



# SPOTLIGHT

TRAINING

## EDITING

By Jonathan Horst

**GET READY...**

**WHERE THE  
MAGIC  
HAPPENS**

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**You create a new  
reality**

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**You tell the story**

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**Time is compressed**

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**Turn boring raw  
footage into  
something amazing**

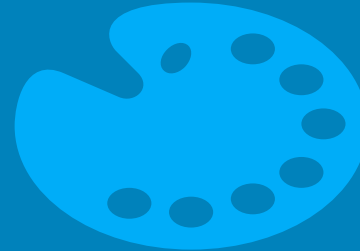


# Computer

Software

Video Files

Workflow



# Artistic

Pacing

Sequencing

Story Structure

# WORKFLOW



## ACQUISITION

What format(s) are you going to record in?



## EDITING

What setting are you going to edit in?



## DELIVERY

What format are you going to export with?

# UNDERSTAND VIDEO FILES



**Frame Size/Resolution**



**Frame Rate**



**Codec**



**Container**



**Pixel Aspect Ratio**



**Chroma Subsampling**



**Bit Rate**

# FRAME SIZE/RESOLUTION



# FRAME RATE

Television 29.97 fps

Film 23.976 fps





# BIT RATE

- The amount of information the video contains.
- Higher Bitrate = Better Quality

**BITRATE**

as exported from editing software

**32,000**  
kilobits/second



# CODEC

The language the video is written in

**H.264**

Most common video codec  
used everywhere

**AVC-Intra**

P2 Camera Codec

**ProRes 422**

Apple's Intermediate Codec

**DNXHD** Avid's Mezzanine

**LongGOP (Interframe)**

- One new key frame every so often then only the changes are written
- Better compression

**Intraframe**

- Each Frame is a Frame
- Easier for a computer to read when editing

# CONTAINER

The wrapper for the video.

- **MOV** Based of Apple Quicktime
- **MXF** Open Format used professionally
- **MP4** Mainly used with H.264



# PIXEL/ASPECT RATIO

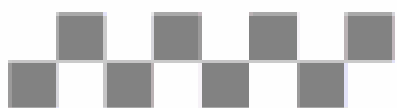
- Shape of the Rectangle.  
Including the entire frame and/or the pixels within it.



# CHROMA SUBSAMPLING

## Colour Resolution

You record less colors than you think



4:1:1

4:2:0

4:2:2

4:4:4

# BIT DEPTH

How many steps between Lightest to Darkest per color

- **8-bit** – Used in most all delivered video you watch
- **10-bit** - Used in Professional video. Gives more flexibility when adjusting footage



# WORKFLOW



**ACQUISITION**



**EDITING**



**DELIVERY**



# AQUISITION

## P2 CAMERA

### AVC Intra 100

- 1920x1080
  - 23.967p / 29.97p / 59.94i
- 1280x720
  - 23.967p / 29.97p / 59.94p
- 10 bit – 4:2:2

