



# ILR-1200-1

INFIRAY LASER RANGEFINDER



## Specification

| Model ILR-1200-1     |                                                                                                          |
|----------------------|----------------------------------------------------------------------------------------------------------|
| Type                 | Wireless Bluetooth Rangefinder                                                                           |
| Measuring Range, m   | 10 ~ 1200                                                                                                |
| Accuracy, m          | $\pm 1$ , (10-100 m)<br>$\pm (1 + L \times 0.25\%)$ , ( $100 < L < 1200$ m, L being the target distance) |
| Laser Wavelength, nm | 900 ~ 908 (Eye-safe)                                                                                     |
| Laser Pointer, nm    | 650                                                                                                      |
| Bluetooth            | 5.0                                                                                                      |
| Battery Parameters   | One replaceable CR123 / 3.7V / 4h                                                                        |
| IP Rating            | IP67                                                                                                     |
| Dimensions, mm       | 90 × 45 × 30                                                                                             |
| Weight, g            | < 105 (w/o battery)                                                                                      |

★ Measurement conditions for typical values: target size  $\geq 1 \text{ m} \times 1 \text{ m}$ , target reflectance  $\geq 85\%$ , outdoor visibility > 5 km

## **| Installation with Mate**

- ILR-1200-1 Bluetooth Rangefinder
- Quick release fixture
- Insert ring for TUBE SE series
- L-shaped wrench
- User manual

## **| Product Description**

As an accessory of the TUBE series thermal imaging scope (refer to the TUBE user manual for the specific models to work with), ILR-1200-1 Bluetooth Rangefinder enables user to accurately determine the target distance and achieve precise shooting. The device features a compact and light-weighted design, and is built with the visible red dot and movable red dot functions. It supports single ranging and continuous ranging.

## Components and Controls



1. Bluetooth laser rangefinder module
2. Laser indicator
3. Laser receive port
4. Laser launch port
5. Quick release fixture
6. Battery compartment cover
7. Power button
8. LED indicator



## LED Indicator

The LED indicator shows the current connection and power status:

| Indicator Color                                                                   | Indicator Status                               | Device Status                                |
|-----------------------------------------------------------------------------------|------------------------------------------------|----------------------------------------------|
|  | Blinking                                       | Automatically searching for a connection     |
|                                                                                   | Keeping solid on for 3s after blinking and off | Successfully connected                       |
|  | Slow Blinking                                  | Pairing failed                               |
|                                                                                   | Fast Blinking                                  | Low power level                              |
|                                                                                   | Keeping solid on for 2s and off                | The rangefinder is powered off successfully. |

## **Battery Installation**

- Rotate the battery compartment cover **(4)** counterclockwise;
- Place a CR123 3.7V battery into the compartment according to the label in the battery compartment, that is, the positive pole faces inward and the negative pole faces outward.
- Tighten the battery compartment cover **(4)** clockwise.

### **Safety Instructions**

- Use the device within the recommended temperature range from -20°C to +50°C. The battery life may be impaired when using beyond this temperature rang.
- The battery capacity drops when the device is used below zero. This is normal and does not indicate a defect.
- The device is built with low power shutdown protection: When the battery voltage is lower than 2.8V, the device will automatically shut down with a 30s countdown prompt .

## | Installation with Tube

- Use three inner hexagon screws to connect the bottom of the ILR-1200-1 Bluetooth rangefinder to one end of the fixture (5).
- Clamp the other end of the fixture which is designed as a quick-release clamping ring onto the TUBE series scope.
- The default inner diameter of the clamping ring is 30mm. If installed on the TUBE SE series, a insert ring is required ( included in the package).



### Note:

When LRF is linked with TUBE, the stadiametric rangefinder function on TUBE series will be not available.

## Laser calibration

After installation, if the position indicated by the laser is inconsistent with the reticle center on the Tube, the laser calibration is required.

