

# Production Workshop

The Camera

We are learning a craft.

Vocabulary

Technique

Creativity

# #1 - Develop a Workflow

Think about your project from beginning to end.

# Meet my dad

Mr. Telles



# Driving a stick shift versus an automatic



3 things you must control manually:

Exposure

Focus

White Balance



Exposure



Aperture



f/2.8



f/4



f/5.6



f/8



f/11



f/16

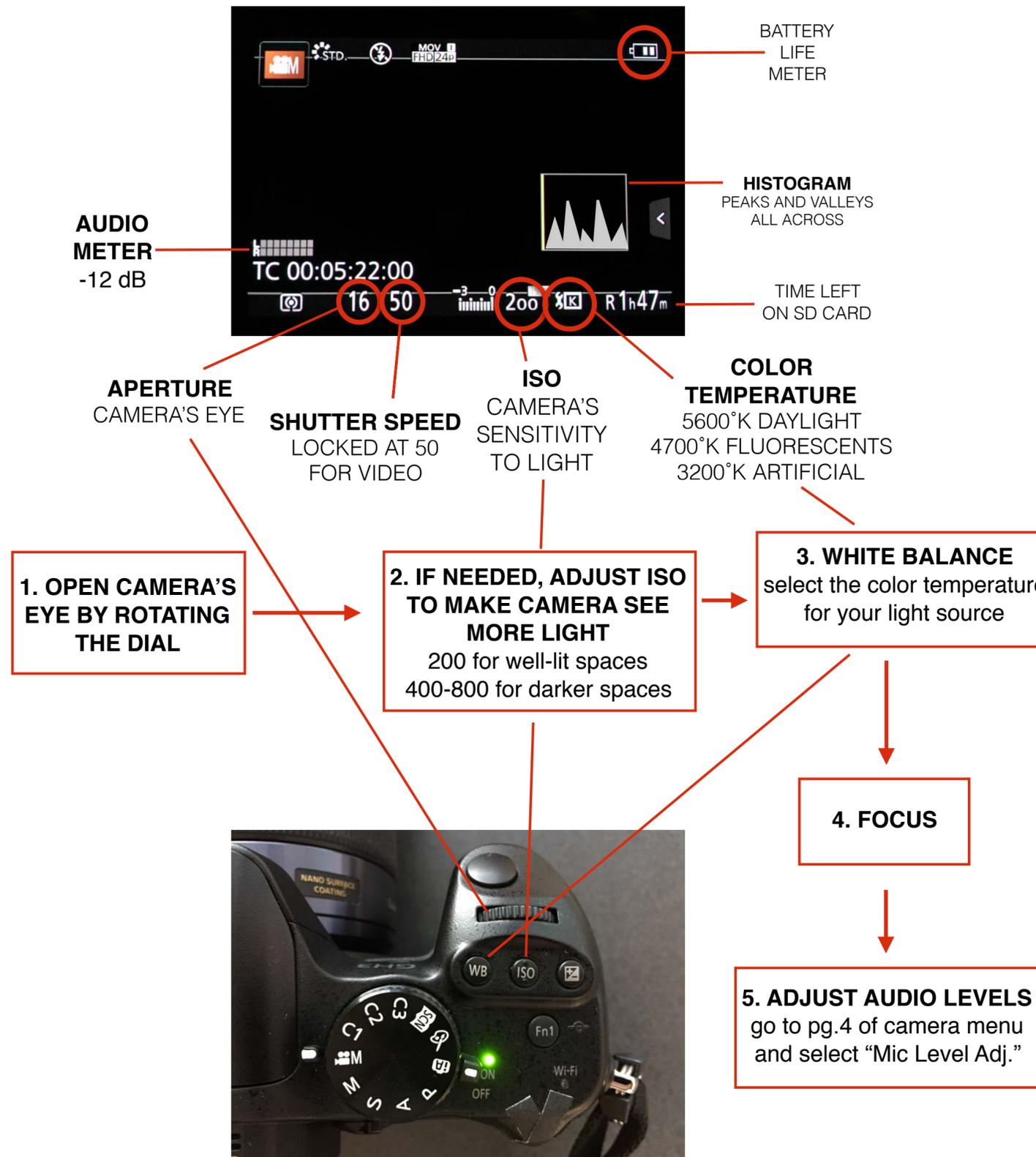


f/22





# Muscle Memory Chart for Panasonic Lumix GH3





Focus



*Defiance* (Paramount, 2008)

Turn focus ring to the right - focus on objects that are near

Turn focus ring to the right - focus on objects that are near

Turn focus ring to the left - focus on objects that are far away



f/22



f/2.8



f/22



f/2.8



f/11



f/4

# Depth of Field

Area in front of and behind a subject/object that will appear in focus.