### AVC Intra 50

- 1440x1080 – same framerates
- 960x720
- 10 bit – 4:2:0

## STUDIO

1920x1080/29.97p

### ProRes 422

- Program Feed from KiPro

### MPEG-2 4:2:2 – 8-bit

- ISO recordings from 3-Play

## GOPRO/DSLR

### H.264

- Various Frame Sizes and Frame Rates





## Editing

Sequence Setting  
1080/30p

## Acquisition

### P2 Camera

- AVC Intra 100 - 1080/30p **75%**
- AVC-Intra 100 - 720/60p **10%**

### GoPro

- 2.7K/30p **15%**
- 1080/60p

### DSLR

- UHD/30p

### Studio

- ProRes 422 1080/30p

## Delivery

### Shaw Spotlight Channel (NOVUS)

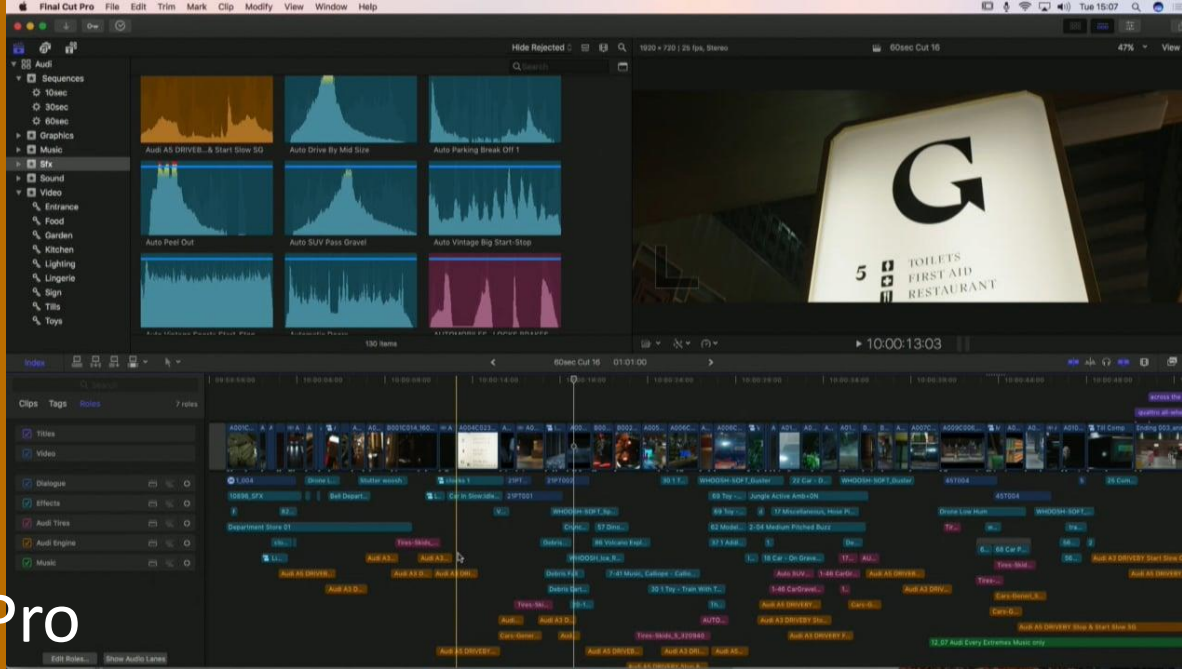
