

Christina Fox IBC2009

UrbanFox.TV

PRODUCTION ON A BUDGET

Christina Fox
www.urbanfox.tv

Production Village UrbanFox.TV

Christina Fox IBC2009

UrbanFox.TV

All of this presentation will go
on our website

www.urbanfox.tv/seminar

Production Village UrbanFox.TV

Christina Fox IBC2009

WHAT CAMERA SHALL I BUY?

- What is your budget?
- What are you going to use the kit for?
- What features must you have?

Production Village UrbanFox.TV

Christina Fox IBC2009

BUDGET

- Whatever your budget - don't forget you'll need to set aside some money for a tripod, mics, lights, editing.....
- Think about 50:50
- So if you have £3,000 to spend on the camera - you could easily spend £3,000 on all the other stuff.

Production Village UrbanFox.TV

Christina Fox IBC2009

WHAT WILL YOU USE IT FOR?

- Internet broadcasting, podcast, vodcast
£500 - £2,000
- Weddings, special interest videos (SIV)
£500 - £3,000

Production Village UrbanFox.TV

Christina Fox IBC2009

WHAT WILL YOU USE IT FOR?

- Corporate, broadcast and stock footage
£3,000 - £??
- Documentary or drama
£3,000 - £???????

Production Village UrbanFox.TV

Christina Fox IBC2009

BUDGET

I'm assuming you've got a
£3,000 - £6,000 total budget.

Production Village UrbanFox.TV

Christina Fox IBC2009

FEATURES... THERE ARE 5 THINGS THAT MAKE CAMERAS GOOD

- The lens
- The imaging system
- The recording format
- Audio
- Lighting

Production Village UrbanFox.TV

Christina Fox IBC2009

LENSES

- With the cheaper cameras you will have to put up with fixed lenses
- Focus lag
- Probably won't zoom out wide enough

Production Village UrbanFox.TV

Christina Fox IBC2009

LENSES

- If you spend more you can get a camera with interchangeable lenses. Canon XL range, JVC HD range, Sony DSR... EX3 and Z7, Panasonic HPX301
- But, check your budget...
...will you be able to afford a second lens?

Production Village UrbanFox.TV

Christina Fox IBC2009

The imaging system

Production Village UrbanFox.TV

Christina Fox IBC2009

THE IMAGING SYSTEM

- CCD and CMOS
- More = better (max of 3)
- Bigger = better = more expensive

Production Village UrbanFox.TV

Christina Fox IBC2009

THE IMAGING SYSTEM

- Sony HVR-A1 => 1/3inch CMOS £1,800
- Sony HVR-Z5 => 1/3inch 3CMOS £3,350
- Panasonic HPX301 => 1/3inch 3CMOS £7,000
- Sony PMW-EX1 => 1/2inch 3CMOS £4,795
- Sony DSR-450 => 2/3inch 3CCD £10,500
- Arri Alexa => 35mm CMOS £42,000

• (all prices ex UK VAT)

Production Village UrbanFox.TV

Christina Fox IBC2009

THE IMAGING SYSTEM

- Standard Definition or High Definition?
- SD is fine for internet stuff
- SD is often better in low light than HD equivalent

Production Village UrbanFox.TV

Christina Fox IBC2009

THE IMAGING SYSTEM

- CCD better for interlaced pictures
- CMOS better for progressive
- True progressive? 25f or 25p
- 24p anyone?

Production Village UrbanFox.TV

Christina Fox IBC2009

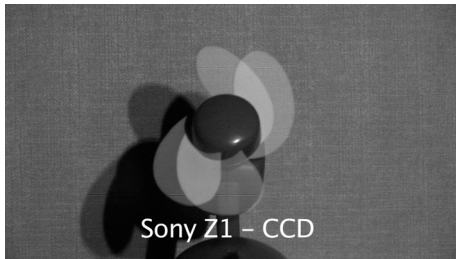
THE IMAGING SYSTEM

- CMOS - No smearing
 - Rolling shutter
 - Skew
 - Wobble
 - Partial exposure - flash
 - Banding - fluorescent lights
- <http://tinyurl.com/3oa6s2>

Production Village UrbanFox.TV

Christina Fox IBC2009

ROLLING SHUTTER



Sony Z1 - CCD

Production Village UrbanFox.TV

Christina Fox IBC2009

The Recording Format

Production Village UrbanFox.TV

Christina Fox IBC2009

THE RECORDING FORMAT

- Tape
- External hard drive
- Internal hard drive
- Optical disc recording
- Solid state recording

Production Village UrbanFox.TV

Christina Fox IBC2009

THE RECORDING FORMAT ...TAPE...

- Cheap
- Very reliable
- Proven to be archive-able (>60 years?)
- Comes in edit friendly formats

Production Village UrbanFox.TV

Christina Fox IBC2009

THE RECORDING FORMAT ...EXTERNAL HARD DRIVE...