f/22 Deeper (larger)



f/2.8 Shallow (small)





The Exposure Triangle

ISO

(camera's sensor sensitivity to light)



Shutter  
Speed

(exposure time)

Aperture  
f/

(pupil)

ISO

(camera's sensor sensitivity to light)

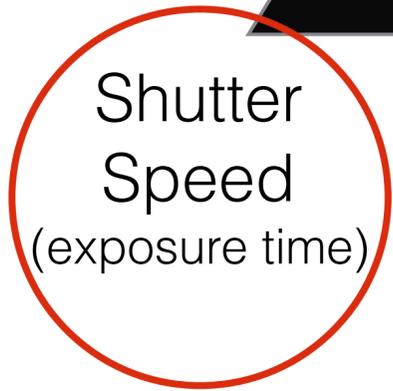


Shutter  
Speed  
(exposure time)

Aperture  
f/  
(pupil)

ISO

(camera's sensor sensitivity to light)

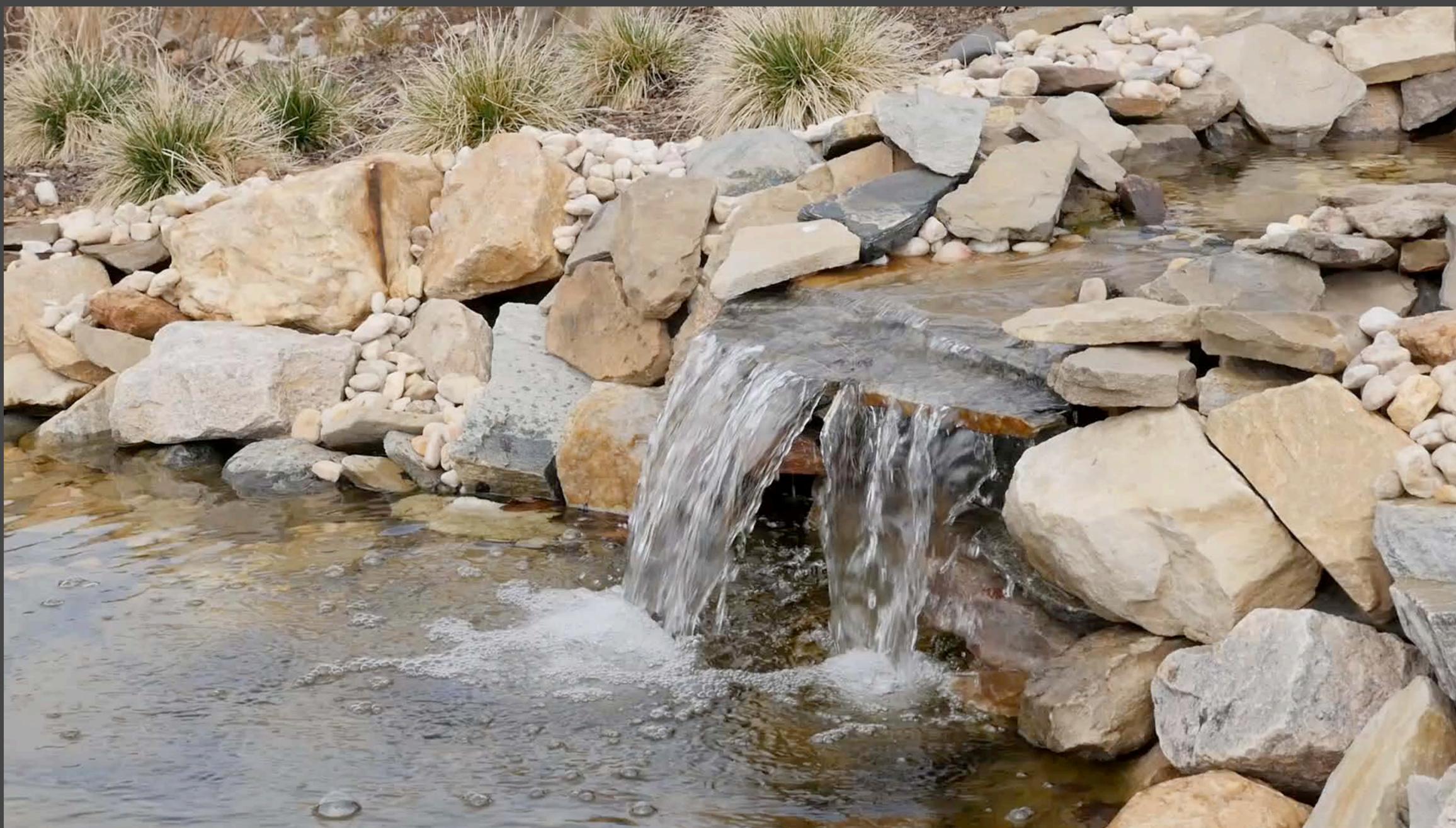


Shutter  
Speed

(exposure time)

Aperture  
f/  
(pupil)





# Frame Rate

**Cinema** Frame Rate - **24fps** (frames per second) - 23.98p

**Television** Frame Rate - **30fps** (frames per second) - 29.97p

In video, we double the frame rate to get the “ideal” shutter speed.

