

## **Light fixtures**

### **Tota lights**

500watt quartz lights. Most people use Totas with umbrellas for a broader lighting spread/throw. On their own they're good for even back wall lighting, as in chromakey, or for sticking in a corner to bring the overall brightness level up in a large space.  
Color temp. 3000k Tungsten

### **Lowell DP**

The DP is a focusable light (a fresnel light) that can be used as a powerful key light, a backlight, or to light a background. Use an umbrella or other diffusion to create a soft key or fill light.  
Color temp 3000 – 3200k tungsten-halogen.

**The DP & T (Tota light) kits** combine the focusing ability of the Lowell studio lights with the wide angle throw of Tota lights.

### **Arri 150 kit – CIN 211 only**

Lights are Fresnel (pronounced fre-nel') lights, meaning the light can be focused using a knob at the back of the light, to create either a spotlight for a narrower beam, or a flood light for a wider beam.  
Color temp. 3200k Tungsten

### **Rifa lights – CIN 211 only**

Quick setup and lightweight make Rifa lights a useful option for softbox lighting. Cannot be focused. The softbox creates a particular style of lighting. It is the type of light you would find on an overcast day. Overcast light creates its own fill that is particularly pleasing for lighting people. If a more dramatic light is desired, then the softbox would not be the best choice as it cannot be focused to create sharp relief or heavy shadows.

To use a softbox effectively it should be placed relatively close to the subject, usually within 3-6 ft, depending on the size. Ideally the softbox used for the key light should be larger than the subject. Large softboxes are good for evenly illuminating the subject without requiring a fill light. Small softboxes make very effective hair and accent lights, and can be used as a fill light when needed.

Note: push and pull the umbrella function from inside the softbox. Do not use the power cord to pull the light open.

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## **Lighting equipment**

### **Barn doors**

Barn doors are metal frames that attach to the light fixture. They are used to direct the path of the light, to shape it and mask it so that it will go where you want it to go.

### **Umbrella**

An umbrella looks and acts exactly like an umbrella. But umbrellas for lighting are silver and are placed in front of the light, usually attached to the same light stand. They are used to send reflected light onto your subject. This diffuses and softens shadows.

### **Diffusion filter**

A diffusion filter is a translucent gel or paper used in front of a light to create a softer spread and to reduce hot spots on your subject. It can be used in front of the camera lens to soften the subject and generates a haze.

### **Colored gels**

Gels are used to correct or even out the color temperature of the lights, depending on your lighting fixtures and situation. The cooler colors (blues) correct orange light to make it cooler. The warmer colors (yellow and oranges) correct blue light to make it warmer. When used in front of the camera lens, gels can create dramatic lighting effects not related to realistic settings.

### **Cookies**

These are boards with a variety of types of designs cut into them used in front of the light to cast different types of shadows onto your scene. Often used with background light casting shadows on a plain wall to create a differentiated or textured background in the scene. Any object used to create special shadow effects is a cookie – these can be DIY boards.

### **Bounce card**

A bounce card is a reflective surface, usually white or silver, used to bounce light from one of your light sources, including the sun, onto your subject. It is very effective as a fill light when shooting outdoors, or when you are using only 1 or 2 other light sources in your scene. Bounce cards must be placed fairly near the subject to be effective. DIY bounce cards can be made using foam core or mat board available in any art supply store.

### **Flag**

A flag is a black card, strip of foil, or fabric used to block and shape light. It is placed in front of the light.

### **C-stand**

C-stands are all-purpose stands for holding cookies, bounce cards, flags, and lights.

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### 3-Point Lighting Set Up

The standard lighting setup consists of three elements: the key light, the fill light, and the backlight.

- **Key Light:** The key light is the first light you set up. It is your main lighting source. It is also usually the strongest light and usually comes from a high angle and from the side.
- **Fill Light:** The fill light defines the intensity of shadows created by the key light. It is either a weaker light or a bounce card.
- **Backlight:** The backlight separates your subject from the background. It creates an edge light which can either be distinct or soft. Try not to make it too strong as this light may distract from the subject or cause a lens flare. For a back light, either place the light above the persons head for a top light, or place it directly behind the person to create a ring or halo of light behind the persons hair.

### Lighting Safety

- Do not touch the bulb with your fingers – cover your hands with a piece of cloth if you need to handle the bulb at all. Most likely, you will not need to handle the bulb. The oil from your fingers will heat up much hotter than the surface temperature of the glass, causing the bulb to explode.
- Extend the light stand to whatever height you need for your shoot *after* the light fixture has been securely attached.
- Cables should not be stretched across the floor. If your lighting cable is too short, use a grounded extension cord. Tape your cords to the floor using Gaffer's Tape to secure the cords.
- Use sandbags to stabilize your light stands.
- Have someone on the set whose job it is to watch the light stands and cables during a shoot. It is very easy to forget where they are in the middle of shooting and knock them over.
- Do not aim the camcorder lens directly at lights. This overloads the electronic pickup device and may damage the camcorder.
- Always turn off the lights before unplugging the cord.
- After shooting, always wait for the bulb to completely cool down before closing the barn doors, taking the fixture off of the light stand, and putting everything back into the kit.
- If you find it necessary to handle the light fixture while it is hot, wear protective work gloves, even when adjusting barn doors. The lights become hot enough that the barn doors are too hot to handle with bare hands.