stand alone on a video shoot.** This is when I record multi mic channels, and is ideal for recording multiple actors/mics, which can then be mixed down in post production.

**3. Sound only recordings.** This could be when making Foley recordings (i.e. sound effects, like door slamming, foot steps, etc.), or music recordings with either the Zoom's own mics or multi mics, depending on the circumstances.

**4. As a mini mixer.** This makes a great field recorder, as the phantom powered XLR inputs are great for use with shotgun mics on boom poles, or radio mics on set. Your imagination is the only limit.

## Alternative products

Major audio equipment manufacturers have models to consider as alternatives, such as

Tascam

Sony

Yamaha

Olympus

And Zoom's other models

The H6, however provides a unique collection of features, so you cannot find any other product that provides the same feature set. Perhaps the best alternative, at a slightly lower cost would be the recently announced Zoom H5, or the well established H2n. I recommend that you do your own research to decide what suits your needs the best.

## Further Reference

As usual, the internet is a great source of research. Using a search engine, such as Google, you can easily find a high number of articles, including a PDF downloadable manual for the H6. YouTube has many videos, demonstrating the use of the H6, with sound samples and comparisons.

## (Not) The End

This is the end of the article, but not the end of your research. If you spot any errors in my write-up, have any comments or feedback, please feel free to contact me at [paul@remektek.com.au](mailto:paul@remektek.com.au)

Enjoy!

# What you need to know about Camera Lenses

By Ami Levartovsky

Understanding camera lenses can help add more creative control to digital photography. Choosing the right lens for the task can become a complex trade-off between cost, size, weight, lens speed and image quality.



## Focal Length

The focal length of a lens determines its angle of view, and thus also how much the subject will be magnified.

The higher the focal length number, the more magnification a lens has.

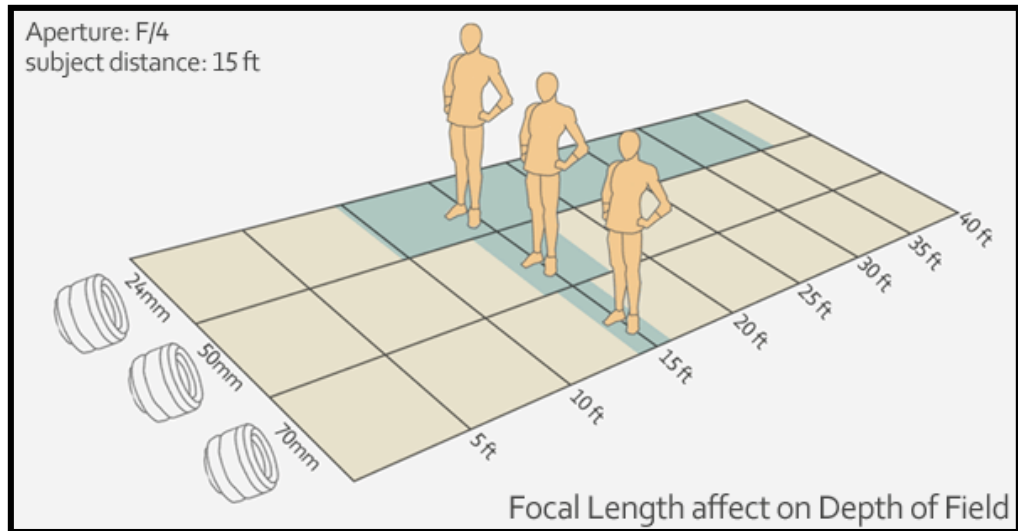


Note however that higher focal length compresses the distance but not the horizontals. Therefore the nose on a face will become smaller with a larger focal length:

