COMPTYCO AUA-9A

COMPTYCO AUA-9A Optical Power Meter and Visual Fault Locator User Manual

Model: AUA-9A

1. Introduction

The COMPTYCO AUA-9A is a versatile optical power meter integrated with a Visual Fault Locator (VFL), designed for testing and maintaining fiber optic networks. This device accurately measures optical power and identifies fiber breaks, bends, or faulty connectors. It supports multiple wavelengths and connector types, making it an essential tool for fiber optic technicians.
This manual provides detailed instructions for the safe and efficient operation, setup, maintenance, and troubleshooting of your AUA-9A device.

2. Safety Information

Please read and understand all safety warnings and operating instructions before using this device. Failure to do so may result in injury or damage to the device.

- **Laser Safety:** The Visual Fault Locator (VFL) emits a visible red laser. Avoid direct eye exposure to the laser beam. Do not look directly into the fiber end or the VFL output port when the VFL is active.
- **Battery Handling:** Use only specified battery types. Ensure correct polarity when installing batteries. Do not mix old and new batteries or different types of batteries. Remove batteries if the device will not be used for an extended period.
- **Environmental Conditions:** Operate the device within the specified temperature and humidity ranges. Avoid exposure to extreme temperatures, moisture, or corrosive environments.
- **Cleaning:** Keep optical connectors clean. Use appropriate fiber optic cleaning tools and solutions.

3. Product Features

- Integrated Optical Power Meter and Visual Fault Locator (VFL).
- Wide power measurement range: -70 to +10 dBm.
- Supports multiple standard wavelengths: 850nm, 980nm, 1300nm, 1310nm, 1490nm, 1550nm, 1625nm.
- High precision optical power measurement.
- 10mW VFL output for fault location.
- Universal 2.5mm interface for SC, FC, and ST connectors (no adapter required).
- Durable design with anti-dropping rubber coating.
- Backlit LCD display for clear readings in various lighting conditions.
- Automatic shutdown function to conserve battery life.
- Replaceable ceramic core for extended device lifespan.



Figure 3.1: Front view of the COMPTYCO AUA-9A Optical Power Meter, showing the display and control buttons.



Figure 3.2: Labeled diagram of the AUA-9A, indicating the display, buttons, and ports. Key elements include the Red Light (VFL output), Receiver (OPM input), Backlight, Working Wavelength, dBm/dB/W units, Power Switch, Auto Off, Zeroing, and Wavelength Selection.



Figure 3.3: Overview of the AUA-9A's capabilities, highlighting its function as an all-in-one optical power meter with a powerful light source, fall-resistant design, high precision, and support for 7 test wavelengths (850nm, 980nm, 1300nm, 1310nm, 1490nm, 1550nm, 1625nm).



Figure 3.4: Demonstrates the 2.5mm standard interface compatible with SC, FC, and ST connectors without additional adapters, and the anti-dropping rubber coating designed to reduce damage from accidental falls.

4. Setup

4.1. Package Contents

Verify that all items are present in the package:

- COMPTYCO AUA-9A Optical Power Meter & VFL Unit
- Instruction Manual
- Protective Pouch (if included)
- Adapter (if included)
- Certificate (if included)



Figure 4.1: Image showing the back of the AUA-9A with the battery compartment open (batteries not included) and the typical contents of the packing box, including the host unit, adapter, certificate, and instruction manual.

4.2. Battery Installation

1. Locate the battery compartment on the back of the device.
2. Slide the battery cover open.
3. Insert the required batteries (typically AA or AAA, refer to device markings) according to the polarity indicators (+/-).
4. Close the battery cover securely.

Note: Batteries are generally not included and must be purchased separately.

5. Operating Instructions

5.1. Power On/Off

- Press the "**ON/OFF**" button to power on the device.
- Press and hold the "**ON/OFF**" button for a few seconds to power off the device.
- The device features an automatic shutdown function to save battery power if inactive for a set period.

