




Guide sensmart TD Gen2 LRF Handheld Thermal Imaging Monocular Owner's Manual

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Guide sensmart TD Gen2 LRF Handheld Thermal Imaging Monocular



Product Information

Specifications

- **Model:** TD Gen2 LRF
- Thermal Imaging Monocular with Laser Ranging
- **Boot up time:** 2 seconds
- High-brightness OLED display
- Upgraded image algorithm for richer details
- Built-in laser rangefinder for accurate target detection up to 600m
- **Battery life:** Up to 10 hours
- **Encapsulation:** IP66 (rugged and durable)
- New UI and interaction design for easier operation
- OTA firmware upgrade by connecting APP

Applications

- Outdoor activities
- Wild adventures
- Law enforcement
- Search & Rescue operations
- Personal security
- Livestock breeding

Contact Information

Manufacturer: Wuhan Guide Sensmart Tech Co., Ltd.

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Email: enquiry@guide-infrared.com

Package Contents

- TD Gen2 LRF Thermal Imaging Monocular
- Lens cover and lanyard
- Battery charger
- Single replaceable 18650 battery
- USB Type-C cable
- Wrist strap
- Carry bag
- Eye mask
- Quick use guide
- Warranty card

Disclaimer

Technical parameters are subject to change without notice. For the latest information, please visit our website: www.guideir.com

Product Usage Instructions

Powering On and Off

To power on the TD Gen2 LRF, press and hold the power button until the device boots up. To power off, press and hold the power button again until the device shuts down.

Observation

1. Ensure the lens cover is removed before use.
2. Adjust the focus ring to achieve clear images.
3. Use the OLED display for comfortable observation.
4. Select different color palettes (Black Hot, White Hot, Red Hot, Iron Hot, Blue Hot) based on your preferences or requirements.

Laser Rangefinder

1. The TD Gen2 LRF is equipped with a built-in laser rangefinder for accurate target detection up to 600m.
2. Activate the laser rangefinder by pressing the dedicated button.
3. Aim at the target and press the button again to measure the distance.

Battery Charging

1. Connect the battery charger to a power source.
2. Insert the single replaceable 18650 battery into the device.
3. Connect the USB Type-C cable to the device and the battery charger.
4. The battery will start charging. The LED indicator on the charger will show the charging status.
5. Once fully charged, disconnect the charger from the power source and remove the USB Type-C cable.

Firmware Upgrade

1. Download and install the TD Gen2 LRF APP on your mobile device.
2. Connect your device to the TD Gen2 LRF via the USB Type-C cable.
3. Open the TD Gen2 LRF APP and navigate to the firmware upgrade section.
4. Follow the on-screen instructions to upgrade the firmware.

FAQ

Q: How long does the battery last?

A: The TD Gen2 LRF has a super long battery life of up to 10 hours.

Q: What is the range of the laser rangefinder?

A: The laser rangefinder can accurately detect targets up to 600m away.

Q: Is the device waterproof?

A: Yes, the device has an IP66 encapsulation, making it rugged and durable. It can withstand water splashes and dust.

Introduction

The TD Gen2 Series laser rangefinder version is the industry's first entry-level full-featured handheld thermal imaging monoculars. While inheriting the characteristics of the previous generation, such as being lightweight, portable, easy to operate, and durable, it integrates a high-precision laser rangefinder module to accurately detect targets within 600 meters. It adopts an OLED display, providing clear imaging and a comfortable viewing experience, making it the ideal equipment for outdoor night vision.