- Great as a back-up device
- 40GB = 3hrs
- Firestore 60Gb - £850
- Sony HVR-DR60 - £500



Production Village UrbanFox.TV

Christina Fox IBC2009

THE RECORDING FORMAT ...EXTERNAL HARD DRIVE...

- Expensive
- Where do you put it?
- Insecure firewire socket
- Good back-up devices
- Great for events longer than 1hour
- Possibility of faster workflow

Production Village UrbanFox.TV

Christina Fox IBC2009

MEGA BITS

- DV/DVCAM (25 Mbps)
- DVCPRO (25 Mbps)
- DVCPRO 50
- DVCPRO HD (100 Mbps)
- HDV (19 + 25 Mbps)
- XDCAM EX (25 + 35 Mbps)
- AVCHD (various)
- AVC-I (50 + 100 Mbps)

Production Village UrbanFox.TV

Christina Fox IBC2009

CAMERA OUTPUTS


- FireWire used to be the way to get video and audio into an external hard drive.
- Look out for cameras with:
 - HDMI
 - HDSDI

Production Village UrbanFox.TV

Christina Fox IBC2009

SOLID STATE RECORDING

- Convergent Design
- Flash XDR - Up to 160Mbps
- nanoFlash
 - HDSI and HDMI in/out
 - 100 or 160mbps mpeg2
 - 2x Compact flash cards



Production Village UrbanFox.TV

Christina Fox IBC2009

THE RECORDING FORMAT ...INTERNAL HARD DRIVES...

- Only on lower cost handycams
- AVCHD Format - editable?
- Usually highly compressed video
- Long recording times
- 40GB = 15hours
- You must archive to a separate drive



Production Village UrbanFox.TV

Christina Fox IBC2009

THE RECORDING FORMAT ...OPTICAL DISC...

- Within this budget records to DVD
- Low quality
- Hard to edit
- Avoid?

Production Village UrbanFox.TV

Christina Fox IBC2009

THE RECORDING FORMAT ...SOLID STATE...

- Getting cheaper
- No moving parts - Pretty reliable
- Pretty resilient too
 - (washing machine safe)
- Well supported media

Production Village UrbanFox.TV

Christina Fox IBC2009

DSLR cameras



- Canon EOS 5D Mark II - 1920 X1080
- Canon EOS 500D - 1920 X1080
- Nikon D5000 - 1280 X 720
- Olympus E-P1 - 1920 X1080
- Panasonic DMC-GH1 - 1920 X1080
- Pentax K-7 - 1536 X1024

Production Village UrbanFox.TV

Christina Fox IBC2009

Why use a DSLR?

- Lenses, lenses and more lenses





- But, not for great audio.

Production Village UrbanFox.TV

Christina Fox IBC2009

You'll need one of these...



Production Village UrbanFox.TV

Christina Fox IBC2009

...and something like this

- 4 track audio recording
- XLR and 1/4inch with phantom power
- Mini jack mic input
- Mid-side stereo
- Records to SD & SDHC flash cards




Zoom H4n
UrbanFox.TV

Production Village

Christina Fox IBC2009

THE RECORDING FORMAT ...SOLID STATE...

- Panasonic P2
- DVCPRO format
- P2 is expensive
- £640 - 64GB card
- 1GB = 1min HD




Production Village UrbanFox.TV

Christina Fox IBC2009

THE RECORDING FORMAT ...SOLID STATE...

- Sony EX1, EX3 & JVC HM700
- SxS Cards (S by S)
- 16GB = 50/70mins
- 32GB card = £550
- Again - not cheap



Production Village

Christina Fox IBC2009

THE RECORDING FORMAT ...SOLID STATE...

- Cheap Kensington reader with
- SD card work around
- 16Gb=£28.99 inc VAT

Loads of info including a compatibility list from Guy Barwood
<http://tinyurl.com/d4m8wt>




Production Village UrbanFox.TV

Christina Fox IBC2009

JVC + QUICKTIME

- JVC GY-HM100 (£2,400)
 - 3 1/4inch CCDs
- JVC GY-HM-700 (£4,500)
 - 3 1/3inch CCDs
- 35mbps recording
- Native QuickTime .mov files
- SDHC memory card
- 32Gb = £95 = 1hour 40 min




Production Village UrbanFox.TV

Christina Fox IBC2009

THE RECORDING FORMAT ...HYBRIDS...

- Sony HVR-Z5 & Z7
- Mini DV tape...and...
- Compact Flash too - using the HVR-MRC1K



Production Village UrbanFox.TV

Christina Fox IBC2009

WHAT ELSE WILL YOU NEED?