- 720/30p H.264

### YouTube

- 1080/30p H.264
- 16 Mbps

### Archive

- ProRes 422 1080/30p



Final Cut Pro X

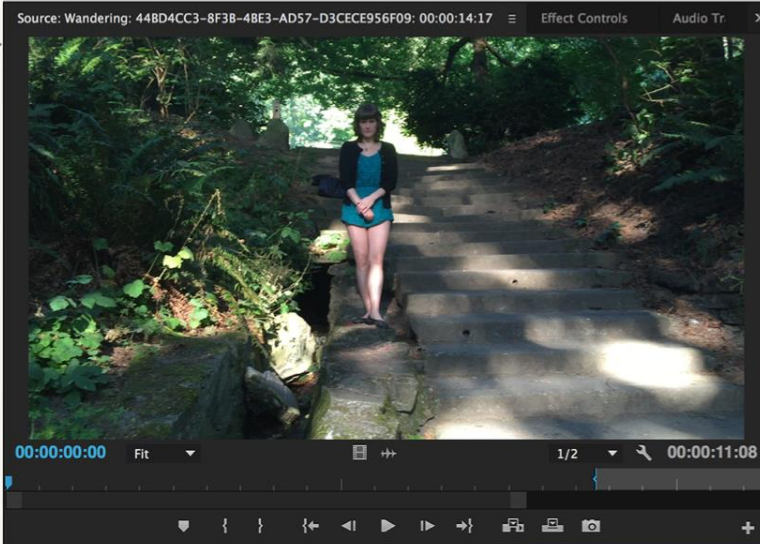
Premiere Pro



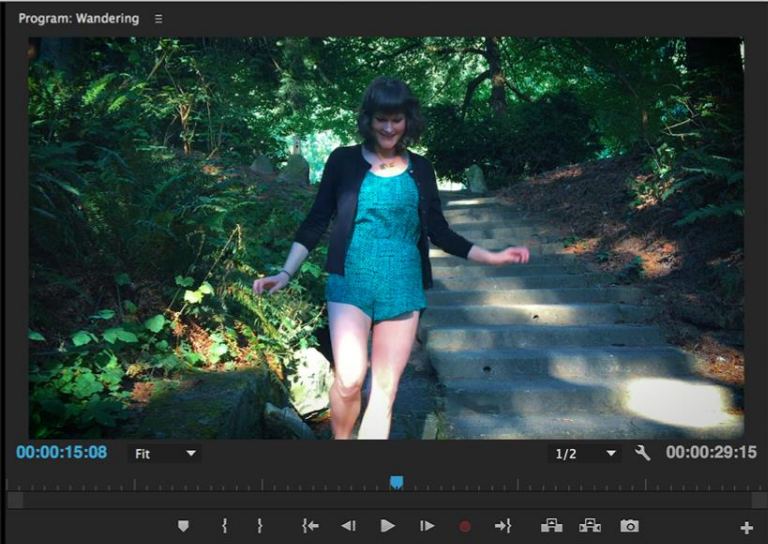


Effect Controls

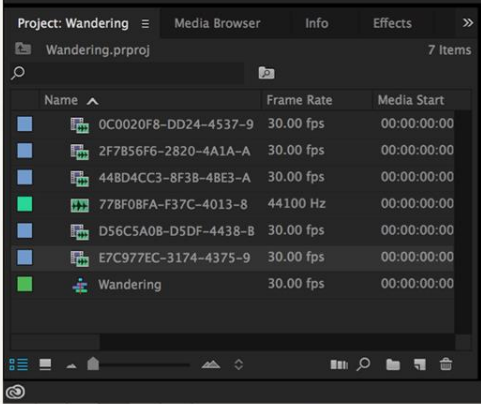
Source Monitor



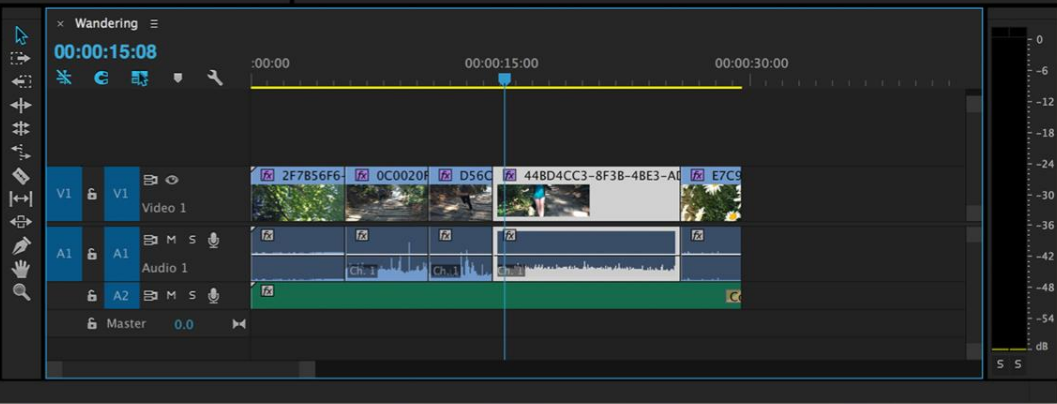
Program Monitor



Project Panel



Tools  
Razor, Ripple, Roll,  
Selection, Zoom & more!



Time Line

PLAYHEAD  
aka (Current Time Indicator (CTI))

## IT TAKES TIME

1 hour of editing  
1 minute finished footage

1 day of editing  
1 minute finished footage