- Select a common observation distance.
- Loosen the two screws (9) on the fixture (5) slightly.
- There is a spherical adapter ring (10) between the laser rangefinder and the fixture (5).
- Fine-tune the angle at the connection between the laser rangefinder and the fixture (5) until the position indicated by the laser is aligned with the reticle center of Tube.
- Then tighten the two screws (9) to fix the angle.



## Linkage and Usage with Tube

- Turn on the Bluetooth function on the Tube.
- Turn on the laser rangefinder with a long press of the **Power button (7)** for 2s.
- When the laser rangefinder module is on, it will automatically search and connect with Tube series.
- Also, manual connection is supported. On the Tube series, search and select the ID of the rangefinder which can be found on the label affixed to the body or package of the rangefinder for manual connection.
- When the LED indicator **(8)** on the rangefinder switches from blinking (green) to keeping green for 3s and then off, it means the connection is successful.
- Press the **Power button (7)** twice to turn on or off the laser indicator **(2)**.

- After use, long press the **Power button (7)** to power off the rangefinder.
- For details about linkage and usage with Tube series, please refer to the user manual of Tube.

### Attention!

Do not point the laser indicator directly to human eyes or faces.

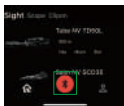
# **Upgrade**

The ILR-1200-1 Bluetooth laser rangefinder supports software upgrade. Users can download the upgrade program from the official website to the mobile device, and upgrade it through the InfOutdoorBC APP.

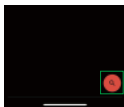
- Download the upgrade program from the official website.
- Download and install the InfOutdoorBC APP on your mobile device from the APP Store.
- Turn on the Bluetooth of the mobile device.
- Long press the **Power button (7)** to turn on the rangefinder.
- Open the InfOutdoorBC APP and tap the Bluetooth icon (  ) in the APP to enter the search interface.
- Tap the Search icon (  ) in the bottom to search the Bluetooth signal.
- Select the name of Infray-ILR-1200-1 and connect.
- When the connection is successful, an upgrade message is

displayed automatically.

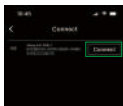
- Select **Yes** to enter the firmware upgrade interface, and tap the **Select File** option to find and select the upgrade program previously downloaded.
- Tap the **Start Upgrade** option, then the percentage of the upgrade process will appear on the interface until update successful.



Stp1



Stp2



Stp3



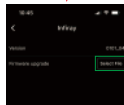
Stp4



Stp7



Stp6



Stp5

## **| Legal and Regulatory Information**

Wireless transmitter module frequency range:

**WLAN: 2.412-2.472GHz (For EU)**

Wireless transmitter module power < 20dBm (only for EU)



IRay Technology Co., Ltd. thus declares that the Zoom V2 series thermal imaging monocular complies with the directives 2014/53/EU and 2011/65/EU. The full text of the EU declaration of conformity as well as additional information are available at: [www.infirayoutdoor.com](http://www.infirayoutdoor.com).

This device may be operated in all member states of the EU.

### **User information on the disposal of electrical and electronic devices (private households)**

2012/19/EU (WEEE directive): Products marked with this



symbol cannot be disposed of as unsorted municipal waste in the European Union. For proper recycling, return this product to your local supplier upon the purchase of equivalent new equipment, or dispose of it at designated collection points. For more information see: [www.recyclethis.info](http://www.recyclethis.info).

## **Regulatory information USA**

FCC ID: 2AYGT-40-ILR

## **Labeling requirements**

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.

## **Information to the user**

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

**Note:** The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment.

**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.

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

### **Body-worn Operation**

This device was tested for typical body-support operations. To comply with RF exposure requirements, a minimum separation distance of 0.5cm must be maintained between the user's

body and the handset, including the antenna. Third-party belt-clips, holsters, and similar accessories used by this device should not contain any metallic components. Body accessories that do not meet these requirements may not comply with RF exposure requirements and should be avoided. Use only the supplied or an approved antenna.



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**RoHS**