

Why can't I see red light from a fiber optic pigtail

Article Overview

Yes, you can see red light from a fiber optic pigtail if you use a Visual Fault Locator (VFL), which emits a visible red laser to detect breaks, bends, or faults in the fiber.

How Red Light Works in Fiber Testing

Fiber optic systems normally transmit infrared light (850–1550 nm), which is invisible to the human eye, so you cannot see the operational signal directly. However, a Visual Fault Locator (VFL) emits a bright red light, typically around 650 nm, that travels through the fiber and can be seen at the far end or at points of leakage, such as breaks, severe bends, or poorly mated connectors. This makes it an effective tool for continuity testing, polarity verification, and locating faults in pigtails or patch cables.

Visibility Through the Fiber Jacket

The red light from a VFL is often bright enough to be seen through the fiber jacket, especially in low-light conditions. It can also shine through yellow or orange simplex jackets, but may be harder to see through black or gray jackets. If the fiber is broken or has a macrobend, the light may escape at the fault location, making it easier to identify the problem visually.

Practical Uses...



Article Content

Dec 29, 2025

What Is the Optical Audio Port, and When Should I Use It?

The one standout in home audio/video market is the optical audio cable. Unlike other

Oct 10, 2025

What is a Fiber Optic Pigtail, and What Is It Used For?

Discover the essentials of fiber optic pigtails, including types, uses, and installation

Jul 02, 2026

What is Fiber Pigtail? A Complete Guide for Beginners

A fiber pigtail is a fiber optic cable with pre-terminated fiber connector and exposed fiber.

May 08, 2026

White Paper: Troubleshooting Fiber

This inexpensive tool that should be found in virtually every fiber technician's tool bag uses a bright laser

May 20, 2026

Fiber Optical Red Light Sources

The red light emitted by the fiber tester has a wavelength of approx. 655 nm and is easily visible to the human eye. Thus, scattered

Sep 10, 2025

Fiber Optic Troubleshooting Guide: Problems, Tools & Solutions

Learn how to troubleshoot fiber optic cables with common problems, a step-by-step process, essential tools, and

Mar 05, 2026

Visual Fault Locators – A Guide to Fiber Optic VFLs

Visual fault locators (VFLs) are handheld tools used to find problems inside fiber cables using visible red light. A fiber

Aug 19, 2025

Comprehensive Guide to Fiber Optic Pigtails | Gezhi Photonics

Understanding Fiber Optic Pigtails: Key Specifications, Classifications and Splicing Methods Modern networking

Nov 05, 2025

Frequently Asked Questions

Q: Is there a generalised ratio between the length of an optic fibre and the length of the path actually taken

Jul 19, 2026

How to Use a Visual Fault Locator (VFL) for Fiber

Hold the connected fiber's far end (carefully, not pointing at your face) and look for visible red light coming

May 06, 2026

What Is Fiber Optic Pigtail and How to Splice It?

While for mechanical fiber optic pigtail splicing, it precisely holds a fiber optic pigtail and fiber patch cord together, the

Dec 23, 2025

Visual Fault Locators

Visual Fault Locators (VFLs) operate in the 630-670 nm range, producing a highly visible red light. This specific

Jun 04, 2026

Fiber cable termination

Fiber Optic cable termination is the addition of connectors to each optical fiber in a cable. The fibers need to have connectors fitted

Dec 01, 2025

Fiber Optic Troubleshooting: Expert Guide for Common Issues

Fiber optic troubleshooting is an essential skill for network administrators, technicians, and engineers responsible for

Jan 23, 2026

An Introduction to Fiber Optic Pigtails

That is why fiber optic pigtails play such an important role in optimal connectivity that is utilized in 99 percent of single

Mar 07, 2026

The FOA Reference For Fiber Optics

Since the light used in systems is invisible infrared light (IR) beyond the range of the human eye, one

Dec 09, 2025

How to Test Fiber Optic Cable: A Step-by-Step Guide for Beginners -

If the red light shows up at the other end, I know there are no big breaks. If the light is weak or missing, I check for

Dec 26, 2025

Question about fiber optic cabling issue

Greetings! Other than connecting switches with fiber optic patch cables I'm a bit of a noob with long distance runs. I

Sep 19, 2025

Fiber Optic Pigtail Meaning What is it and How to Choose it

Fiber optic pigtail is an unbuffered optical fiber that has one end terminated with a fiber optic connector and the other

Sep 10, 2025

How to Use a Visual Fault Locator (VFL): A Step-by-Step Guide

Turn on the optical visual fault locator. Most VFLs have a button or switch to turn on the light. You should see a visible

Jul 25, 2025

Troubleshooting Fiber

If a lot of red light is visible, the connector is bad and should be replaced. If you look from the other end and see light coming only out

Oct 29, 2025

Fiber Optic Pigtail Introduction and Installation Guide

The fiber optic pigtail is a short terminated optical fiber with a connector on one end, used

May 26, 2026

What Do All The Colors Mean? Fiber Optic Color Code Explained

What Do All The Colors Mean? Fiber Optic Color Code Explained Written by Ben Hamlitsch, trueCABLE Technical

Mar 03, 2026

Fiber Network Troubleshooting – Common Issues & Fixes

Learn how to troubleshoot fiber networks. Identify common issues like high loss, dirty connectors, and signal drops,

Jan 07, 2026

Fiber-optic cable

A fiber-optic cable, also known as an optical-fiber cable, is an assembly similar to an electrical cable but containing one or more

Contact Us

For more information, pricing, or custom solutions, please contact us:

Website: <https://www.iiss.co.za>

Email: sales@iiss.co.za

Phone: +27 63 174 2895

Address: Unit 8, Innovation Park, 15 Rivonia Road, Sandton, Johannesburg, 2196, South Africa

This document is for informational purposes only. Specifications subject to change without notice.

