

ZK521ST-B

Optoma Golf Sim ZK521ST-B — True 4K UHD Short Throw 5,000 Lumens Laser Projector



Tee Off. Anywhere, Anytime with Optoma's ZK521ST-B featuring 5,000 lumens of laser-powered brightness in a short throw design built for golf simulators, immersive environments, and always-on installations. Maintenance-free with a 30,000-hour DuraCore laser source.

Golf Sim Short Throw Lens: Keeps the projector closer to the impact screen, reducing shadows and minimizing the risk of club and ball interference

- Native 4K UHD clarity: True 4K resolution renders sharper fairways, clearer greens, and legible simulator data for a more convincing playing experience
- High ambient light performance: At 5,000 lumens*, the image stays vivid for home golf simulators or commercial entertainment or training spaces. *Brightness measured in accordance with ISO 21118
- Maintenance-free laser: DuraCore laser technology eliminates lamp replacements entirely. Consistent brightness across the full 30,000-hour lifespan
- Flexible installation: Geometric correction, horizontal and vertical keystone ($\pm 15^\circ$), and the Optoma Smart Control App enable precise alignment on any screen size from 30" to



300" diagonal

Specification

Display

Technology	DLP®
Resolution	4K UHD (3840x2160)
Brightness	5,000 Lumens
Contrast ratio	300,000:1
Contrast ratio (Dynamic)	2,000,000:1
Native aspect ratio	16:9
Aspect ratio - compatible	4:3, 16:9, 16:10, Full, Auto, Native
Keystone correction - horizontal	+/-15°
Keystone correction - vertical	+/-15°
Horizontal scan rate	15~150 KHz
Vertical scan rate	24~240 Hz
Uniformity	75%
Screen size	30"~300"



Light source

Light source type	Laser
Light source life	30,000 hours (Eco mode)

Optical

Throw ratio	0.79
Projection distance	1m~ 10m (mechanism travel) ; 0.89m to 2.93m (Optical travel)
Zoom	n/a
Zoom type	n/a
Focal length	11.6mm
Native offset	104%~125%
Lens shift	Vertical 104%~125%

Specification

Connectivity

Connections- Inputs	2 x HDMI 2.0, 1 x VGA In,
Connections - Outputs	2 x USB-A 2.0, 1 x 3D sync out, 1 x Audio 3.5mm
Connections - Control	1 x RJ45, 1 x RS232, 1 x 12V trigger

General

Noise level (min)	29 dB(A)
Noise level (max)	29 dB(A)
PC compatibility	VGA, SVGA, XGA, 720p, WXGA, SXGA, SXGA+, UXGA, 1080p, WUXGA
2D compatibility	NTSC, PAL, SECAM, SDTV, HDTV, UHD
3D compatibility	Supports all HDMI 1.4a mandatory 3D formats (Frame pack, side-by-side, top-bottom) and up converts frame rate from 60Hz to 120Hz or 24Hz to 144Hz
Security	Security bar, Kensington Lock, Password protected interface
OSD / display languages	27 languages: Arabic, Czech, Danish, Dutch, English, Farsi, Finnish, French, German, Greek, Hungarian, Indonesian, Italian, Japanese, Korean, Norwegian, Polish, Portuguese, Romanian, Russian, Simplified Chinese, Spanish, Swedish, Thai, Traditional Chinese, Turkish, Vietnamese
24/7 operation	Yes
360° operation	Yes
Operating conditions	Max Temperature(operating): 0 ~ 40°C; Tolerance +/- 2°C, Max Altitude(operating): 10,000 ft., for 0°C~30°C, Max humidity(operating): 80% RH, non-condensing
Remote control	Business remote control
Speaker count & Watts per speaker	1 x 15W
Input lag	4K/ 60Hz: 16.7 ms 1080P/ 60Hz: 16.7 ms 1080P/ 120Hz: 8.6 ms
In the box	AC power cord Remote control 2 x AAA batteries Quick start user manual

Specification

Networking

LAN control	Yes
24/7 operation	Yes
360° operation	Yes

Power

Power supply	AC 100 ~ 240 V, 50 ~ 60 Hz
Power consumption (standby)	≤0.5 W
Power consumption (eco mode)	147 W@110VAC 146 W@220VAC
Power consumption (bright mode)	196 W @110VAC 193 W @220VAC

Weight and dimensions

Dimensions (W x D x H)	W/o feet: 216 x 274 x 108.5mm (10.8 x 8.5 x 4.3 inches) With feet: 216 x 274 x 114mm (10.8 x 8.5 x 4.5 inches)
Gross weight	4.3 kg / 9.4 lbs
Net weight	3.0 Kg / 6.6 lbs

Applicable software

Optoma Management Suite	Yes
Optoma Smart Control App	Yes