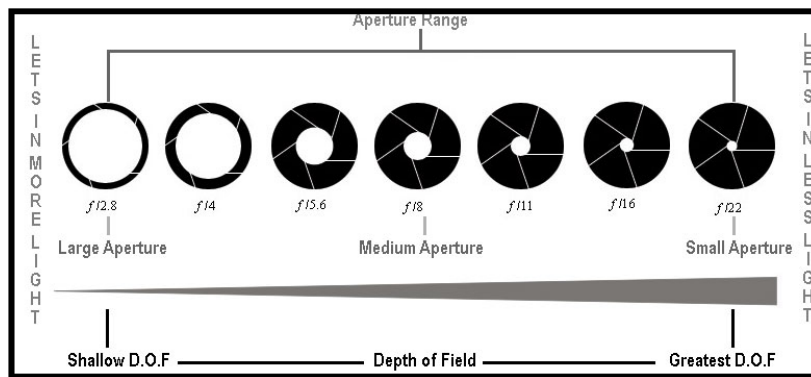
## Focal Length and Depth of Field

The longer the focal length – the less depth of field:





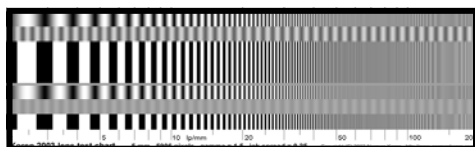
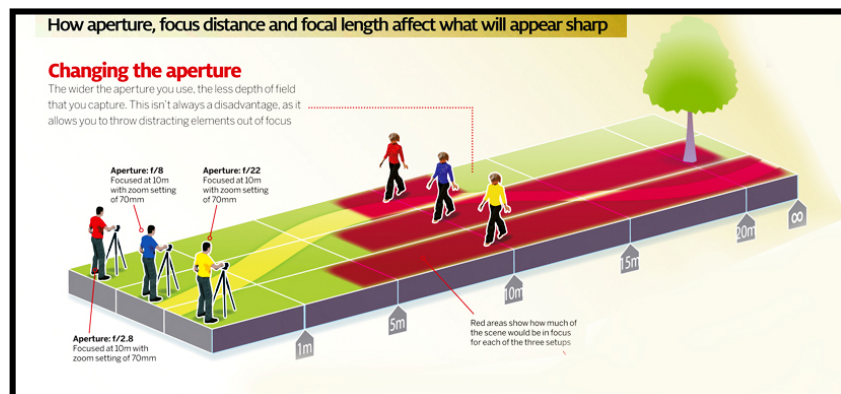
## Aperture



Aperture is the ability of letting light into the camera sensor. When you have more light you can use a higher shutter speed to freeze action. Even in video, using slow shutter speeds to capture moving objects will result in a soft focus feel because of the blur caused by the movement of the object while the shutter is open.

Therefore “Fast Lens” is one that opens wider – smaller F Stop.

The aperture also affects the depth of field. The smaller the F Stop, the smaller the depth of field.

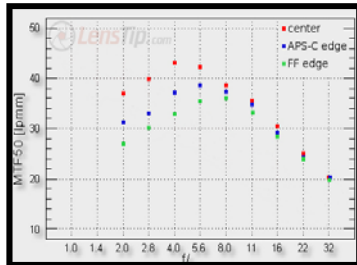


## Resolution

Lens resolution describes the ability of an imaging system to resolve detail in the object that is being imaged.

The chart on the right shows the relation between aperture and resolution.

Note also that resolution is better in the centre of the lens.



## Distortion



The wider the focus length the more likelihood of distortion.

The greater the zoom range - the more likelihood of distortion.

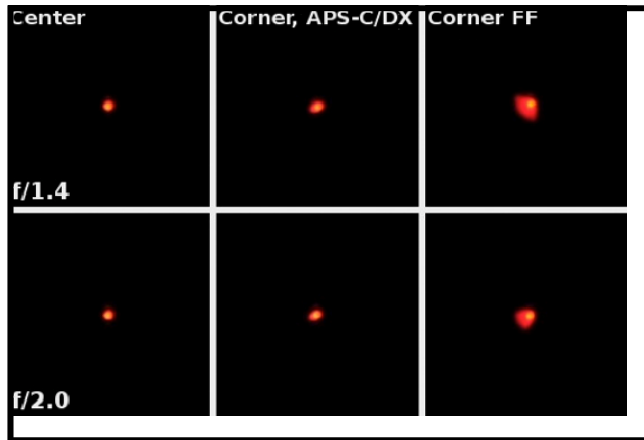
Usually zooms are best near the middle of their range, but this depends on lens design. They are almost always at their worst at their maximal focal length.