Production Village UrbanFox.TV

Christina Fox IBC2009

TRIPODS

- Spend as much as possible (£200 - £700)
- Weight (carbon fibre is expensive)
- Robust - outlive the camera
- Min and Max height
- Easy to use leg adjustments

Production Village UrbanFox.TV

Christina Fox IBC2009

TRIPODS



- Video NOT a photographic tripod
- Mid level or ground level spreader
- Spirit level
- Quick release hot shoe
- Pan and tilt head
- Separate pan and tilt head frictions

Production Village UrbanFox.TV

Christina Fox IBC2009

ALTERNATIVE SUPPORT

The Pod
www.thepod.ca

Double Bean bag
www.wildlifewatchingsupplies.co.uk

Production Village UrbanFox.TV

Christina Fox IBC2009

ALTERNATIVE SUPPORT

- Monopod (Manfrotto 560B 561B)
- Magic arm with Superclamp




Production Village UrbanFox.TV

Christina Fox IBC2009

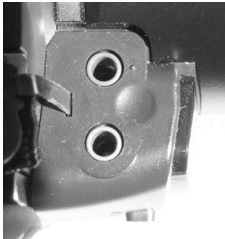
FEATURES... THERE ARE 5 THINGS THAT MAKE CAMERAS GOOD

- The lens
- The imaging system
- The recording format
- Audio
- Lighting

Production Village UrbanFox.TV

Christina Fox IBC2009

IF YOU ONLY HAVE A MINIJACK MIC INPUT




Production Village UrbanFox.TV

Christina Fox IBC2009

Then you may need an XLR adapter...

- A BeachTek box (DXA-4)



Production Village UrbanFox.TV

Christina Fox IBC2009

Cheap Alternative



Production Village UrbanFox.TV

Christina Fox IBC2009

BASIC SOUND KIT

- Gun mic (hypercardioid) great for noisy places
- Sennheiser 416
- Sennheiser ME66 (K6)
- Rode NTG1 and 2
- Beyerdynamic MCE 86




Production Village UrbanFox.TV

Christina Fox IBC2009

BASIC SOUND KIT

- Personal mic (Tie, clip, lavalier)
- Omni directional - good for interviews
- Sony ECM77 or ECM88
- Tram TR-50
- Sanken COS-11




Production Village

Christina Fox IBC2009

BASIC SOUND KIT

- Radio mic
- Sennheiser Evolution (EW112-p G2)




Production Village UrbanFox.TV

Christina Fox IBC2009

BASIC SOUND KIT

- Sony UWP-C1 series
- Diversity System




Production Village UrbanFox.TV

Christina Fox IBC2009

EXTRAS

- XLR-XLR cables 30cm, 1m, 2m, 3m (quad flex)
- Closed Headphones
 - Sennheiser HD25



Production Village UrbanFox.TV

Christina Fox IBC2009

LIGHTING

Production Village UrbanFox.TV

Christina Fox IBC2009

LIGHTING KIT


- Lights are tools. You need the correct light to do a specific job well.
- SO...
- Please don't buy three identical lamps

Production Village UrbanFox.TV

Christina Fox IBC2009

INTERVIEW KIT

- Hard light
- Dedo aspheric2 (150W)
- Soft Light
- Lowell Rifa 44 (300W)



Production Village UrbanFox.TV

Christina Fox IBC2009

INTERVIEW KIT

- Around £1,000 +VAT





Production Village UrbanFox.TV

Christina Fox IBC2009

LED ON-CAMERA LIGHT

- Cool light
- 0-100% dimmable
- No colour temp change
- Lamp life 10,000 hours
- Very low battery
- Consumption (11W)




Production Village UrbanFox.TV

Christina Fox IBC2009

LIGHTING KIT EXTRAS

- Daylight colour-correction gel
- Extension leads
- Magic arm




Production Village

Christina Fox IBC2009

RUN OUT OF MONEY?

- ...buy a reflector
- 5 in 1 reflector
- Don't buy one that is too big unless you have an assistant to hold it.




Production Village

Christina Fox IBC2009

MIND YOUR BACK

- Folding sack truck (eBay) – Carries 50-90Kg Load
- A good case on wheels
- A rucksack



Production Village UrbanFox.TV

Christina Fox IBC2009

FEATURES...

- THERE ARE 5 THINGS THAT MAKE CAMERAS GOOD...

Production Village UrbanFox.TV

Christina Fox IBC2009

Actually, can we make that six ...

Production Village UrbanFox.TV

Christina Fox IBC2009

EDITING

You're not buying a computer...
...you're buying an edit suite


Production Village UrbanFox.TV

Christina Fox IBC2009

BUY A MAC

Production Village UrbanFox.TV

Christina Fox IBC2009



- Buy a refurbished Mac
- The new Intel models will run Windows too (if you really must)

Production Village UrbanFox.TV

Christina Fox IBC2009

RAM

Get lots of it

www.crucial.com

Production Village UrbanFox.TV

Christina Fox IBC2009

Any questions?

Production Village UrbanFox.TV

UrbanFox.TV

All of this presentation will go on our
website

www.urbanfox.tv/seminar