**Cinema** Frame Rate - **24fps** (frames per second)

**Shutter Speed** - **48** (round up to 50 in most cameras)

In video, we double the frame rate  
to get the “ideal” shutter speed.

**Television** Frame Rate - **30fps** (frames per second)

**Shutter Speed - 60**

ISO

(camera's sensor sensitivity to light)



~~Shutter  
Speed  
(exposure time)~~

Aperture  
f/  
(pupil)

Locked at 48(50)

ISO

(camera's sensor sensitivity to light)



~~Shutter  
Speed  
(exposure time)~~

Locked at 48(50)

Aperture  
f/  
(pupil)





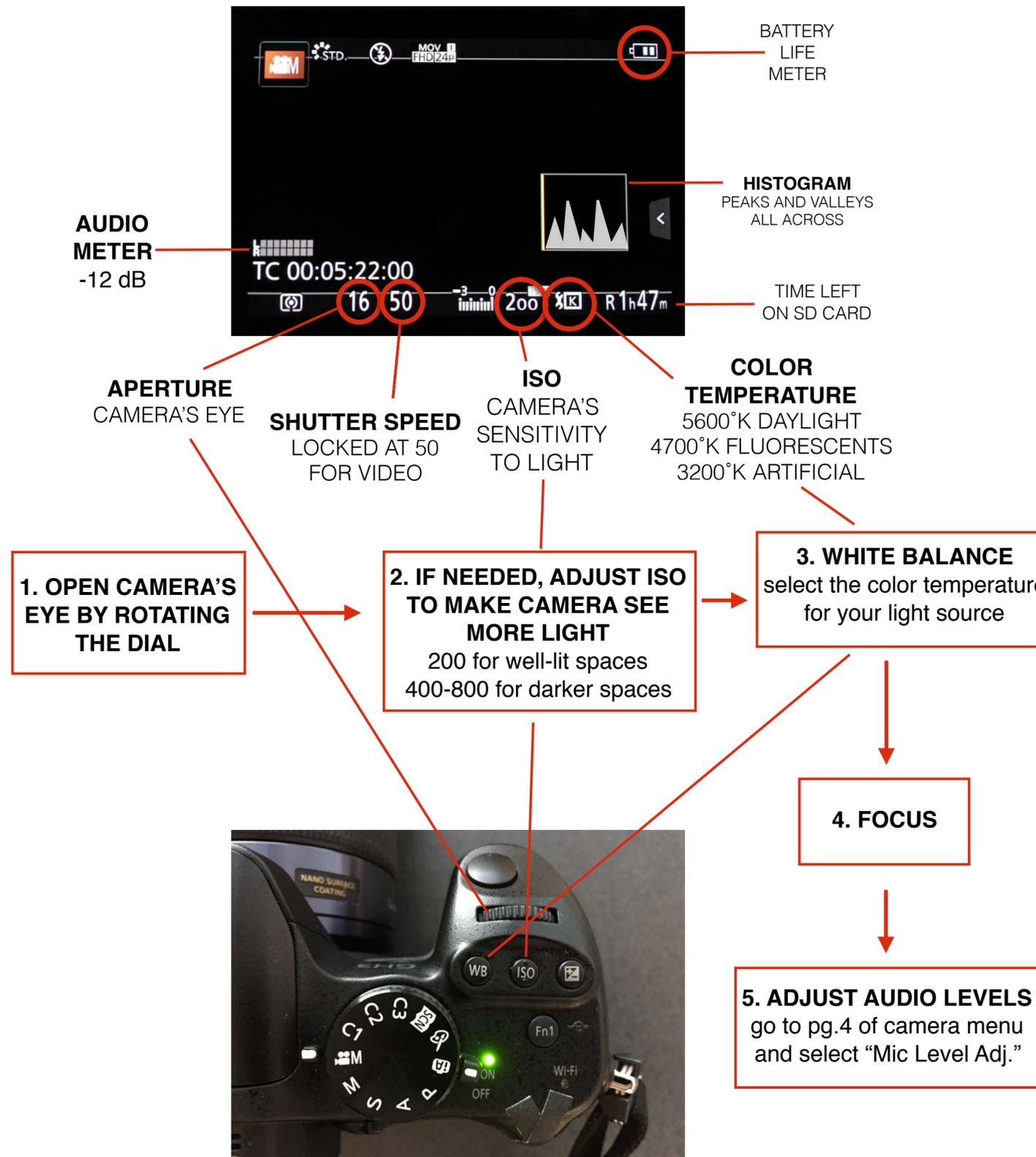
ISO 100

ISO 3200

CLEAN IMAGE

NOISY IMAGE

# Muscle Memory Chart for Panasonic Lumix GH3





Neutral Density Filters (ND)