## Chromatic Aberration

Chromatic Aberration is a type of distortion in which there is a failure of a lens to

focus all colors to the same convergence point.



## Coma

When point sources such as stars or street lights appear distorted or appear to have a tail like a comet.

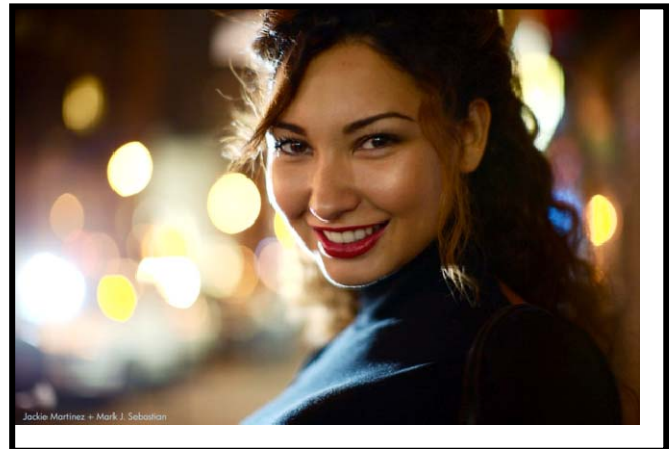
The coma gets worse towards the edge of the lens which benefits crop sensor cameras as they use the middle part of the lens.

## Bokeh

The aesthetic quality of the blur produced in the out-of-focus parts of an image

produced by a lens.

Some lenses have many aperture blades and/or blades with curved edges to make the aperture more closely approximate a circle.



Leica lenses used to have 11, 12, or 15 blades that gave a circular bokeh even at open apertures. More often, lenses have 8 blades.

## Colour

One subtle characteristic of a lens is colour. A good lens should have neutral colour -- it should not tint the image in any way. Lenses may give the image a cool (blue) or warm (yellow) cast... and cheap ones can impart a nastier magenta cast.

## In Summary

Almost all modern lenses are capable of getting good images under some conditions. The difference between a mediocre lens and a superb one is that the superb one will get good quality under all conditions in which it can be used.



Prime lenses are better than zoom lenses as they have less optics. However, video makers need the flexibility of the zoom to frame their picture.

Consider then the effects of the focal length and the sweet spot of the lens and remember that you can also zoom with your feet to get the best effect....

This article is not exhaustive, I touched the points I deemed most important.

There is a website <http://www.lenstip.com> that you can visit. Under the “Lenses” tab you’ll get specifications and user reviews and under “Reviews” tab you’ll get test results for the parameters discussed above and then some.

<http://www.cambridgeincolour.com/camera-equipment.htm> brings you articles about lens characteristics.

More useful links:

<http://www.digitalcameraworld.com/2013/07/15/camera-lenses-explained-how-to-get-sharp-photos-with-any-type-of-lens/>

[http://www.prime-junta.net/pont/How\\_to/ha\\_Testing\\_lenses/a\\_How\\_to\\_test\\_a\\_lens.html](http://www.prime-junta.net/pont/How_to/ha_Testing_lenses/a_How_to_test_a_lens.html)

<http://www.videomaker.com/article/8614-depth-of-field>

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Vice President:  
Ami Levartovsky

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The Club meets on the FOURTH WEDNESDAY of each month (except for November & December) at 8PM at the Dougherty Centre, Victor Street, Chatswood. Tea & Coffee are available from 7PM. FOCUS nights, which usually cover technical subjects, are held on the SECOND WEDNESDAY of each month (except January & December) at 7.30PM at the Dougherty Centre, Victor Street, Chatswood.

The Committee meets on the FIRST WEDNESDAY of each month. Members are always welcome to attend, and for meeting time and venue, see any committee member.

Member's guests may be invited to meetings; the first visit is free, subsequent visits are \$5. New members are always welcome. Annual membership is single \$60, self and spouse \$85, Overseas and Country members \$35

Note: Equipment brought to a Club night is not covered by the Club's insurance. Members should study their household insurance and check whether their video equipment is covered away from their premises and consider whether their cover should be extended.

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<b>Team Coordinator</b>		

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