

# FI-7000 FiberInspector™ Pro

## Video Probe







### Getting Started Guide









The FI-7000 FiberInspector™ video probe lets you see dirt, scratches, and other defects that can cause unsatisfactory performance or failures in fiber optic networks.

## Accessing the Product Manuals

This guide provides basic information to help you get started using the tester. For more detailed information, see the latest versions of the *Versiv Series Users Manual* and the *Versiv Series Technical Reference Handbook* provided on the Fluke Networks website.

## Symbols

	Warning or Caution: Risk of damage or destruction to equipment or software. See explanations in the manuals.
	Warning: Risk of fire, electric shock, or personal injury.
	Consult the user documentation.
	Conforms to the Appliance Efficiency Regulation (California Code of Regulations, Title 20, Sections 1601 through 1608), for small battery charging systems.
	This product complies with the WEEE Directive marking requirements. The affixed label indicates that you must not discard this electrical/electronic product in domestic household waste. Product Category: With reference to the equipment types in the WEEE Directive Annex I, this product is classed as category 9 "Monitoring and Control Instrumentation" product. Do not dispose of this product as unsorted municipal waste.  To return unwanted products, contact the manufacturer's web site shown on the product or your local sales office or distributor.
	40 year Environment Friendly Use Period (EFUP) under China Regulation - Administrative Measure on the Control of Pollution Caused by Electronic Information Products. This is the period of time before any of the identified hazardous substances are likely to leak out, causing possible harm to health and the environment.

	Do not connect this equipment to public communications networks, such as telephone systems.
	Conformite Europeene. Conforms to the requirements of the European Union and the European Free Trade Association (EFTA).
	Listed by the Canadian Standards Association.
	Conforms to relevant Australian standards.
	Conforms to relevant Russian standards.
	EMC approval for Korea. Class A Equipment (Industrial Broadcasting & Communication Equipment). This product meets requirements for industrial (Class A) electromagnetic wave equipment and the seller or user should take notice of it. This equipment is intended for use in business environments and is not to be used in homes.
	This Product contains a lithium-ion battery. Do not mix with the solid waste stream. Spent batteries should be disposed of by a qualified recycler or hazardous materials handler per local regulations. Contact your authorized Fluke Service Center for recycling information.
	This key turns the Product on and off.

## Safety Information

### Warning

To prevent possible fire, electric shock, or personal injury:

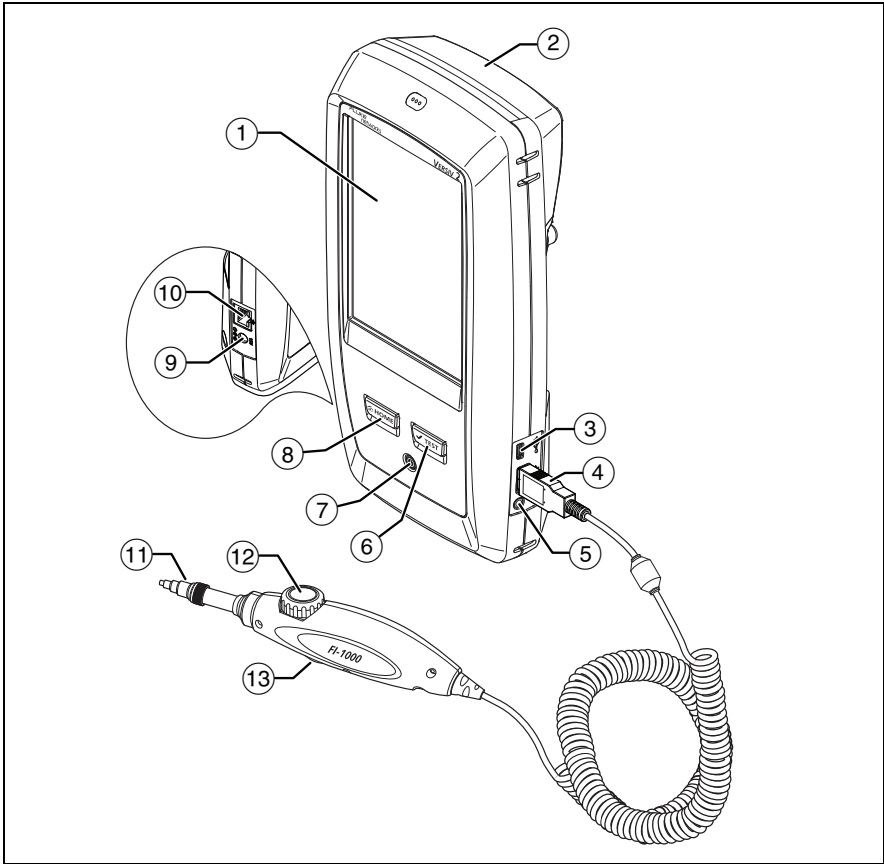
- Read all safety information before you use the Product.
- Carefully read all instructions.
- Do not open the case. You cannot repair or replace parts in the case.<sup>10</sup>
- Do not modify the Product.
- Use only replacement parts that are approved by Fluke Networks.
- Do not use the Product around explosive gas, vapor, or in damp or wet environments.
- Use this Product indoors only.
- Use the Product only as specified, or the protection supplied by the Product can be compromised.
- Do not use and disable the Product if it is damaged.
- Do not use the Product if it operates incorrectly.
- Batteries contain hazardous chemicals that can cause burns or explode. If exposure to chemicals occurs, clean with water and get medical aid.

