# Rigel 2 User Manual

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PDF

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#### **1** Overview

Overhead Golf Launch Monitor is one of Best Golf Launch monitors with the high-speed camera.It is equipped with original imported high-order control chips and sensor chips, with powerful image processing capabilities and computational performance.It can be connected to both mobile apps and PC terminal for use.Overhead Golf Launch Monitor includes the following product models: Rigel 2, Rigel 2 Lite, Rigel 2 MAX<sub>o</sub>

Rigel 2 series is mainly used in indoor golf system, by collecting and analyzing the flight data of the ball hit by the golfer and the head data of the swing, and projecting the actual flight trajectory of the hit ball onto the screen, to present customers with an immersive golf environment.



#### **1.1 System Description**

# **1.2 Product Scope**

• Indoor Golf System

# 2 **Product Specification**

Models	Rigel 2, Rigel 2 Lite, Rigel 2 MAX		
CDU	Quad-core ARM Cortex-A53 MPCore up to 1.5GH,9200D		
CPU	MIPS,16nm		
Storage	DDR3 stores data, 2G		
Image Sensor	onsemi Sensor		
Supply Current	DC 24V/3.75A		
Network	1000M (RJ45)		
Working Power	48W		
Working Temperature	$-10^{\circ}$ C $\sim 45^{\circ}$ C		
Storage Temperature	$-20^\circ \text{C} \sim 70^\circ \text{C}$		
Humidity	$20\%~\sim~70\%$		
Expected Use of Altitude	3000m		
Adapter	Input: 100-240VAC 50/60Hz.1.4A		
	Output: 24VDC 3 75A 90W		
	Supu. 211DC ,5.151750		

# **3** Product introduction

## 3.1 Launch monitor



Rigel 2 and Rigel 2 MAX



Rigel 2 Lite

# 3.2 Status light

When the monitor is powered on, the red light remains on and the blue light flashes;

After the startup is completed, for about 30 seconds, the red and blue lights will remain on;

When connected to an application or PC software, the red light goes off and the blue and green lights remain on after recognizing the ball;

After the ball is hit, the green light goes out, and the red and blue lights come on.

#### **3.3 Infrared light**

1ST step, after successfully connecting to the APP or PC terminal, the first gear is always on (only visible with a mobile camera)2nd step, after recognizing the ball (with a green status light),the second gear is always on (visible to the naked eye).

#### 3.4 Camera

It is one of most important functional modules positioning balls.

It should not be obstructed during the process of hitting balls and the exterior of the lens should be kept clean and tidy for a long time.

## **3.5 Instruction**



Rigel 2 and Rigel 2 MAX



Rigel 2 Lite

Switch button: Press the "O" button to turn off the device,Press the "|" button to turn on the device.

Charging port: To charge the monitor, it connects to a 24V adapter.

Ethernet port: Connecting a gigabit network cable and a network port for monitor calibration and playing golf.

#### 4 User Guide

#### 4.1 Connecting to PC simulator for use

4.1.1. The default factory IP of the sensor of the Rigel 2 is "192.168.1.147", connect the sensor directly to the computer, and then set the computer IP to the same network segment "192.168.1.\*\*\*" through the TCP/IPv4 attribute of the Ethernet attribute (\*\*\* is a value other than the sensor IP, as shown in Figure 1). Also pay attention to whether the following is a Gigabit network connection.

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Figure 1

4.1.2. Open the calibration program, and the License will be displayed in the calibration program. Enter the sensor IP number (factory default is 192.168.1.147) and click the "Connect" button. The status window will display "Connected Sensor". Click "② Activate the camera". After it is successfully activated, the left and right images will be displayed (Figure 2).





#### 4.2 Upgrade

When there are new features added to the monitor, a new firmware version will be iteratively upgraded.

There are 2 ways to upgrade: one is to self upgrade through the APP; The second is to upgrade through self-service prompts on the PC terminal.

# 4.3 Switch



1.1 O represents OFF, I represents ON, switch symbol explain as follow table

	(EC 60417-5007 (2009-62)	On (Power)
0	IEC 60417-5008 (2000-02)	Off (Paver)

#### FCC STATEMENT

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:(1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.

- Increase the separation between the equipment and receiver.

- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

- Consult the dealer or an experienced radio/TV technician for help.

FCC Radiation Exposure Statement

This projector complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This device should be installed and operated with a minimum distance of 20cm between the radiator and user body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

FCC WARNING: This equipment may generate or use radio frequency energy. Changes or modifications to this equipment may cause harmful interference unless the modifications are expressly approved in the instruction manual. The user could lose the authority to operate this equipment if an unauthorized change or modification is made.

#### **ISED** Statement

- English: This device complies with ISED license -

exempt RSS standard(s). Operation is subject to the following

two conditions: (1) This device may not cause interference, and (2) This device must accept any interference, including interference that may cause undesired operation of the device.

The digital apparatus complies with Canadian CAN ICES -3 (B)/NMB -3(B).

- French: Le présentappareilestconforme aux CNR d'ISED applicables aux appareils radio exempts de licence. L' exploitationestautorisée aux deux conditions suivantes: (1) l' appareilne doit pas produire de brouillage, et (2) l'utilisateur de l'appareildoit accepter tout brouilla geradi oélectriquesubi , mêmesi le brouillageest susceptible d'encompromettre le fonctionnement. l'appareil numérique du ciem conforme canadien peut - 3 (b) / nmb - 3 (b). This device meets the exemption from the routine evaluation limits in section 5.3.2 of RSS 102 and compliance with RSS 102 RF exposure, users can obtain Canadian information on RF exposure and compliance.

cet appareil est conforme à l'exemption des limites d'évaluation courante dans la section 5.3.2 du cnr - 102 et conformité avec rss 102 de l'exposition aux rf, lesutilisateurs peuvent obtenir des données canadiennes sur l'expositi on aux champs rf et la conformité.

This equipment complies with Canada radiation exposure limits set forth for an uncontrolled environment.

Cet équipement est conforme aux limites d'exposition aux rayonnements du Canada établies pour un environnement non contrôlé.

This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

Cet équipement doit être installé et utilisé à une distance minimale de 20 cm entre le radiateur et votre corps.

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