LIGHTING
Why Use Lighting?

• The natural light your eye sees is very different from the light a camera will capture. The white balance has to be set on the camera to get the correct lighting…

• You might think that a bright blue sunny day is perfect beautiful light for filming right? WRONG.
Why Use Lighting?

• To fix this problem you should either shoot during dusk or dawn when the sun has to pass through more atmosphere to get to the earth, making the light less harsh; or when the sun is behind clouds

• OR you could improve any shot with several lighting techniques
Why Use Lighting?

• Lighting can also be used to improve dark inside shots
Why Use Lighting?

• Lighting can also influence the mood and meaning of a shot
  – Who looks like someone you’d rather have dinner with?

– Video as a medium flattens subjects and backgrounds into monotony, lighting separates the background from the subject in many different ways, as seen above
Light Properties

- **Daylight (Color Temperature 5600K)**
  - Contrary to what one might think, daylight does not produce a yellow light like the sun, but rather a cool bluish hue.

- **Tungsten bulb (Color Temperature 3200K)**
  - The tungsten light bulb naturally produces an warm orange hue, similar to indoor lights.

- **Fluorescent**
  - Used in film now are made to be flicker-free and come in both daylight and tungsten balanced bulbs. "Kino-Flo" is one of the major companies involved in making fluorescent bulbs and fixtures for film and video production. Fluorescent lights tend to be very soft, but do not put out much light in comparison to other lighting instruments.
  - Household lights produce a green color that looks BAD!

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Whether you check out a big or small light-kit, you will be getting these basic lighting elements:

- 3 lights
- 3 light stands
- 3 power chords
- 3 clip-on barn doors (barn doors block the light from hitting an area of the set or frame you don't want them to)
- 1 pair of gloves
- Diffusion and gels (Gels are attached to a light in order to alter their color temperature)
3-Point Lighting

- By using three separate positions, the photographer can illuminate the shot's subject (such as a person) however desired, while also controlling (or eliminating entirely) the shading and shadows produced by direct lighting.

Standard Three-Point Lighting

- #1 Key Light
- #2 Fill Light
- #3 Back Light
Key Light

- The Key Light creates the subject's main illumination, and defines the most visible lighting and shadows. Your Key Light represents the dominant light source, such as the sun, a window, or ceiling light - although the Key does not have to be positioned exactly at this source.
Fill Light

- The fill light also shines on the subject, but from a side angle relative to the key and is often placed at a lower position than the key (about at the level of the subject's face). It balances the key by illuminating shaded surfaces, and lessening or eliminating chiaroscuro effects, such as the shadow cast by a person's nose upon the rest of the face. It is usually softer and less bright than the key light (up to half).
Back Light

• Shines on the subject from behind, often (but not necessarily) to one side or the other. It gives the subject a rim of light, serving to separate the subject from the background and highlighting contours
**LOWEL LIGHT KITS**

- **L-Light Kit**
  This is a Lowel L-light Mid-L Kit, GO-85 Case, with three lights. A smaller sibling in the Lowel family of lights, the tiny L-light is easy to hide, making it perfect for an accent light, a quick kicker, a discreet backlight or with diffusion, a subtle fill. It's the perfect answer for those situations where a small versatile light is needed. Barndoors, gel frame with gels, stand links and light stands are included. A “flood/spot” control is not available on this unit, both functions can be achieved by switching between a 100W spot lamp and a 100W flood lamp.

- **Omni/Tota Light Kit**
  2 broad-throw 750w Tota-lights and a 500w focusable Omni-light, plus Tota-brella, gel-frame & gels, and 3 Stands. Good for raising the ambient level of a medium sized room.

  The **Tota-light** (tungsten halogen) can be used with its umbrella or gel-frame & diffusion as a soft key, fill, or backlight. With its adjustable reflectors, it can be a smooth & even background light, or point it toward the ceiling to raise the ambient (base) light level of a room.

  The wide focusing range of the **Omni-light** makes it a flexible key or back-light. Add diffusion or an umbrella, and it’s a soft fill source.
Other Available Lighting Options

• DIVA Light
  - The Diva-Lite puts out a broad soft wash of light. The drop off is like the light off of a bounce card. For this reason it is most effective in close proximity to the subject. These fluorescent lights do not get hot light halogen bulbs.

• LED Micro light Panel
  - Small and easy to use, attaches to the top of the camera and offers luminous, soft, directional lighting

• Flashlight
  - Flashlights from a Home-Depot-type store, can be ideal when you don’t have a power source (for example outside at night),
  - They can be used as a dramatic spot-light.
Don’t Have a Lighting Kit? No Problem!

• Here are some ways to use natural light, or lighting sources you may have without even knowing:
  – Reflectors
    • Reflectors are used in video and photography to bounce light so it can light up the shadow side of an object or actor
    • We offer gold/white or silver/white reflectors in the production center
    • You could also use a car dashboard protector if you’re in a pickle and forgot to check out a reflector
  – Bounce-board
    • A bounce board is a board that is used to reflect light on a subject that is being filmed - light can be bounced from either a natural light source (sun etc.) or reflected off a studio light to soften and diffuse the glare
FIRST SWITCH TO MANUAL MODE

To set the camera to record the current light setup or to use a white balance preset, you will have to adjust the white balance. The two presets are 5.6K (daylight) or 3.2K (tungsten).

Set the WHITE BAL switch to either:
PRST (preset), A or B (custom white balance settings)

PRST:
Press the AWB to switch between the two presets: 5.6K (daylight) or 3.2K (tungsten). The camera display window will let you know what setting is on.

A or B custom setting:
Place a white pattern in a location with the same lighting conditions and light source as the subject, then zoom in and fill the whole screen with white. Something white (a white paper or wall) near the subject can be used instead.
Set the WHITE BAL switch to A or B (whichever one you want to save the adjustment in).

Press the AWB button, adjustment takes a few seconds. The following messages appear on the screen: Message during adjustment: ) AWB Ach ACTIVE. Message after adjustment: AWB Ach OK
Message when adjustment cannot be done: AWB Ach NG