



**Pre-requisite based Study Material**  
**for**  
**Basic of Video Camera, Light & Sound**  
**(BA(JMC)- 203)**

by

**Dr Vanshika Bhatia**  
**(Associate Professor, BVICAM, New Delhi)**

**2023**

# Understanding Video Cameras

- To master videography, it is crucial to understand the different components of a video camera. This slide will cover essential elements such as lenses, sensors, and controls. By comprehending the functionalities of these components, you will be able to make informed decisions while shooting.

# Framing and Composition

- Framing and composition are key aspects of videography. Learn how to frame your shots effectively by using the rule of thirds, leading lines, and creating balanced compositions. This slide will provide you with practical tips to enhance the visual appeal and storytelling of your videos.

# Camera Movement

- Camera movement adds dynamism and visual interest to your videos. Discover the various camera movements such as pans, tilts, dollies, and zooms. This slide will explain when and how to use each technique to create captivating shots that engage your audience.

# Understanding Exposure

- Exposure is a fundamental concept in videography. Master the art of exposure by comprehending the interplay between aperture, shutter speed, and ISO. This slide will guide you through the process of achieving proper exposure in different lighting conditions.

# Audio Essentials

- Good audio is essential for high-quality videos. This slide will cover audio recording techniques and the importance of capturing clear and balanced sound. Learn about external microphones, audio levels, and reducing background noise to elevate the overall production value of your videos.



# LIGHT

# Key Terms

- Before diving into the basics of video lighting, let's familiarize ourselves with some key terms. **Key light** is the primary light source, **fill light** helps reduce shadows, and **backlight** adds depth and separation. **Colour temperature** refers to the warmth or coolness of light, measured in Kelvin. Understanding these terms will be crucial in mastering video lighting techniques.



- There are several lighting techniques that can dramatically enhance your video production. **Three-point lighting** is a classic setup that provides a balanced and professional look. **High-key lighting** creates a bright and cheerful atmosphere, while **low-key lighting** adds drama and mystery. **Rembrandt lighting** is a technique that produces a triangular highlight on one side of the subject's face. Experimenting with these techniques will help you achieve different **moods and effects**.

# Accessories

- Choosing the right lighting equipment is essential for achieving desired results. **Softboxes** and **umbrellas** are popular modifiers that diffuse and soften the light. **LED panels** are versatile and energy-efficient options. **Lighting stands,** and **boom arms** provide stability and flexibility in positioning lights. Investing in quality equipment that suits your specific needs and budget is essential.

# Essential Tips

- Here are some **essential tips** to improve your video lighting:
  - ✓ **Control the light:** Use modifiers and flags to shape and direct the light.
  - ✓ **Consider natural light:** Utilize natural light sources to complement or enhance your artificial lighting setup.
  - ✓ **White balance:** Adjust the white balance settings to ensure accurate colour representation.
  - ✓ **Experiment:** Don't be afraid to try new techniques and explore creative lighting setups.

# SOUND

# Understanding Microphone Types

- Different microphone types serve different purposes in video production. **Condenser microphones** are highly sensitive and ideal for capturing vocals and ambient sounds. **Dynamic microphones**, on the other hand, are more robust and suitable for handling loud sources. **Lavalier microphones** are small and clip-on, perfect for interviews and presentations. Understanding these microphone types will help you choose the right one for your needs.

# Microphone Placement Techniques

- Proper microphone placement is crucial for achieving optimal sound quality. When using a **shotgun microphone**, position it out of frame, pointing towards the sound source. For **lavalier microphones**, attach them close to the speaker's mouth, ensuring they are properly concealed. Experiment with different placements to find the best balance between capturing clear audio and minimizing unwanted noise.

# Optimizing Microphone Settings

- To capture the best possible sound, it's important to optimize your microphone settings. Adjust the **gain** or **input level** to ensure a strong, clean signal without distortion. Consider using a **windscreen or pop filter** to reduce plosives and wind noise. Additionally, familiarize yourself with the **polar patterns** available on your microphone and select the most appropriate one for your recording environment.



# Minimizing Unwanted Noise

- Unwanted noise can significantly degrade the quality of your video's audio. To minimize noise, choose a **quiet recording location** and use **soundproofing techniques** if necessary. Pay attention to **background noise** and try to eliminate or reduce it during recording. Additionally, utilize **post-production tools** like noise reduction plugins to further enhance the clarity of your audio.