Fiber Checker

Specification & User Manual

1.1 Description:

The Fiber Checker is a very useful tool designed for checking the defects of a fiber cable. It emits a visible 635 nm or 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 Singlemode 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 connector. The visibility is up to 3 Km to 5 km depends upon the output power of the Fiber Checker.

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

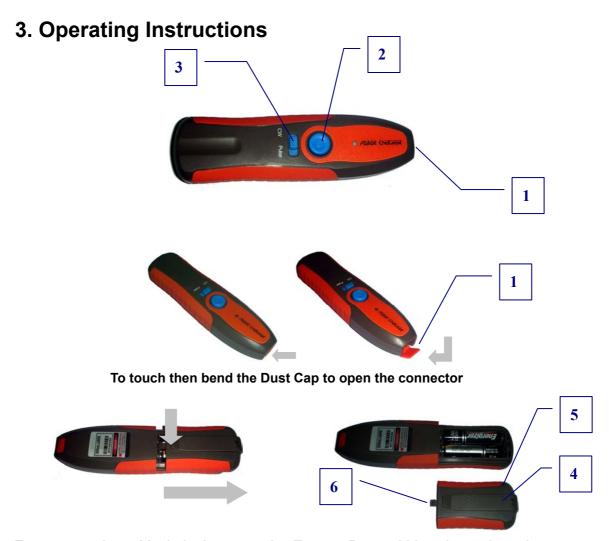
The LD output signal can be switched on CW or Pulse Mode to obtain different visual effects. There is a dust proof cover which will prevent dust from getting into the inside of the LD connector. The cover also helps you to avoid evading incidental exposure of the laser directly into your eyes.

1.2 Features:

- Easy to check fiber faults by using 635 nm or 650 nm visual red laser
- Range: visibility up to 3 ~ 5 Km
- Universally Connector for test different ST, SC, FC, LC (via Optional Adapter) interfaces
- For both Singlemode and Multimode cables
- Highly effective power circuits designed for stable laser power
- Operating in both CW (Continuous Wave) & Pulse Mode
- Dust-proof design keeps fiber connectors clean
- Two AAA-size alkaline batteries
- LED indicator for Power On, Battery Low

2. Specification

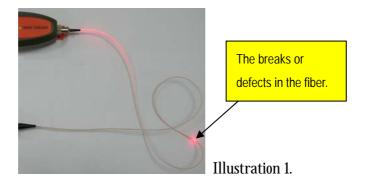
| Laser Class | Class 2M | |
|-----------------|--------------------------------------|--|
| Wavelength | 650 nm ± 10 nm @ 25℃ | |
| Spectral Width | < 10 nm | |
| Output Power | > 0.5 mW @ 25°C into 9 μ m fiber | |
| Mode | CW / Pulse Mode | |
| Battery Type | AAA 1.5 V x 2 | |
| LED Indicator | GREEN Light - Power ON | |
| | RED Light - Battery Low | |
| Emitting Range | Visibility to 3 ~ 5 Km | |
| Operating Temp. | 0℃ ~ 50℃ | |
| Storage Temp. | 0℃ ~ 70℃ | |



To press to release Linchpin then to push To open Battery Lid to change batteries. Battery Lid backward.

- 1. Dust Cap: prevent dirt contaminates the LD
- 2. <u>Button</u>: pressing to Turn On / Turn Off the LD emitting.
- 3. Mode Switch: to select CW Continuous Wave Mode / Pulse Mode.
- 4. Pen Clip: a design to fasten the tool while put inside pocket.
- 5. <u>Battery Lid</u>: to open to change batteries.
- 6. <u>Linchpin</u>: a mechanical design to lock the Battery Lid.
- 1. The Fiber Checker is powered by two pieces 1.5 V AAA batteries
- 2. To check the power on please press the button and see if the LED is GREEN.
- 3. Lift the front of the dustproof up and insert on end of the fiber connector to the universal connector or directly insert to an output connector of the fiber or patch cord.

- 4. Switch to CW / Pulse Mode.
- 5. Press the Button and check those breaks or defects in the fiber will refract the light, creating a bright glow around the faulty area. (Shown as below Illustration 1)



- 6. When the LED is RED, this means that batteries are almost drained out and in low voltage status and you will need to replace the batteries right away.
- 7. Do not touch the fiber's interface to avoid dirt into the connector.
- 8. Keep the fiber connector capped at all the time when the device is not in use.
- 9. With proper cleaning tools to clean the fiber before testing so that to obtain the right tests results and make the service longer.

4. Maintenance

This tool requires no maintenance other than periodic battery charges. Like any other electronic equipment, this tool should be kept away from water, high damp, dust, electricity, and environments of extreme temperature. And the internal Fiber Checker there is a fiber stub needed to be cleaned by specific cleaning tools regularly (Shown as Illustration 2.). Please do not drop this tool on hard surface. Modifying internally any of this tool components can cause a malfunction and will invalid the manufacturer's warranty.



5. Ordering Information:

| Part Number | Description | |
|--------------|-------------------------------|---------------------|
| i ait Numbei | Wavelength | Output Power |
| RP-MF0650 | 650 nm | > -3 dBm (0.5 mW) |
| Part Number | Description | |
| MOD-MF0651 | LC adapter, 2.5 mm to 1.25 mm | |