

# Digital Inspector (DI-1000)



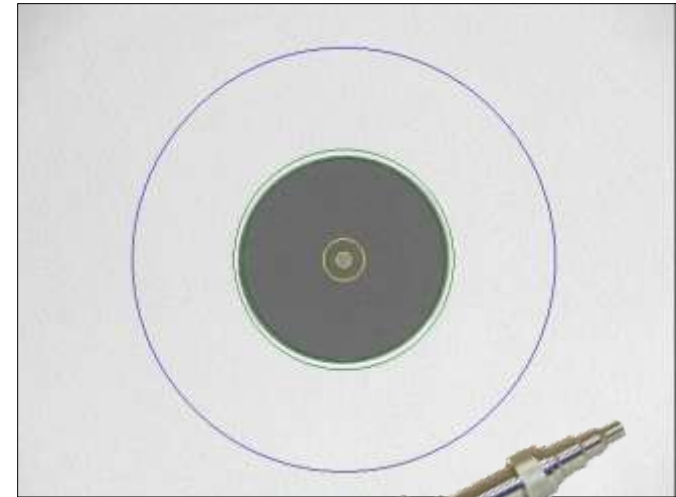
1. Introducing the DI-1000
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# DI-1000 Introduction

The DI-1000 is an all digital video microscope for inspecting the endface of fiber optic connectors. It connects directly to your PC through the computer's USB2.0 port to view and capture images on your PC.

## Specifications

Magnification	400X (w/ 9" monitor) (Lower magnification optional)
Field of View	~ 425 $\mu$ m x 320 $\mu$ m (standard) ~ 640 $\mu$ m x 480 $\mu$ m (optional)
Resolution	0.5 $\mu$ m detectable
Focus	Manual adjustment, 2mm max travel
Light source	Blue LED
Power Supply	PC USB2.0 port
Dimensions	35mm diameter x 175mm length (without tip)
Weight	200g
Operating Temperature	0° C to 50° C
Storage Temperature	-20° C to 70° C



# The DI-1000 Package



The DI-1100 comes in a fold-up zippered case designed to easily fit into most laptop cases.

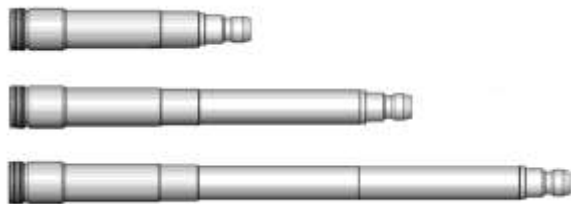
The basic packages are available with either standard UPC tips or with an SC APC tip package.

Both packages include Lightel's ConnectorView™ image capture software.

# DI-1000 Tips

Male connectors use universal tips based upon connector ferrule size. Different types of female connectors will usually require a tip designed specifically for that connector type. For both, PC and APC versions will be different, and APC tips will be have a mark to match the key. All Lightel tips are engraved for easy identification.

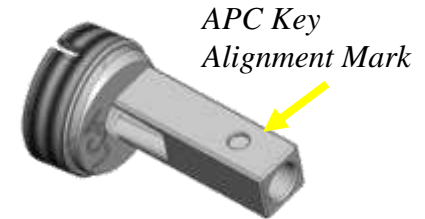
In addition to standard tips Lightel offers a wide variety of Series 2 specialty tips to accommodate special situations.



Extended tips



Angled tips



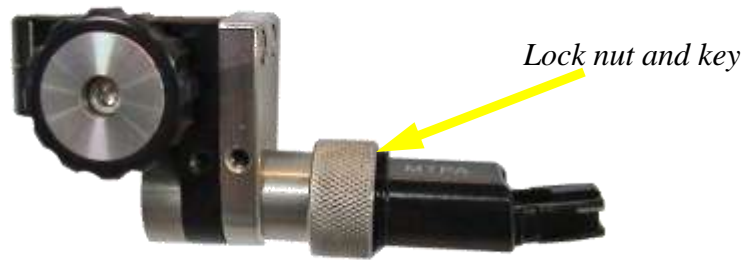
Ribbon fiber tips

# DI-1000 Tips

60° angled tips have two key slots at top and bottom to allow use from two different directions.



The front end of the MTP/APC tip can be set in two positions in a similar fashion.



# CI-1000 and DI-1000 Tips

CI-1000 tips (Series 1 tips) and DI-1000 tips (Series 2 tips) are clearly distinct.

Series 1 tips have an inside thread. Series 2 tips have a key slot and are threaded on the outside.