- Remove the batteries if the Product is not used for an extended period of time, or if stored in temperatures above 50 °C. If the batteries are not removed, battery leakage can damage the Product.
- The performance of rechargeable batteries typically goes down to 80% of the specified performance after 2 years of frequent use. Frequent use is when you discharge the battery completely and recharge it every day. Fluke Networks recommends that you replace frequently-used rechargeable batteries every 2 years.
- The performance of rechargeable batteries typically goes down to 80% of the specified performance after 5 years of moderate use. Moderate use is when you discharge the battery completely and recharge it twice each week. Fluke Networks recommends that you replace moderately-used rechargeable battery every 5 years.
- Typical battery life is 8 hours. If your battery life goes down by 20% or more, then replace the battery the next time you send the tester to a service center for service or calibration.
- If the rechargeable battery is hot when you charge it (>50 °C (>122 °F)), disconnect the charger and move product or battery to a cool, nonflammable location. Recycle the battery according to local regulations and return the product for service as applicable.
- The battery door must be closed and locked before you operate the Product.
- Repair the Product before use if the battery leaks.
- Recharge the batteries when the low battery indicator shows to prevent incorrect measurements.
- Do not disassemble or crush battery cells and battery packs.
- Do not put battery cells and battery packs near heat or fire. Do not put in sunlight.
- Have an approved technician repair the Product.
- For Products with rechargeable batteries, use only AC adapters approved by Fluke Networks for use with the Product to supply power to the Product and charge the battery.

### **Caution**




To prevent damage to the Product or cables under test and to prevent data loss, read all safety information given in all documentation supplied with the Product.

# Connectors, Keys, and LEDs



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**Figure 1. Connectors, Keys, and LEDs (Versiv 2 shown)**

- ① LCD display with touchscreen.
- ② Blank module included with the FI-7000 kit. Keep the module installed to give protection to the module connectors.
- ③ Micro USB port: This USB port lets you connect the tester to a PC so you can upload test results to the PC and install software updates in the tester.
- ④ Type A USB port: This USB host port lets you save test results on a USB flash drive and connect the FI-1000 video probe to the tester. Versiv: Also lets you connect a Wi-Fi adapter for access to Fluke Networks cloud services. (Versiv 2 testers have an internal Wi-Fi radio.)
- ⑤ Headset jack.
- ⑥ : Starts a test. To start a test, you can also tap **TEST** on the display.
- ⑦ Power button. Versiv 2: The LED in the power button shows the status of the battery charging process. See the Users Manual.
- ⑧ : Press  to go to the home screen.

- ⑨ Connector for the AC adapter.
- ⑩ RJ45 connector: Lets you connect to a network for access to Fluke Networks cloud services.
- ⑪ Removable tip for different types of connectors.
- ⑫ Dial for focus adjustment.
- ⑬ The button starts the FiberInspector test and switches the probe between still and live modes.

## How to Do a FiberInspector Test

### 1. Power the Tester

Charge the battery if necessary. Connect the ac adapter to ac power and to the adapter connector (⑨) shown in Figure 1. You can use the tester while the battery charges.

### 2. Connect the FI-1000 Probe

With the tester off, connect the probe to the type A USB port on the side of the tester. Then turn on the tester. Figure 2 shows the home screen for a FiberInspector test.

