

1.11 HUMAN VISUAL SYSTEM:

Understanding the human visual system is essential in designing effective graphics displays. The human visual system consists of the eyes, optic nerves, and the brain, working together to perceive and interpret visual information.

Key Aspects of the Human Visual System:

1. Resolution Sensitivity:

- The human eye is sensitive to details, and higher display resolutions contribute to sharper and more realistic visuals.

2. Color Perception:

- Humans perceive a wide range of colors. Graphics displays aim to reproduce accurate and vibrant colors to enhance visual experiences.

3. Contrast Sensitivity:

- The ability to distinguish between light and dark areas is crucial. High contrast ratios in displays improve visibility and readability.

4. Field of View (FOV):

- The FOV represents the extent of the visual field. VR and AR devices aim to provide a wide FOV to create immersive experiences.

5. Refresh Rate:

- A high refresh rate reduces motion blur and enhances the smoothness of motion in dynamic visuals, especially important in gaming and VR.

