

Fiber Checker Optical Testing Tool

Technical Specifications and User Manual



Description

The Fiber Checker is a particularly useful tool designed for checking the defects of a fiber cable. It emits a visible 650 nm wavelength red laser light through fiber optic cables, then if there are breaks or defects in the fiber will refract the light, creating a bright glow around the faulty area.

The universal connector can be used for all the most widespread fiber interfaces such as ST / SC / FC connector. It is suitable to test both Single mode and Multimode cables. With an optional 2.5 mm to 1.25 mm optional Adapter, you can easily test 1.25 mm diameter fiber LC or MU connector. The visibility is from 3 km to 5 km dependent upon the output power of the Fiber Checker.

Internally there is also a specifically designed power circuit called an APC (Auto Power Control) circuit which provides steady power. The APC prevents unstable laser output when the battery is low.

The LD output signal can be switched to CW or Pulse Mode to obtain different visual effects. There is a dust cap which will prevent dirt from getting into the LD connector. The cover also prevents accidental exposure of the laser beam into anyone's eyes.

Features

- Easy to check fiber faults by using 650 nm visual red laser
- Range: visibility up to 3 ~ 5 km
- Universal Connector for testing additional ST, SC, FC, MU, and LC interfaces when using our Optional Adapter
- Operates with both Single mode and Multimode cables
- Highly effective power circuits designed for stable laser power
- Operating in both Continuous Wave (CW) & Pulse Mode
- Dustproof cap keeps fiber connectors clean
- Powered by two AAA-size alkaline batteries
- LED indicator for Power On, Battery Low alerts

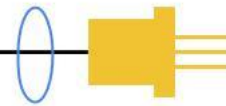
Applications

- Installation and Maintenance CATV / Telecom / FTTH in fiber optical fiber networks.
- Installation and Maintenance 4G / 5G mobile system.
- Installation and Maintenance data center network.
- Testing in standard laboratories.
- High throughput quality assurance.

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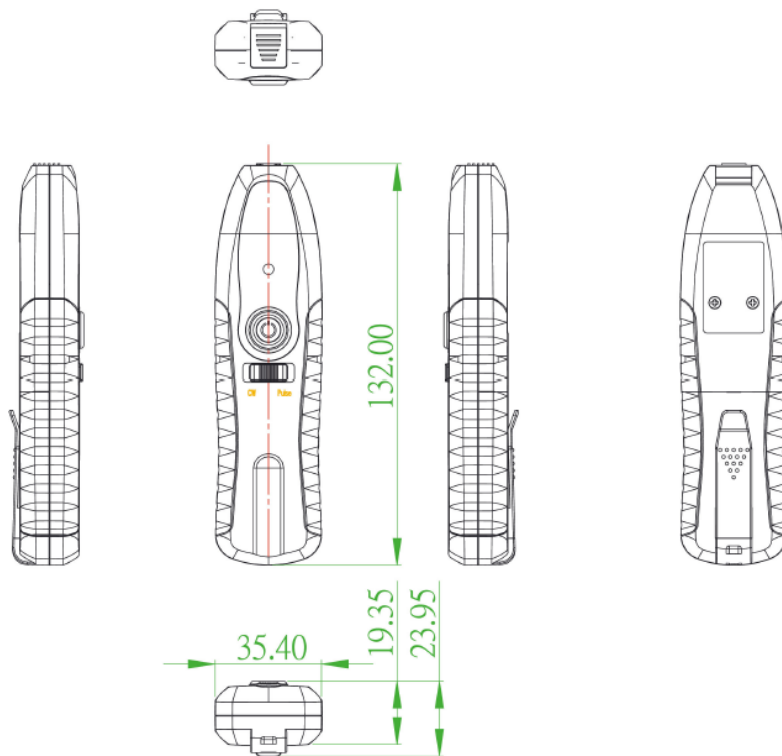
Tel: (909)718-0999 | Fax: (909)718-0998 | E-mail: info@lasermate.com | URL: <http://www.lasermate.com>

