Projector Adjuster Using Smart Phone

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Abstract: As we know projector are used widely in world. The projector is mounted to the rooftop and we cannot adjust with over hands therefore the projector adjuster is used. It is the device which adjusts the projector by using any Android and iOS device with the help of Bluetooth. We lay out and discuss the design space of interactions and application enabled by such devices. Moreover, we focus on the implication of hardware design, discuss possible interaction concepts, describe the most relevant applications areas and give an outlook on future research topics.

Keywords: Projector Adjuster, Smart Phone

1. Introduction

A projector or image projector is an optical device that projects an image (or moving images) onto a surface, commonly a projection screen. Most projectors create an image by shining a light through a small transparent lens, but some newer types of projectors can project the image directly, by using lasers. A virtual retinal display, or retinal projector, is a projector that projects an image directly on the retina instead of using an external projection screen. This surface is usually light in color and it may be a projection screen, white screen or sometimes a wall. Projectors may be used as an alternative to a television or monitor in large gatherings. A projector adjuster using smart phone is a device that rotates and move up, down the whole projector with the use of any Android or IOS devices. There are many projector adjusting devices which focus on adjusting the display size but the projector adjuster using smart phone is the device which controls the complete projector to adjust the screen on the projection screen.

2. Figures

Fig. 1. Right and left side
Fig. 2. Front side
Fig. 3. Top view
Fig. 4. Back side

3. Literature review

(1800s) The Magic Lantern: Magic lanterns projected images printed on glass slides. Oil lamps and candles served as light sources for the magic lantern, according to the Magic Lantern Society. (1925) The Filmstrip Projector: Filmstrips were used
to show educational films in classrooms, serving as a predecessor of videocassettes, DVDs and Blu-ray technology.

(1960s) The Overhead Projector: Roger Appeldorn created a machine that projected the image of writing on clear film in the early 1960s, while working at 3M, according to the company’s recount of the invention of the overhead projector. (1980s) The Data Projector: A data projector takes signals from a video source, such as a computer or television, and projects an image on a projection screen. By (2006), the advent of much higher 4K resolution digital projection reduced pixel visibility. (2009) Lens Shift, Ultra-high-contrast. (2010) The 3D Projector Creative Frame Interpolation, Anamorphic Lens support and Anamorphic Lens Emulation Implementing 3D technology in schools became more affordable in 2010, when manufacturers included DLP chips in their projectors. (2011) Deep Color, ISF, THX Certification. (2012) 3000 ANSI lumens 85% uniformity and a 2000:1 contrast ratio Native XGA resolution. Compatible with inputs up-to-UXGA and WSXGA+. Supports analog video input in all color standards up-to 1080i. 3 panel LCD imaging delivers a rich, color-saturated picture. 8-bit color processing yields a 16.7 million color palette Convenient midrange (1.2:1) manual zoom and focus lens Fixed image offset. Automatic vertical digital keystone correction Two Dsub15 computer inputs. Switchable monitor output .10 W sound system. Mic input for P. A. Closed Caption decoding (NTSC). Built-in wired LAN connection for projector monitoring and control. Power management and Eco mode help prolong lamp life Wireless remote control. Digital zoom 50-400%4K and HDR supported maintenance-free models for large venue performance Rancho Santa Margarita, CA–(December 2019). The two new WUXGA large class 1-chip DLP Laser Projectors: the 4K resolution and HDR. Rancho Santa Margarita, CA – (September 2019). the EK-308U and EK309W High Performance Portable Meeting Room Projectors. Featuring 3 LCD design for excellent image quality and reliability, both the EK-308U and EK-309W offer 6,000 ANSI Lumens brightness, with the EK-308U providing WUXGA (1920 x 1200) resolution and the EK-309W offering WXGA (1280 x 800) resolution. With a wide assortment of input connectors, up to 4,000-hour lamp life, and an integrated 10-watt loudspeaker for audio, these new meeting room projectors facilitate both portability and flexible installation while being designed for easy maintenance. In the early and middle parts of the 20th century, low-cost opaque projectors were produced and marketed as a toy for children. The light source in early opaque projectors was often limelight, with incandescent light bulbs and halogen lamps taking over later. Episcopes are still marketed as artists’ enlargement tools to allow images to be traced on surfaces such as prepared canvas.

4. Merits
- Large Picture Size.
- Best Alternative for Large Screen Television.
- Low Cost.
- Space Saving.
- It can be control by any android or IOS phone.
- There is no need to climb on table to adjust the projector.

5. Demerits
- Can’t use without mounting.
- A dark room is very often required to use a projector.
- It requires maintenance on regular intervals.
- Installation Cost can be more in some cases as it depends upon how you get it installed.
- Most of the projectors need a separate audio system.

6. Future scope
- It can be operated on Wi-Fi.
- It can be operated on GSM.
- Can adjust the focus of screen using smart phone.

7. Conclusion
We study the external and internal components of projector adjuster using smart phone. We study the history of the projector and analyze the problems about the projector.

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References
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