5.2. Optical Power Measurement

1. **Connect Fiber:** Connect the fiber optic cable to be tested to the optical power meter input port (Receiver) using the appropriate SC, FC, or ST connector. Ensure the connector is clean.
2. **Select Wavelength:** Press the "**λ**" button to cycle through the available wavelengths (850nm, 980nm, 1300nm, 1310nm, 1490nm, 1550nm, 1625nm) until the desired wavelength is displayed.
3. **Measure Power:** The optical power reading will be displayed on the LCD screen in dBm or dB/W.
4. **Change Units:** Press the "**dB/W**" button to switch between dBm and dB/W measurement units.

5. **Zeroing Function:** For relative power measurements, press the "**ZERO**" button to set the current power reading as the reference (0 dB). Subsequent measurements will show the loss or gain relative to this reference.

5.3. Visual Fault Locator (VFL) Operation

1. **Connect Fiber:** Connect the fiber optic cable to be tested to the VFL output port (Red Light).
2. **Activate VFL:** Press the "**VFL**" button (or similar, depending on specific button layout) to activate the red laser.
3. **Locate Faults:** Observe the fiber along its path. A visible red light escaping from the fiber indicates a break, bend, or faulty connector.
4. **Deactivate VFL:** Press the "**VFL**" button again to turn off the red laser.

Warning: *Never look directly into the VFL output or the end of a fiber connected to the VFL when it is active. The laser can cause eye damage.*

5.4. Backlight Control

- Press the "**LIGHT**" button to turn the LCD backlight on or off, improving visibility in low-light conditions.

6. Maintenance

6.1. Cleaning Optical Ports

Dust and debris on optical connectors can significantly affect measurement accuracy. Regularly clean the optical input and VFL output ports.

- Use a specialized fiber optic cleaning stick or lint-free wipe with isopropyl alcohol.
- Gently clean the ferrule of the connector and the internal surfaces of the device's ports.
- Ensure the ports are dry before making any connections.

6.2. Replacing the Ceramic Core

The ceramic core in the optical power meter input port is replaceable, extending the lifespan of the device. If the core becomes damaged or excessively worn, it can be replaced.

1. Carefully unscrew and remove the metal head/adapter from the optical power meter input port.
2. Extract the old ceramic core.
3. Insert a new, clean ceramic core.
4. Reattach the metal head/adapter securely.