Features and Benefits

- Boot up in 2 seconds and ready to use
- High-brightness OLED display for a comfortable observation

- Upgraded image algorithm for richer details
- Built-in laser rangefinder for 600m accurate target detection
- Super long battery life of up to 10 hours
- IP66 encapsulation, rugged and durable
- New UI and interaction design for easier operation
- OTA firmware upgrade by connecting APP



Applications

- Outdoor
- Wild Adventure
- Law Enforcement
- Search & Rescue
- Personal Security
- Livestock Breeding

Specifications

| Product model | TD411 LRF | TD421 LRF | TD431 LRF |
|---------------------|-----------------------------------|--------------|-------------|
| Infrared Detector | | | |
| Detector type | VOx, 8 to 14 μm | | |
| Detector resolution | 384 × 288, 12 μm | | |
| NETD | ≤40mk | | |
| Frame rate | 50 Hz | | |
| Lens | | | |
| Focal length | 19 mm; F1.0 | 25 mm; F1.1 | 35 mm; F1.0 |
| Field of view | 13.6° × 10.3° | 10.4° × 7.9° | 7.5° × 5.6° |
| Optical zoom | 1.4x | 1.9x | 2.6x |
| Digital zoom | 1x, 2x and 4x | | |
| Focus | Manual | | |
| Power | | | |
| Battery type | Single, replaceable 18650 battery | | |


| | | | |
|----------------------|---|--------|--------|
| Battery life | ≥ 10 hours | | |
| Interface | | | |
| USB | Type C (USB 2.0 standard), supporting analog video and power supply | | |
| Video interface | USB Type C | | |
| Mechanical interface | UNC ¼"-20 (Tripod mounting), Mechanical expansion interface | | |
| Display | | | |
| Display type | 0.23" OLED | | |
| Resolution | 640 × 400 | | |
| Eyepiece | Monocular, exit pupil distance≥12 mm, diopter adjustment: -4 to 2 | | |
| Eyepiece zoom | 18x | | |
| Video output | Analog video | | |
| Functions | | | |
| Hot spot tracking | Available | | |
| Rough ranging | Available with APP | | |
| PIP | Upper left, Upper middle, Upper right, Closed | | |
| Scene modes | Enhanced, Highlight and Natural | | |
| Color palettes | Black Hot, White Hot, Red Hot, Iron Hot, Blue Hot | | |
| Compensation modes | Automatic, shutter and scene compensation | | |
| WIFI | Transmission of real-time video via WIFI for remote control in the 2.4G frequency band and within 15 meters | | |
| Laser | Laser rangefinder (up to 600 m) | | |
| Environmental | | | |
| Storage temperature | -30 °C to 60 °C | | |
| Humidity | 10 % to 95 % non-condensing | | |
| Shock | 30 G at 11 ms half sine pulse (as per IEC60068-2-27) | | |
| Vibration | 10 Hz~150 Hz~10 Hz 0.15 mm (as per IEC60068-2-6) | | |
| Drop | 1 m | | |
| Encapsulation | IP66 | | |
| Certification | IP66, FCC, CE, RoHS, EAC, WEEE, un38.3, IEC 60825-1 Class 2 | | |
| Detection Range | | | |
| Detection range | 800 m | 1000 m | 1400 m |
| Physical | | | |

| | | | |
|------------------|--|--------|--------------|
| Weight | ≤383 g | ≤360 g | ≤393 g |
| Size (L × W × H) | 150×75×74 mm | | 150×77×74 mm |
| Standard | A device, lens cover and lanyard, Battery charger, single 18650 battery, USB Type-C cable , Wrist strap, Carry bag, Eye mask, Quick use guide, Warranty card | | |

Technical parameters are subject to change without notice.

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Documents / Resources

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|  | <p>Guide sensmart TD Gen2 LRF Handheld Thermal Imaging Monocular [pdf] Owner's Manua l TD411 LRF, TD421 LRF, TD431 LRF, TD Gen2 LRF, TD Gen2 LRF Handheld Thermal Imaging Monocular, Handheld Thermal Imaging Monocular, Thermal Imaging Monocular, Imaging Mono cular, Monocular</p> |
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References

- [The domain name Infrared.com is for sale. Buy it now!](#)
- [Guide Sensmart-Thermal Imaging Camera Manufacturer | Guide Sensmart](#)
- [User Manual](#)