Series 2 tips can only be used on the Series 2 probe (for VC-6200, CI-1100 and DI-1000). They are not compatible with the Series 1 probe (for VC-6100 and CI-1000). All DI-1000 tips start with the part number "PT2-"

An adapter is available for Series 1 tips allowing them to be used with the Series 2 probes (VC-6200-PL, CI-1100 and DI-1000). This adapter can be used with any Series 1 tip.



PT2-CI/ADAPT



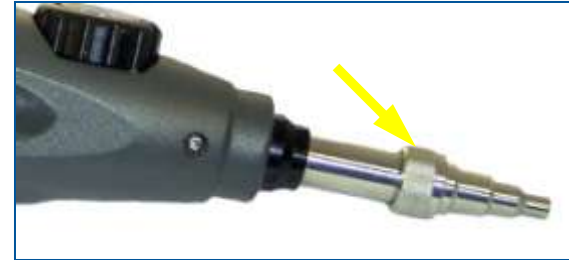
**CI-1000 tip**  
(Series 1)  
CI-1000-LC/F



**DI-1000 tip**  
(Series 2)  
PT2-LC/PC/F

# Changing DI-1000 Tips

DI-1000 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.

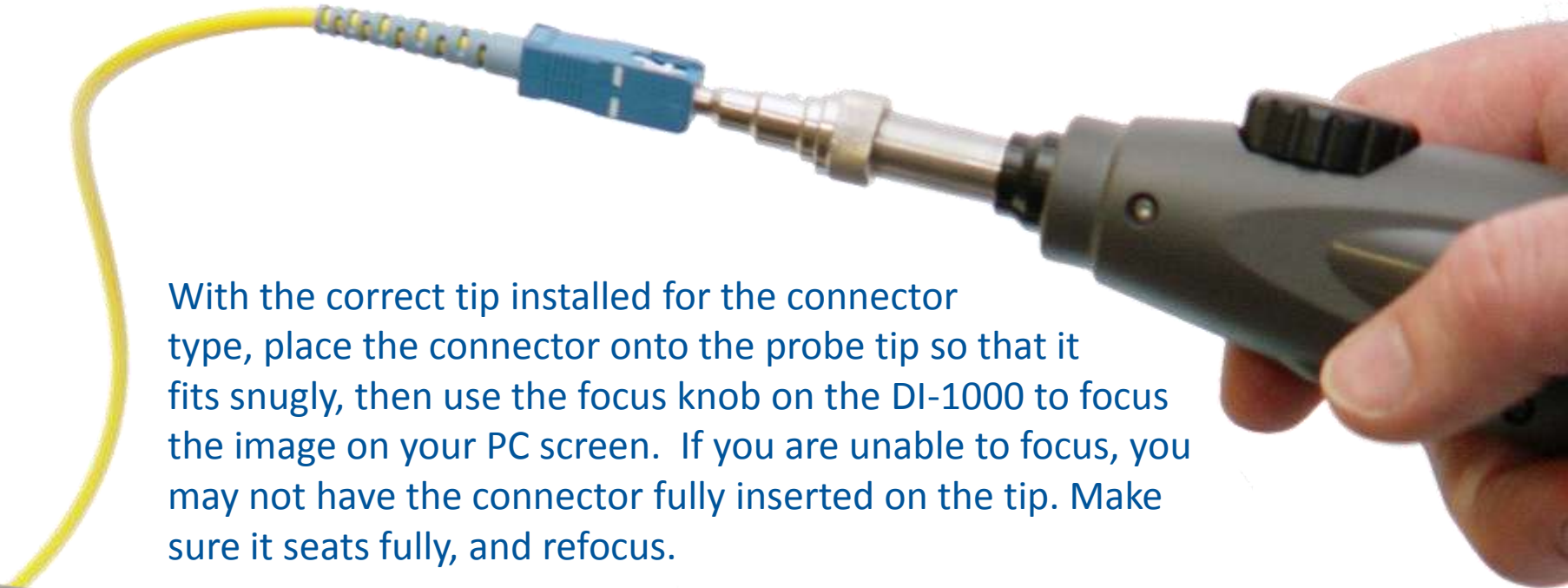


All tips have a slot and fit into the key at the top of the probe. Slide the new tip in place and slip the lock nut over the tip. (You may want to use a finger to hold the tip in place until the lock nut has started threading.) Tighten the nut snugly – if the tip is loose, it may not focus properly.

