

# UT691 Visual Fault Locator User Manual

## Preface

Thank you for purchasing the new UT691 visual fault locator. In order to use this product safely and correctly, please read this manual thoroughly, especially the *Warning* part.

After reading this manual, it is recommended to keep the manual at an easily accessible place, preferably close to the device, for future reference.

## Limited Warranty and Liability

Uni-Trend guarantees that the product is free from any defect in material and workmanship within one year from the purchase date. This warranty does not apply to damages caused by accident, negligence, misuse, modification, contamination or improper handling. The dealer shall not be entitled to give any other warranty on behalf of Uni-Trend. If you need warranty service within the warranty period, please contact your seller directly.

Uni-Trend will not be responsible for any special, indirect, incidental or subsequent damage or loss caused by using this device.

## I. Overview

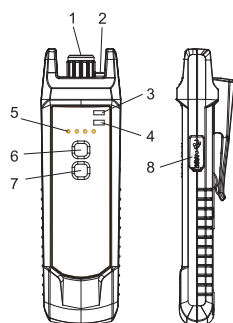
This product, driven by a constant current source, adopts a 650nm semiconductor laser as the light-emitting device to emit stable red light. It is connected with the optical fiber interface to realize fiber fault detection. The product is an indispensable tool for fiber engineering construction, fiber network maintenance, optical device production and research, etc.

### ⚠ Warning

1. Read and understand the warnings and operating instructions in the user manual before using the product.
  2. Please use the product correctly in strict accordance with the user manual.
  3. Laser is harmful, especially to the eyes. It is strictly forbidden to look directly at the red light when the laser is working.
  4. When using the product, try to avoid high temperature environments. Long-term continuous use is not recommended.
  5. After using for a period of time, clean the interface with a special cleaning swab.
  6. After use, please cover the dust cap to prevent dust from falling in.
  7. If the product is not used for a long time, the voltage may get too low to start due to self-discharge of the lithium battery. Please use it after charging.
- The product compliance with EN61326-1, EN61326-2-2 standards.

## II. Structure

|   |                          |
|---|--------------------------|
| 1 | Laser interface          |
| 2 | Flashlight               |
| 3 | Laser status indicator   |
| 4 | Auto power off indicator |
| 5 | Battery status indicator |
| 6 | Flashlight key           |
| 7 | Laser key                |
| 8 | USB charging port        |



## III. Operating Instructions

1. Open the dust cap and insert the 2.5mm fiber connector into the laser interface.
2. Press the laser key, the laser status indicator lights up red, and the laser outputs red light at the same time. For a well-connected fiber, red light can be seen at its end. For a disconnected fiber, there is no red light output at its end.
3. Press the laser key again, the laser status indicator flashes at 1Hz, and the red light flashes at 1Hz at the same time. Press again to turn off the red light.
4. Flashlight key: Press to turn on/off the flashlight or flash it at 1Hz.
5. Auto power off: When the product starts up, the auto power off indicator lights up green, indicating that the auto power off function is on. The automatic shutdown time is about 15 minutes. Press any key for 2s in the power on state to cancel this function.
6. Battery status indicator: The indicator shows the battery status when the laser/flashlight is on or the product is being charged (if the indicator is fully lit in charging, the battery is fully charged).

## IV. Specifications

| Item                                     | UT691-01   | UT691-10 | UT691-20   |
|--|--|----------|------------|
| Total Output power                       | <1mW   | <15mW    | <25mW      |
| Output power at 100mm, with 7mm aperture | <1mW   | <10mW    | <12mW      |
| Measurable optical fiber length          | 1~3km  | 8~10km   | 12~15km    |
| Wavelength                               | 630~670nm  |          |            |
| Connector                                | 2.5mm universal connector  |          |            |
| Lighting function                        | LED flashlight   |          |            |
| Battery type                             | 3.7V 1050mAh polymer lithium battery   |          |            |
| Battery life                             | >10 hours  | >7 hours | >5.5 hours |
| Battery status                           | 4 blue LEDs for battery status indication<br>(The indicated LEDs may or may not be on when using flashlight separately.) |          |            |
| Auto power off indicator                 | Indicates the status of auto power off function  |          |            |
| Laser status indicator                   | Indicates the status of laser (on, flash, off)   |          |            |
| Charging Voltage/current                 | DC 5V, <1A   |          |            |
| Auto power off                           | 15 minutes (can be canceled)   |          |            |
| Operating environment                    | Operating temperature: 0°C~40°C  |          |            |
|  | Storage temperature: -10°C~50°C  |          |            |
|  | Operating humidity: 20~75% RH  |          |            |
|  | Storage humidity: 10~90% RH  |          |            |
|  | Altitude: ≤2000m   |          |            |
| Product dimension                        | 130*38*25mm  |          |            |
| Weight                                   | 62g  |          |            |
| Certification                            | CE, IP54, RoHS   |          |            |

## V. Label Markings

⚠ WARNING: LASER RADIATION. DO NOT do any of the following, as severe and permanent eye damage could result:

- DO NOT direct laser beam into eyes.
- DO NOT stare into the beam.
- DO NOT view directly with optical instruments.
- Warning label (The peak power value on the warning label is tested at a distance of 100mm with 7mm aperture in the lab)



UT691-01



UT691-10



UT691-20

This manual is subject to change without prior notice.

# UNI-T®

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