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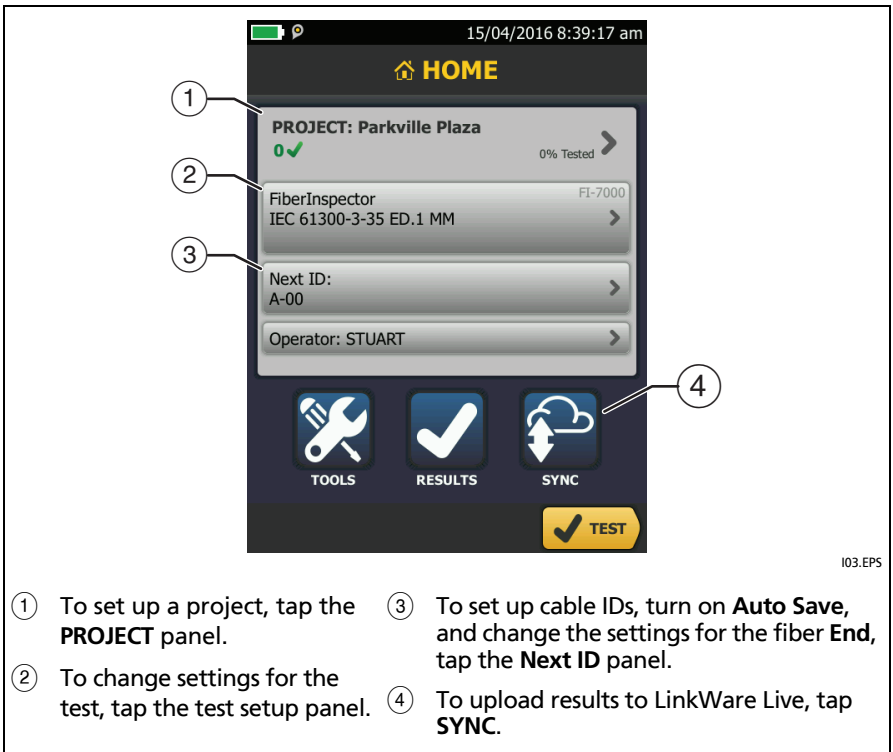


Figure 2. Panels on the Home Screen

### 3. Install the Correct Tip on the Probe

See Figure 3.

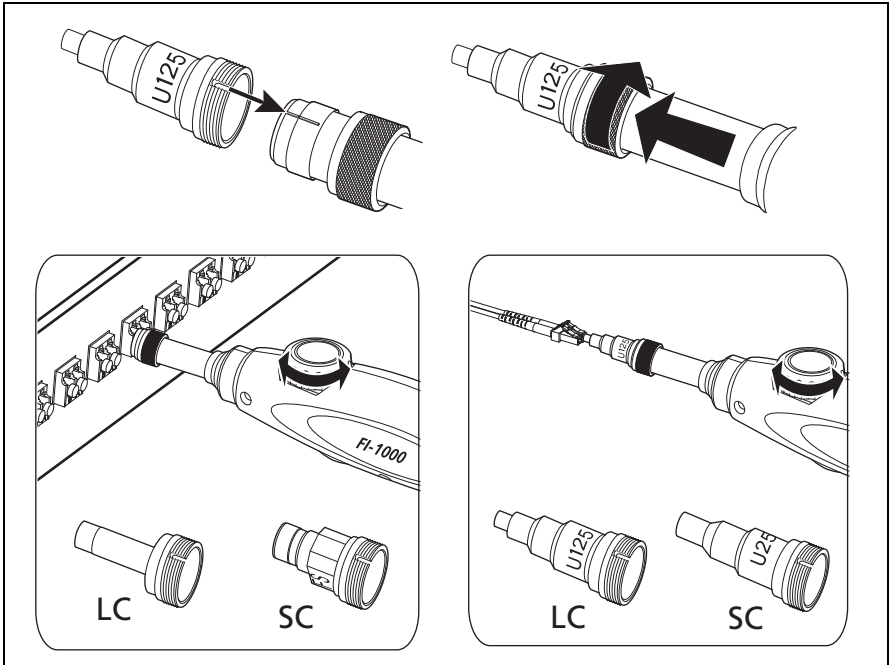
### 4. Clean the Connector

Use proper cleaning procedures to clean the connector you will inspect.