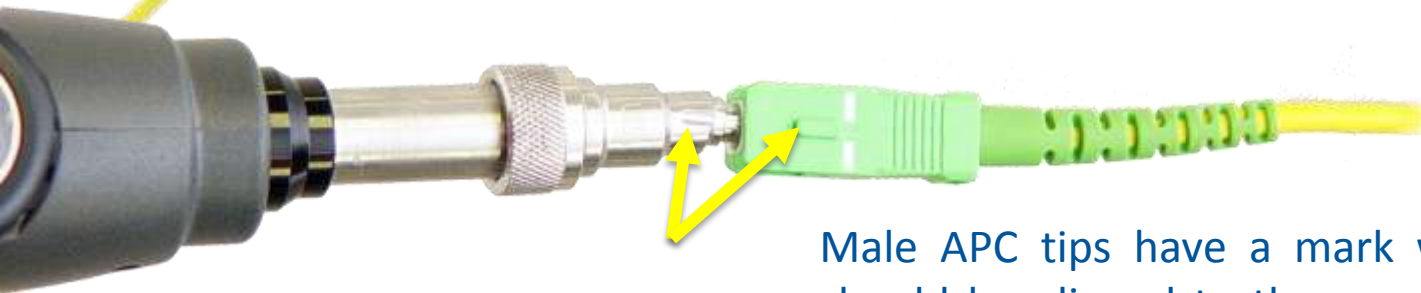




# Inspecting Male Connectors



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 DI-1000 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



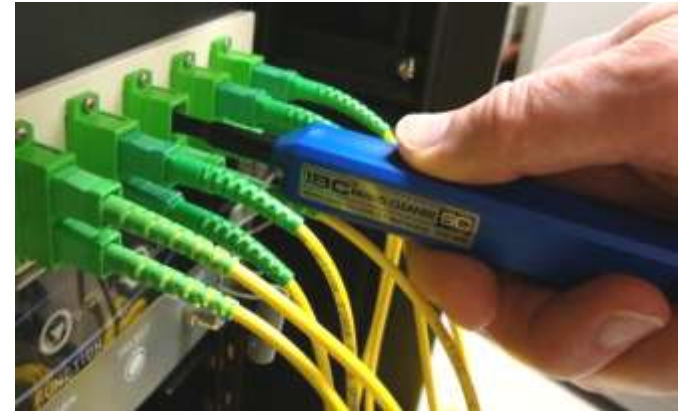
With the correct tip installed for the connector type, place the tip of the probe into the adapter and use the focus knob on the DI-1000 to focus the image. If you are unable to focus, you may not have the probe tip fully inserted. Make sure it seats fully, and refocus.

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

When inspecting in-adapter connectors (female), access problems may require specialty tips. The Lightel website lists more than 50 Series 2 tips available for the DI-1000.

# Cleaning Connectors

After inspecting, you can use the IBC™ cleaner or FerruleMate™ 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. Lightel has cleaners for 1.25mm, 2.0mm, 2.5mm and MTP connectors. Cleaners can be used for both PC and APC type connectors.

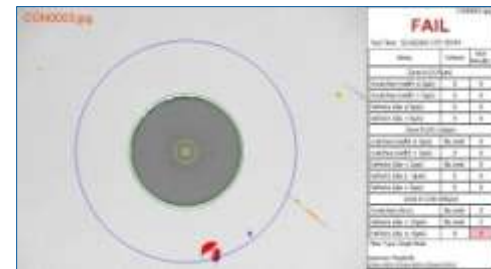
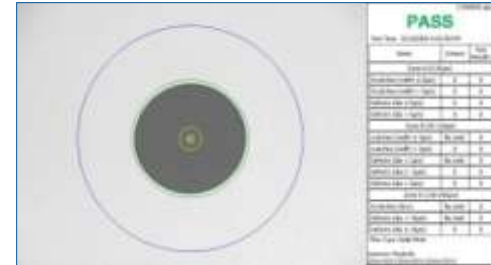


# ConnectorView™ Plus

Lightel's ConnectorView Plus software is our optional Pass/Fail analytical software available for ViewConn and other Lightel video microscopes.

ConnectorView Plus will automatically analyze the connector condition and provide a report. It can be used with single mode and multimode, male and female, PC and APC connectors.

Summary reports can also be generated.



Filename	Test Time	Pass/Fail	User	2008-08-08				2008-08-09				2008-08-10						
				08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00			
0208080808	10:14:00	PASS	SA															
0208080809	10:14:00	FAIL	SA															
0208080810	10:14:00	PASS	SA															
0208080811	10:14:00	PASS	SA															
0208080812	10:14:00	FAIL	SA															
0208080813	10:14:00	PASS	SA															
0208080814	10:14:00	PASS	SA															
0208080815	10:14:00	PASS	SA															
0208080816	10:14:00	PASS	SA															
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0208080818	10:14:00	PASS	SA															
0208080819	10:14:00	PASS	SA															
0208080820	10:14:00	PASS	SA															



# Additional Accessories



Tip boxes



Cleaning devices