# **VIP-45**

**Video Inspection Probe** 



**Operation Guide** 



## **Foreword**

Thank you for purchasing from Precision Rated Optics. Before assembly and use, make certain that all of the parts you have ordered are present. Check the packaging carefully as some parts are small and can be overlooked. Also, locate any additional parts and accessories you may have purchased.

# **Safety Conventions**

You should understand the following conventions before using the product described in this manual.

## **CAUTION**

"Caution" refers to a potential product hazard. It requires a procedure which, if not correctly followed, may result in component damage. Do not proceed unless you understand and meet the required conditions.

## **Overview**

PRO Video Inspection Probes (VIP-45) are rugged, easy-to-use instruments which identify the quality of connector end faces.



## **Standard Accessories**

USB 2.0 Digital Inspection Probe, specified inspection tips, soft carrying case, standard video capture software, CD or USB, and manual.

# **Specifications**

	VIP-45-K1	VIP-45-K2	VIP-45- MPO-K1	VIP-45- MPO-K2
Inspection Tips	Universal 1.25mm UPC Patch cord tip Universal 2.5mm UPC Patch cord tip SC/FC UPC Bulkhead tip LC UPC Bulkhead tip	Universal 2.5mm APC Patch cord tip SC/FC APC Bulkhead tip	MPO/MTP PC Bulkhead tip	MPO/MTP APC Bulkhead tip
Field of View	~425µm x 320µm			
Resolution	0.5μm detectable			
Operating Temperature	32° F ~ 122° F (0° C ~ 50° C)			
Storage Temperature	-4° F ~ 158° F (-20° C ~ 70° C)			
Focus	Manual adjustment, 2mm max travel			
Dimensions	35mm diameter x 175mm length (without tip)			
Light Source	Blue LED			
Power Supply	USB port of PC			

The VIP-45 Series Video Inspection Probe is an all-digital video microscope probe with USB2.0 output designed to inspect fiber optic connector end faces. This probe can inspect both patch cord connectors (male) and in-adapter connectors (female). The USB2.0 connection allows connection to Windows XP, 2000, Vista and Windows 7 based PCs for image display, capture and analysis. The VIP-45 is powered by the USB connection – no other power source is required.

#### **Features**

- Convenient image capture button
- Digital zoom
- Inspect patch cord and adapter bulkhead connectors
- Optional WiFi Feature



## **Function Description**



## **Interchangeable Adapter Tip**

The Adapter Tip is inserted onto the connector to view the connector endface. Adapter tips are keyed to ensure that they are correctly installed on the VIP-45. A variety of tips, both male and female, are available for the VIP-45. Check the PRO website for a current list of tips or contact your PRO distributor. Using an optional adapter, CI-1000 tips may also be used.

#### **Lock Nut**

The Lock Nut holds the Adapter Tip in place. With the probe facing away from you, turn the Lock Nut counterclockwise to loosen the nut. When it slides freely on the probe barrel, pull the adapter tip forward to remove it. Place a new adapter tip on the probe, matching the tip's slot to the probe key. Slide the Lock Nut back onto the treads and hand tighten, by turning the nut clockwise.

#### **Focus Knob**

The Focus Knob rotates freely. Once the probe is attached to the connector, turn the Focus Knob in either direction until you have a clear image. If you are unable to get a clear image, check to ensure the connector is properly seated in the adapter tip.

## **Capture Button**

The Capture Button toggles the view between live video and the chosen software setting (Freeze, Save, or Freeze and Save). See your software manual for instructions on settings selection.

## **USB2.0** output

The USB2.0 Output plugs into a USB2.0 port. This connection powers the VIP-45 and provides the output channel for the probe images. An appropriate driver and Pass/Fail software must be installed on the PC to view the VIP-45 output. See your software manual for details on installation of the driver and software and the User's Guide.

# **Changing VIP-45 Tips**

VIP-45 tips are held in place with a lock nut.



Holding the probe, turn the lock nut counter-clockwise to loosen it fully, and then remove the tip.



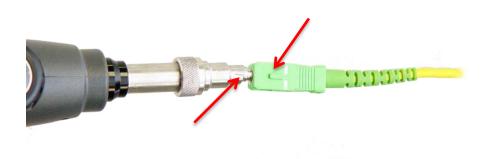
All tips have a slot and fit into the key at the top of the probe. Slide the new tip in place and slip the lock nut over

the tip. (You may want to use a finger to hold the tip in place until the lock nut has started threading.) Tighten the nut snugly – if the tip is loose, it may not focus properly.



# **Inspecting Male Connectors**

With the correct tip installed for the connector type, place the connector onto the probe tip so that it fits snugly, then use the focus knob on the VIP-45 to focus the image on your PC screen. If you are unable to focus, you may not have the connector fully inserted on the tip. Make sure it seats fully, and refocus.



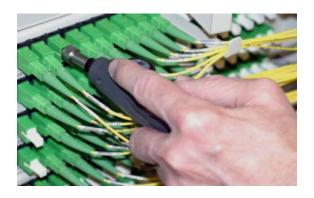
Male APC tips have a mark which should be aligned to the connector key for proper viewing.



# **Inspecting Female Connectors**

With the correct tip installed for the connector type, place the tip of the probe into the adapter and use the focus knob on the VIP-45 to focus the image. If you are unable to focus, you may not have the probe tip fully inserted. Make sure it seats fully, and refocus.

If you are inspecting female APC connectors, make sure the tip's alignment mark matches the connector's key.



# **Cleaning Connectors**

After inspecting, you can use the PRO Quick Clicks to clean in the adapter. Insert the cleaner and push until it clicks. Remove and be sure to reinspect to ensure the female connector is clean before re-mating the connectors.

These cleaners can also be used to clean male connectors. PRO has cleaners for 1.25mm, 2.0mm. 2.5mm and MPO connectors. Cleaners can be used for both PC and APC type connectors.







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