

VFL 101 • User Guide

This guide provides instructions for an experienced technician to operate and maintain the VFL 101 fiber optic fault locator.

The VFL 101 is a visible red laser source designed to troubleshoot faults on fiber optic cables. Used with the Extron Fiber Optic Termination Kit, it ensures connector and cable integrity.



WARNING: The VFL 101 is a registered Class II Laser Product. Never look directly into the optical output.

Inspecting Connectors

NOTE: Always clean the cable connector and the universal adapter optical output of the VFL 101 before connecting them together.

1. Attach the cable and connector to the 1.25 mm universal adapter.
2. Press and hold (1 second) the On/Off button to turn on the VFL 101. The red LED will illuminate.
3. Observe the connector for faults. Visible red light indicates a break in the light path between the connector and cable.



Maintenance

Replacing the Battery

1. Remove the screw on the back of the unit and pull the unit apart.
2. Remove the AAA battery and place the new battery in the unit ensuring the [+] and [-] poles of the battery align with the poles printed inside the compartment.
3. Reassemble the unit, then replace and tighten the screw.

The VFL 101 contains no user serviceable parts. Except for changing batteries, the instrument must be returned to Extron for repair.

Optical Output Cleaning

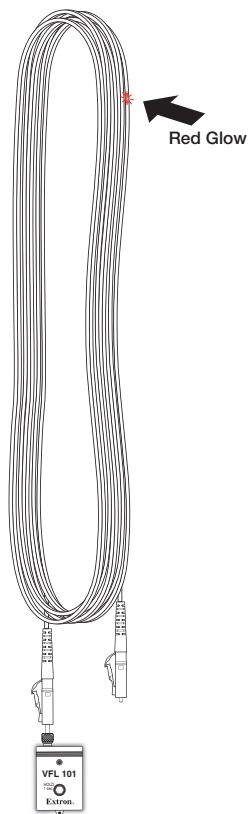
4. Use lint-free optical cleaning wipes and optical quality cleaning fluid to clean the universal adapter.

Troubleshooting Cables

Since it emits a visible laser light, the VFL 101 can be a useful troubleshooting tool.

To Locate a Severe Signal Loss:

1. After connection to the fiber cable, turn the VFL 101 on and inspect along the length of fiber.
2. If any part of the fiber glows red, it most likely indicates a sharp bend or break causing severe signal loss, (see illustration at right).



VFL 101 • Setup Guide (Continued)

To Locate or Trace a Single Fiber Cable:

- 1. After connection to the fiber cable, turn the VFL 101 on.
- 2. The VFL 101 light source is visible. Locate the red light on the other end of the fiber cable, (see illustration at right).

Specifications

NOTE: This device is a class 2 (II) laser product. It meets the safety regulations of IEC-60825, FDA 21 CFR 1040.10, and FDA 21 CFR 1040.11.

Optical specifications

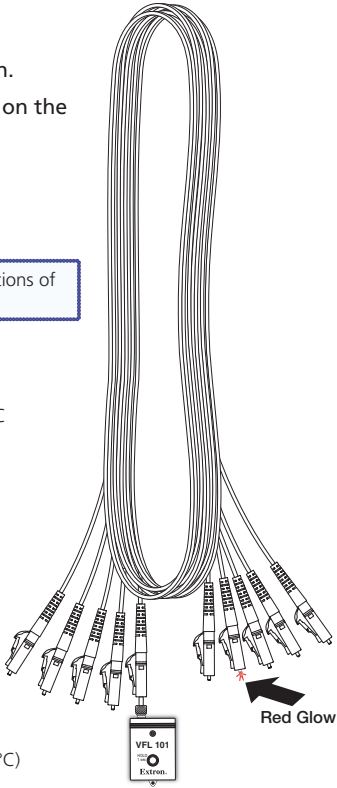
Number/type 1 laser emitter
Connectors..... (1) 1.25 mm universal connector with LC and MU adapters
Wavelengths..... 635 nm

General

Power..... Internal, supplied by a battery
Power consumption..... 1.5 VDC, 0.8 A
Batteries
Number/type 1 AAA battery (1.5 V alkaline or 1.2 V rechargeable)
Operating time (nominal)..... 16 hours
Temperature/humidity..... Storage: -22 to +140 °F (-30 to +60 °C) / 10% to 90%, noncondensing
Operating: +14 to +122 °F (-10 to +50 °C) / 10% to 90%, noncondensing
Cooling Convection, no vents
Thermal dissipation..... 0.5 BTU/hr
Enclosure type Plastic
Enclosure dimensions..... 2.8" H x 1.4" W x 0.6" D (7.1 cm H x 3.6 cm W x 1.5 cm D) (Excluding connectors.)
Product weight 0.1 lb (<0.1 kg)
Shipping weight <1 lb (<1 kg)
Vibration ISTA 1A in carton (International Safe Transit Association)
Regulatory compliance
Safety..... EN 61010-1
EMI/EMC EN 61000-4, EN 61326-1
Warranty 3 years parts and labor, excluding battery

NOTE: All nominal levels are at ±10%.

NOTE: Specifications are subject to change without notice.



Extron USA - West Headquarters	Extron USA - East	Extron Europe	Extron Asia	Extron Japan	Extron China	Extron Middle East
+800.633.9876 Inside USA and Canada Only	+800.633.9876 Inside USA and Canada Only	+800.3987.6673 Inside Europe Only	+800.7339.8766 Inside Asia Only	+81.3.3511.7655 +81.3.3511.7656 FAX	+400.883.1568 Inside China Only	+971.4.2991800 +971.4.2991880 FAX
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