



# FiberLink 6656 Series



## **Visible Fault Locator**

Installation and Operations Manual

### WWW.ARTEL.COM

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#### Welcome

FiberLink 6656 Visible Fault Locator is a light-weight, hand-held tool used to quickly troubleshoot faults in the continuity of both single-mode and multimode fibers, especially at fiber launch points or in OTDR dead zones.

A high-intensity visible red laser beam is precision-coupled into a optical fiber; breaks and micro-bends in the fiber deflect the red light into the fiber jacket, producing a red glow at the point of the fault.

Additionally, the FiberLink 6656 can be used as an end-to-end visual fiber identifier, which is useful for locating fibers terminated in poorly labeled or unlabeled fiber patch panels.

#### **Features**

- User selectable output: constant or flashing
- Extended battery life up to 30 hours on one 9V battery
- Comes equipped with a rugged and durable rubber boot to protect the instrument from drops and other hazards
- Optional ruggedized carrying cases available to accommodate 3 or 6 test devices

#### Package Contents

- One FiberLink 6656
- This User's Manual
- One Non-Rechargeable Lithium Battery (Pre-installed in unit)

#### **Technical Specifications**

Specifications		
Launch Method	Red Laser	
Connector	2.5mm universal port	
Output Power (Approximately):	>2 dBm	
Visual Range	up to 5km	
Operating Temperature	0 - 55º C	
Power Requirements:	9 Volt battery	
Battery Life	Approx. 15 hours	
Dimensions:	4.94 x 2.175 x 1.28 (inches)	
Weight	10 oz.	



This device emits invisible infrared electromagnetic radiation which can be harmful to human eyes. The radiation from this optical connector, if viewed at close range with no fiber optic cable connected to the optical connector, may be sufficient intensity to cause instantaneous damage to the retina of the eye. Direct viewing of this radiation should be avoided at all times!







#### 2.5mm Universal Port:

This port houses a laser diode that emits visible light into optical fibers either continuously or flashing depending upon the mode selected.



#### **3 Position Mode Selector Switch:**

The mode selector switch has three positions from left to right as follows:Constant (Left):Unit is on, unit will output contiuous red laser lightOff (Middle):Unit is offFlashing (Right):Unit is on, unit will flash red laser light



#### **Output Status LED:**

Indicates the unit is in "Constant" or "Flashing" mode and is emitting red laser light when the LED is illuminated. Indicates the unit is off when LED is not lit.

#### **Mode Selector Switch Legend**

Indicates the operation of the 3 Position Mode Selector Switch as described in (2).

#### **Operating Pointers**

Remember to check attenuation of the fiber optic cable. The system will only operate properly if these specifications fall within the range of the system's loss budget.

#### Troubleshooting

Multimode fiber optic cable contains an optical fiber with a light carrying "core" that is only .0025 inches (62.5 microns) in diameter. Single mode fiber optic cable has an even smaller "core," only .0032 to .0004 inches (8-10 microns). This is smaller than a human hair! Therefore, any minute particles of dirt or dust can easily block the fiber from accepting or radiating light. To prevent this from happening, always use the provided dust caps when ever optical connectors are exposed to air. It is also a good idea to gently clean the tip of an optical connector with a lint-free cloth moistened with alcohol whenever dust is suspected.

The status of the LED's should provide the first clue as to the origin of any operational failure. If these are off, it usually means that the battery has failed in the unit.

If, after reviewing the above possibilities, the system is still not operating, please contact the Customer Service Department for further assistance. If you suspect your problem is caused by the optics or the fiber optic cable, and you have an optical power meter, please take the appropriate measurements prior to contacting support.

#### **Maintenance and Repairs**

The FiberLink 6656 Series has been manufactured using the latest semiconductor devices and techniques that electronic technology has to offer. They have been designed for long, reliable and trouble-free service and are not normally field repairable.

Should difficulty be encountered, Artel Video Systems maintains a complete service facility to render accurate, timely and reliable service of all products.

The only maintenance that can be provided by the user is to ascertain that optical connectors are free of dust or dirt that could interfere with light transmission and that connections are secure and accurate.

All other questions or comments should be directed to our Customer Service Department. It should be noted that many "problems" can easily be solved by a simple telephone call.

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