



Operating Manual for Laser Rangefinder

Operating Manual for HK Laser Rangefinder



Networking Rangefinder Pioneer

I. Introduction

Thank you for purchasing Uineye's professional networking Rangefinder. Portable and user-friendly, this Rangefinder is characterized by superior ranging performance, fashionable Bluetooth function and mobile APP, bringing you more than simple ranging.

Key Features of Uineye HK Series:

- + **Telescoping-----Single-tube observation lens**
Durable; rubber buttons; waterproof optical instrument; fully replace the telescope
- + **Ranging-----Laser Rangefinder**
A ranging distance of 5-2,000m, depending on the model, target visibility and properties of the Rangefinder
- + **Angle measurer**
Measure all the angles between 90° and 90°; the resolution and accuracy are 0.1° and 0.35", respectively; outperforming all similar competitive products
- + **Built-in electronic compass**
Adopt the same electronic compass technique with Apple 6s to calculate the angle, the height, the coordinate azimuth and the magnetic azimuth .

Technical Indicators of Uineye HK Series:

1. Measuring range: 800/1000/1500/1800
2. Telescope multiple: 8X
3. Field angle: 7°
4. Objective lens aperture: 25mm
5. Accuracy: 0.3/0.5/ 1m optional
6. Minimum ranging distance: 5m
7. Bluetooth+ APP: Yes/No
8. Battery: Lithium battery CR2 3V

Working Principles of Uineye HK Series:

Uineye HK Handheld Telescopic Laser Rangefinder adopts 905 nm safe laser (Class I; eye safety is guaranteed; invisible laser) to record the time needed for the emitting laser to meet the object and get back; then, the distance can be calculated by taking half of the product of time and velocity of light.

II. Functional Architecture

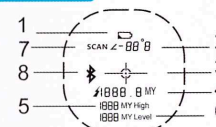
Appearance

Objective lens



"Tripod" Interface

Internal Display & Icons



- | | |
|---------|---------------------------|
| 1. Icon | Low battery voltage; |
| 2. Icon | Angle data; |
| 3. Icon | Target indication; |
| 4. Icon | Linear distance data; |
| 5. Icon | Vertical height data; |
| 6. Icon | Horizontal distance data; |
| 7. Icon | SCAN mode; |
| 8. Icon | Bluetooth mode. |

Keys

1. Power/Measuring key. When the Rangefinder is off, the key serves as the power key; when the Rangefinder is on, the key (a short press) will serve as the key to start and end measuring (SCAN mode);
2. M1 Switch between single measurement and all-in-one machine (SCAN mode).

III. Operating Instructions

Without power supply, the Rangefinder will work as a precise optical telescope. The operator may observe objects through the eye lens. When the objects are not clear enough, the operator may rotate the eye lens patch to adjust the visibility, thereby achieving the goal of seeing the details of the objects.

1. Battery Installation

1) Open the battery cover and put the batteries into the battery compartment in accordance with their polarity;

2) If the icon occurs when the Rangefinder is powered on, it means that the battery runs low. Please remove the batteries out of the compartment to prevent the unnecessary damages caused by battery leakage when the Rangefinder is not in use for a long time;

3) The Rangefinder has designed a protective device for power installation error. Reverse connection of the batteries will not cause damage to the instrument, but the erroneous voltage exceeding the voltage limit will damage the internal precise measuring parts. Please use the batteries with a normal voltage of 3v.

2. Measurement

1) Press to observe the distant objects through the eye lens. Select the target, aim at the target center, choose the corresponding mode, and press for measurement.

2) If no operation is made within 20 seconds, the system will automatically shut down.

3. Unit switch

This machine contains two units of meter and yard, the default unit is meter, while press and M1 two keys 0.5 seconds, you can switch and save as yard, want to switch back, action repeat.

IV. Measuring Modes & Operations

Mode Name	Mode Description	Mode Operation
Single measurement	Measure the distance between the measuring instrument and the target	Press , select the target, aim at the target and press for single measurement.
All-in-one machine	Measure the distance and angle, and calculate the height and horizontal distance	Press and M1, select the target, aim at the target and press for measurement.
SCAN mode	Continuous measurement	Press , continuously press M1 for twice, select the target, aim at the target and press for continuous measurement.
Angle calibration	Angle calibration	When the Rangefinder is on , have a long press on. When the angle 0°0 flashes once in one second, anchor the Rangefinder to the tripod with adjusted level angle, and press M1 to complete the angle calibration

V. Common Faults & Disposal Plans

Fault	Reason	Disposal Plan
The target icon does not occur when the batteries are loaded	There is something wrong with the batteries	Check the battery polarity and replace the old batteries with new ones
Abnormal noise occurs in the instrument	The instrument is damaged during the transportation or hit by an external force	The instrument should be returned to the manufacturer
The measuring data are not correct	The unit is not correct	Check the unit for meter/mu switching
The measuring error is huge	The vibration exceeds the limit	The holding position should be stabilized, or a tripod can be used, or the instrument can be manually recalibrated
The accuracy drops as the instrument has exceeded its designed lifetime	Another calibration is needed	The instrument should be returned to the manufacturer for calibration

VI. Model Selection Guide

HK-xxxx-x B/H/P
800/1000/1500/1800

Code	Description
800	The measuring distance is 800m under good meteorological conditions
1000	The measuring distance is 1,000m under good meteorological conditions
1500	The measuring distance is 1,500m under good meteorological conditions
1800	The measuring distance is 1,800m under good standard conditions
B	Basic model, measuring the distance, SCAN mode
H	High model, measuring the distance, the height and the angle, horizontal distance, SCAN mode
P	Plus model, measuring the distance, the height and the angle, horizontal distance, electronic compass

VII. Miscellaneous Matters

1. The instrument has no batteries inside it when leaving the factor. The user may purchase appropriate batteries for it by themselves.

2. Warranty terms: One year of free maintenance and repair is guaranteed (except for the faults caused by improper use) from the date of selling the instrument. For the product maintenance beyond the maintenance period, the manufacturer will charge related maintenance fees.

VIII Safety Warnings:

Do not observe the sun through the observer, or the focused sunlight may cause permanent damage to the eyes

Do not expose this Rangefinder to direct sunlight. Even if the exposure does not last long, irreversible damages may still be caused to the internal optical sensing parts.

Do not place this Rangefinder in the environment with extreme temperature. A temperature of below 20°C or above 60°C may cause damages to the Rangefinder.