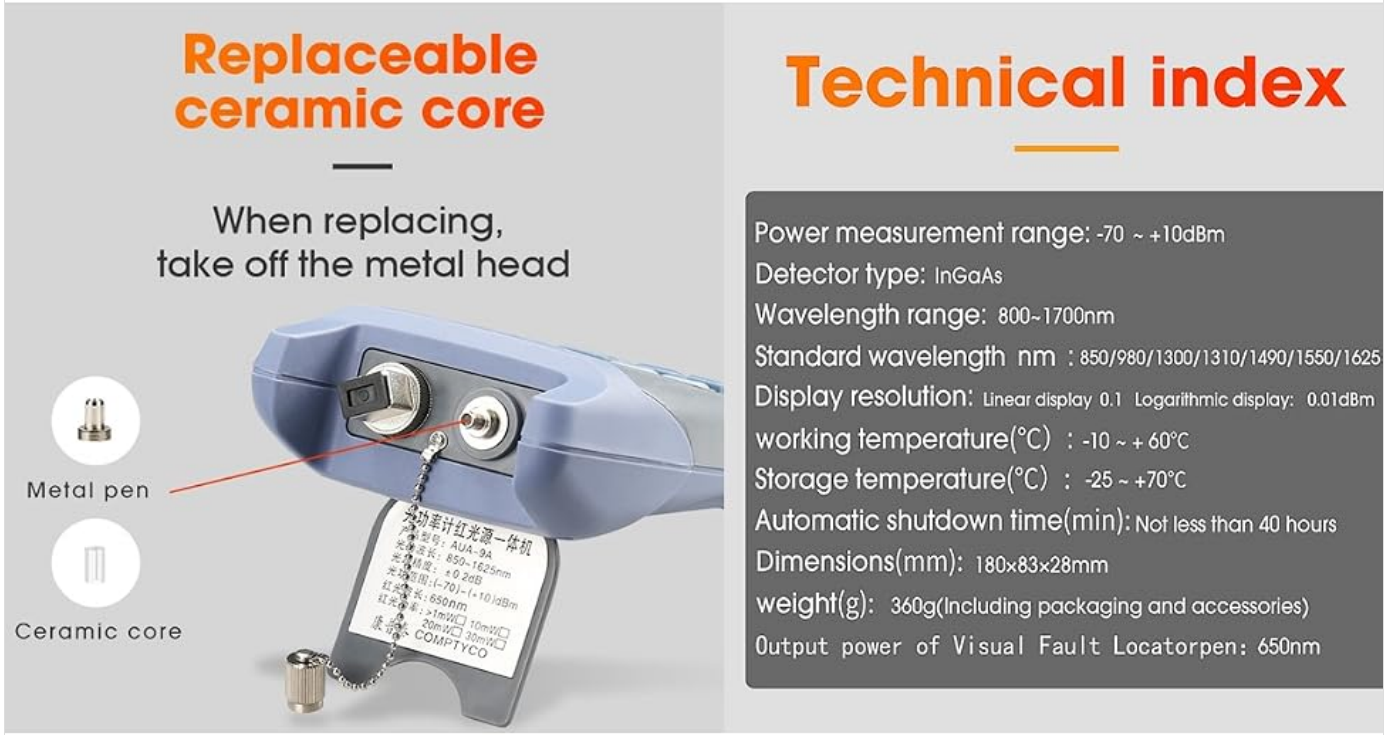


Figure 6.1: Illustration of the replaceable ceramic core feature. To replace, remove the metal head, then replace the ceramic core.

6.3. Battery Replacement

Replace batteries when the low battery indicator appears on the display or when the device fails to power on. Refer to Section 4.2 for battery installation instructions.

7. Troubleshooting

Problem	Possible Cause	Solution
Device does not power on.	Low or dead batteries; incorrect battery installation.	Replace batteries with new ones, ensuring correct polarity.
Inaccurate power readings.	Dirty optical connectors; incorrect wavelength selected; damaged fiber.	Clean optical ports and fiber connectors. Verify the correct wavelength is selected. Inspect fiber for damage.
VFL red light is dim or not visible.	Dirty VFL output port; VFL laser failure; fiber not properly connected.	Clean the VFL output port. Ensure fiber is securely connected. If problem persists, contact support.
Display is blank or flickering.	Low battery; device malfunction.	Replace batteries. If the issue continues, contact customer support.

8. Specifications

Model Number	AUA-9A
Power Measurement Range	-70 to +10 dBm
Detector Type	InGaAs
Wavelength Range	800nm ~ 1700nm
Standard Wavelengths	850nm, 980nm, 1300nm, 1310nm, 1490nm, 1550nm, 1625nm
Display Resolution	Linear display: 0.1; Logarithmic display: 0.01dBm
Connector Type	FC, SC, ST (Universal 2.5mm interface)
VFL Output Power	10mW (650nm)
Working Temperature	-10°C to +60°C
Storage Temperature	-25°C to +70°C
Automatic Shutdown Time	Not less than 40 hours (if inactive)
Dimensions (LxWxH)	180 x 83 x 28 mm
Item Weight	340 g (approx.)

9. Warranty and Support

For warranty information or technical support, please refer to the documentation provided with your purchase or contact your vendor. Keep your purchase receipt as proof of purchase.
Manufacturer: Syrolink Networks Pvt Ltd
Contact: 8285865659 (as per product information)

© 2023 COMPTYCO. All rights reserved.

Ask a question about this manual

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. Privacy details.

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question