daylight



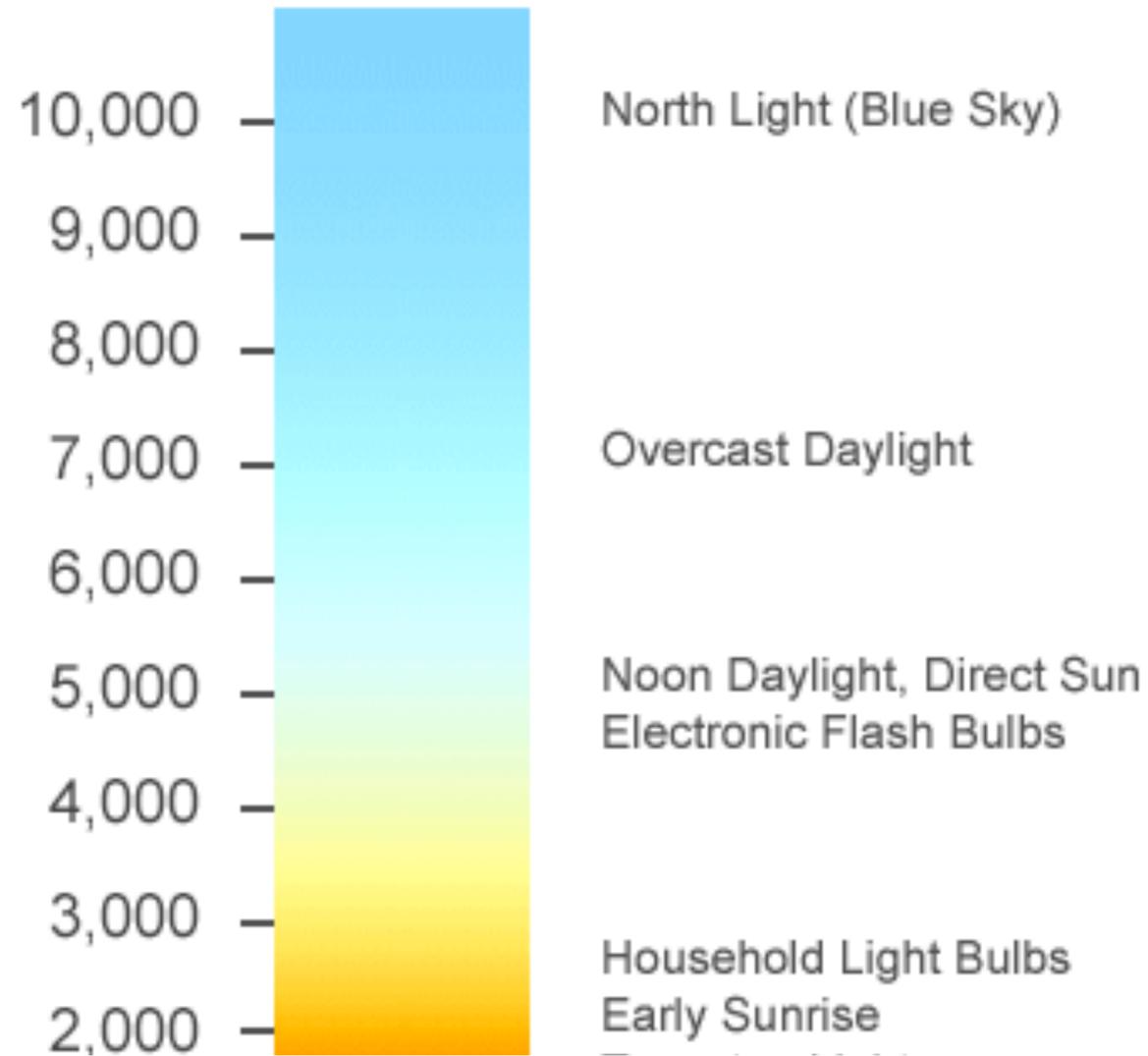
custom  
white-balance



tungsten

# White Balance

## Colour Temperatures in the Kelvin Scale



3200°K - Artificial Light (Tungsten)

4300°K - 4700°K - Fluorescent

5600°K - Daylight