Application Brief

TI DLP® Technology for Golf Simulators

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Introduction

The golf simulator market is experiencing significant growth, driven by the potential to provide access to golf for millions worldwide. For recreational players and training prospects, the golf simulator market is projected to grow at a 10% CAGR through the mid-2030s. Advancements in TI DLP technology enable stunning visuals and realistic graphics, making this an exciting time for new innovations in the market.

Applications

Golf simulators offer flexibility in various settings, from at-home practice and school training to golf simulator venues for group recreation activities. A clear and engaging visual experience is essential, making a high-quality projector a must-have for simulation enjoyment. To achieve this, projector brightness needs must be matched to environment and space constraints.

- For home environments with controlled lighting, where space can be limited, a projector meeting the 16:9 aspect ratio standard is often sufficient. This can typically be found in 4K UHD models with at least 4000 lumen brightness.
- For larger spaces such as training studios or venues, with constant light exposure and ample area available, more powerful projectors are required to maintain clarity and visual detail. For these contexts, a minimum of 6000 lumen brightness is usually essential, with a larger 16:10 aspect ratio resolutions such as WUXGA and 4K+/WQUXGA.

By considering these factors, it is possible to select the preferred projector for golf simulator settings.

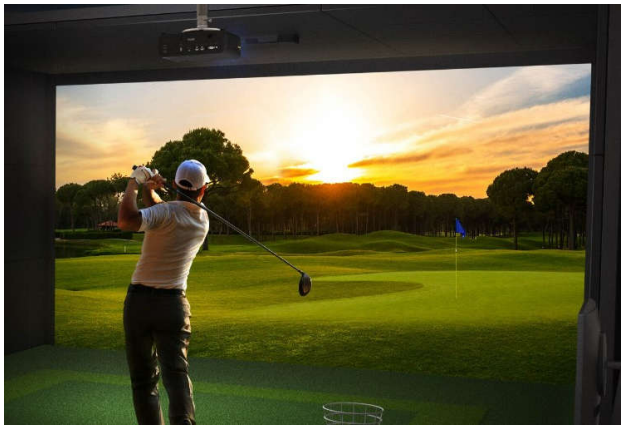

Figure 1. Golf Simulator Projector Using DLP® Technology

Recommended Chipsets for Golf Simulators

Resolution	DMD + Controller	Brightness
WUXGA	DLP481RE + DLPC8445 *new SST pixel!*	Up to 7.5 klm
	DLP670RE + DLPC4430	Up to 9klm
	DLP800RE + DLPC4430	Up to 9klm
4K UHD	DLP473TE + DLPC8455 *new SST pixel!*	Up to 6.8klm
	DLP472TE + DLPC7540 *new SST pixel!*	Up to 6.8klm
	DLP650TE + DLPC7540	Up to 8klm
	DLP780TE + DLPC4420	Up to 8klm
4K+/WQUXGA	DLP481XE + DLPC8455 *new SST Pixel!*	Up to 7.5klm
	DLP801XE + DLPC4420	Up to 15.5klm

Additional Technical Resources

- View and compare all of our *Display & Projection Products* with a range of sizes, brightness, resolution, and power consumption
- Read *TI DLP® System Design: Brightness Requirements and Tradeoffs*
- Contact optical module manufacturers and third-party providers to assist in designs

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