### 5. Do the FiberInspector Test

To start the test, press the button on the probe, tap **TEST**, or press  **TEST**.

To adjust the focus, turn the dial on the probe.



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Figure 3. How to Use the FI-1000 Probe

## 6. Examine the Results

See Figure 4:

- ① **Manual limit selected (default):** To give a **PASS** or **FAIL** grade to the image, tap **GRADE**.
- ② **Test limit selected:** To see an analysis of the defects, tap **ANALYZE**. The tester uses the selected test limit to give scratches and defects a **PASS** (green highlight) or **FAIL** (red highlight) grade.

### **Caution**

If a defect is possibly a dirt particle, clean the endface and do the inspection again. You must remove all loose particles because they can move into the core when you make connections.

## 7. Save the Results

7-1 Tap **SAVE**.

7-2 If the **Cable ID** box shows the correct ID, tap **SAVE**.

To enter a cable ID, tap the **Cable ID** box on the **SAVE RESULT** screen, use the keyboard to enter a name for the results, tap **DONE**, then tap **SAVE**.

The tester saves the results in the **DEFAULT** project, unless you selected a different project.

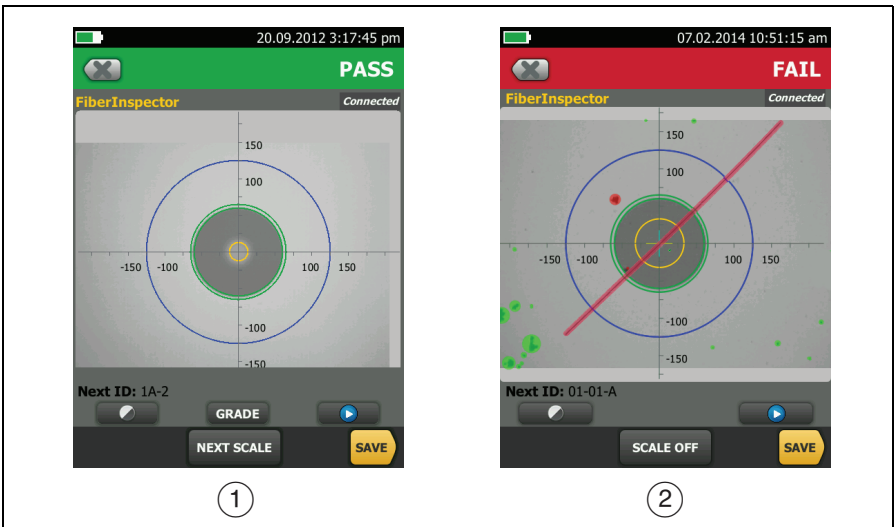


Figure 4. Examples of FiberInspector Results Screens

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# About Fluke Networks Cloud Services

With a Fluke Networks web account and a wired or wireless network connection, you can use the LinkWare Live web application to store and manage projects in the cloud. Go to <https://www.linkwarelive.com/signin> or see the Users Manual or Technical Reference Handbook for more information.

## Registration

Registering your product with Fluke Networks gives you access to valuable information on product updates, troubleshooting tips, and other support services.

To register, use LinkWare PC software. Download LinkWare PC from the Fluke Networks website.

## Contact Fluke Networks



[www.flukenetworks.com/support](http://www.flukenetworks.com/support)



[info@flukenetworks.com](mailto:info@flukenetworks.com)



1-800-283-5853, +1-425-446-5500



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Fluke Networks operates in more than 50 countries worldwide. For more contact information, go to our website.

## General Specifications

<b>Battery Type</b>	Lithium-ion
<b>Power Adapter</b>	Input: 100 to 240 VAC $\pm$ 10%, 50/60Hz; Output: 15 VDC, 2 A maximum Class II
<b>Versiv 2 wireless radio*</b>	Frequency ranges: 2.4 GHz band: 2412 MHz to 2484 MHz 5 GHz band: 4910 MHz to 5825 MHz Output power: <100 mW
<b>Temperature</b>	Operating: 0 °C to +45 °C; Storage: -10 °C to +60 °C
<b>Altitude</b>	Operating: 4,000 m (3,200 m with AC adapter); Storage: 12,000 m
* For more information, go to <a href="http://www.flukenetworks.com/manuals">www.flukenetworks.com/manuals</a> and search for "Radio Frequency Data for Class A".	

## Warranty

Limited 1-year warranty. See the product manual for details.