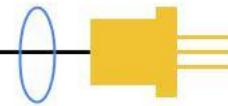


Specifications

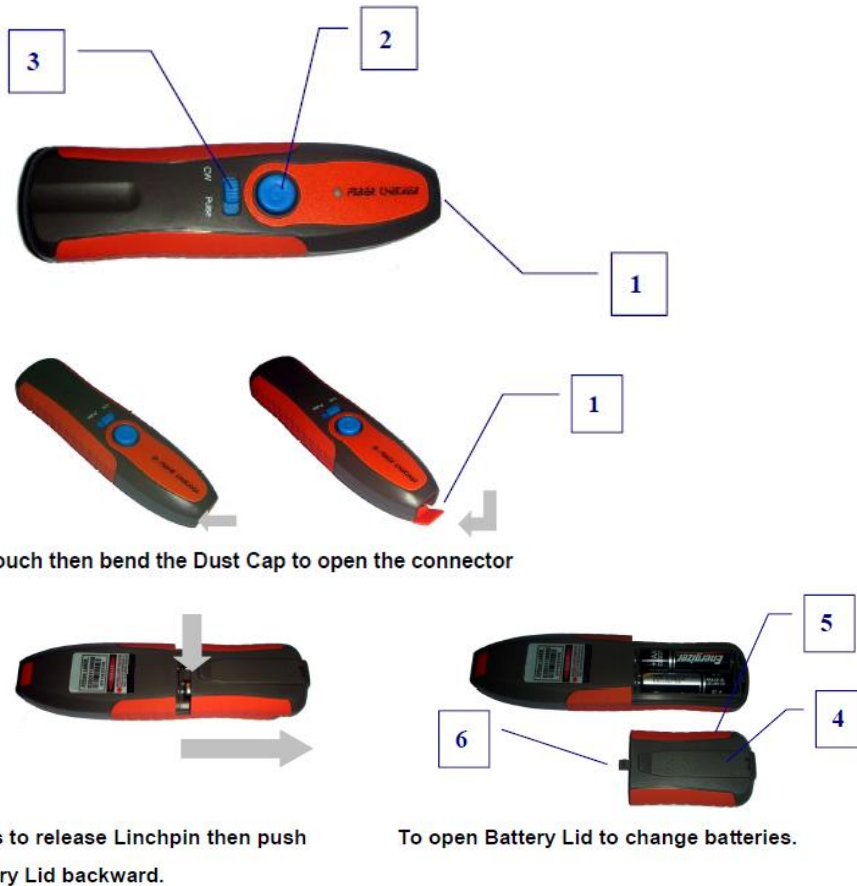
Fiber Checker	
Laser Class	Class 2M
Wavelength	650 nm \pm 10 nm @ 25°C
Spectral Width	<10 nm
Output Power	> 0.5 mW @ 25°C into 9 μ m fiber
Output Power (Part number -1)	> 1 mW @ 25°C into 9 μ m fiber
Output Power (Part Number -2)	> 2 mW @ 25°C into 9 μ m fiber
Mode	Continuous Wave / Pulse Mode
Battery Type	AAA [1.5 V x 2]
LED Indicator	GREEN Light - Power On RED Light - Battery Low
Emitting Range	Visibility to 3 ~ 5 km
Operating Temperature	0°C ~ 50°C
Storage Temperature	0°C ~ 70°C
Weight	0.06 kg
Dimensions	132 x 34 x 19 mm

Dimensions (unit: mm)



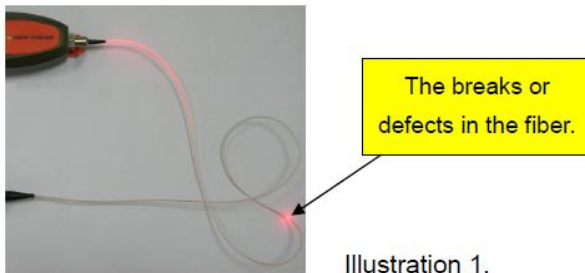


Operating Instructions

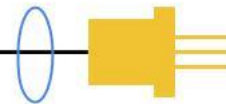


- 1) Dust Cap: prevents dirt contamination of the LD connector.
- 2) Button: pressing to Turn On / Turn Off the LD emitting.
- 3) Mode Switch: slide to select Continuous Wave or Pulse Mode.
- 4) Pen Clip: to fasten the tool while inside pocket.
- 5) Battery Lid: open to change batteries.
- 6) Linchpin: mechanical design to lock the battery lid.

1. The Fiber Checker is powered by two 1.5 V AAA batteries
2. To check if the power is on press the button and see if the LED is GREEN.
3. Lift the front of the dust cap up and insert on end of the fiber connector to the universal connector or directly insert onto an output connector of the fiber or patch cord.
4. Switch to Continuous Wave or Pulse Mode.
5. Press the Button and check for breaks or defects in the fiber that will refract the light, creating a bright glow around the faulty area, as shown below in Illustration 1.



6. When the LED is RED, the batteries are in low voltage status and must be replaced.
7. Do not touch the fiber's interface to avoid getting dirt in the connector.
8. Keep the fiber connector capped at all the times when the device is not in use.
9. Clean the fiber before testing so as to obtain accurate results and longer service.



Maintenance

This tool requires no maintenance other than periodic battery changes. Like any other electronic equipment, this tool should be kept away from water, high damp, dust, electricity, and environments of extreme temperature. The Fiber Checker has an internal fiber stub that requires periodic cleaning with specific cleaning tools, as shown in Illustration 2. The Fiber Checker is fragile and must not be dropped on a hard surface. Modifying any of this tool's internal components can cause a malfunction and will invalidate the manufacturer's warranty.



Illustration 2. Fiber Stub Cleaning

Warranty

The manufacturer warrants this product to be free of defects in workmanship and materials for a period of 10 months after purchase. This warranty (excluding batteries) is solely limited to the repair and replacement of original parts, which are defective in workmanship or materials. All other costs are the sole responsibility of the owner. This warranty does not cover any defects, damage, or deterioration due to misuse, alteration, or negligence.

Ordering Information

Part Number	Wavelength	Output Power
S200111-650	650 nm	> -3 dBm (0.5 mW)
S200111-650-1	650 nm	> 0 dBm (1 mW)
S200111-650-2	650 nm	> +3 dBm (2 mW)
S200411	LC adaptor, 2.5 mm to 1.25 mm	
S200421	MU adaptor, 2.5 mm to 1.25 mm	

Note: Specifications are subject to change without notice.