# **FIBERCHEK2™**

Automated fiber end face inspection & analysis system

# **QUICK START GUIDE**





**ZP-PKG-0318** REV 2

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INDEPENDENT This unit has undergone extensive testing according to the European Union Directive and LABORATORY TESTING Standards.

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# **QUICK START**

1

# SOFTWARE INSTALLATION

**ו** ()

**IMPORTANT!** Install the software before attaching the microscope to PC.

### Minimum System Requirements

- PC/laptop with Pentium® III
   1.0 Ghz CPU or higher
- Windows<sup>®</sup> 2000 (SP4), XP or Vista<sup>®</sup> Operating System
- 30 MB of hard drive space for application software
- One open USB 2.0 port
- 128 MB RAM

### **1.** INSERT FIBERCHEK2<sup>™</sup> CD

 Insert FiberChek2<sup>™</sup> CD and wait for the automatic Welcome to the FiberChek2<sup>™</sup> Setup Wizard menu to launch OR locate the setup file on the software CD and open.

### 2. INSTALL FIBERCHEK2<sup>™</sup> SOFTWARE



 At the Welcome to the FiberChek2 Setup Wizard menu click Next > to continue.

etup - FiberChek2	
License Agreement Please read the following important information before continuing.	<b>P</b>
Please read the following License Agreement. You must accept the terms of this agreement before continuing with the installation.	
WESTOVER SCIENTIFIC LICENSE AGREEMENT	^
The License Agreement governes your use of the enclosed Software product. By Installing and/or using the Software your gares to be loaded by the terms of the Agreement. If you do not agree to these terms and conditions, prompty return all the components of this product to the place of purchase and your money will be infunded. LUCINES: This License Agreement allows you to use one copy of the enclosed Software on a since construct. If you table the Software on a since construct server.	
you must purchase a separate copy of the Software for each computer that will be	~
I accept the agreement	
I do not accept the agreement	
< Back Next >	Cancel
· · · · · · · · · · · · · · · · · · ·	-

 At the *License Agreement* menu select I accept the agreement button, then click Next > to continue.

Setup - F	iberChek2
Select De	stination Location
Where	should FiberChek2 be installed?
	Setup will install FiberChek2 into the following folder.
To cont	inue, click Next. If you would like to select a different folder, click Browse.
C:\Pro	ram Files\Westover Scientific\FiberChek2 Browse
(a.)	20.0 MD of fees while service in service of
Atleast	38.9 MB of free disk space is required.
	< Back Next > Cance

 At the Select Destination Location menu, accept the default location (strongly recommended) for the application files OR click Browse to select a user-defined location then click Next > to continue.

Set Set	up - FiberChek2
	Vhich components Which components should be installed?
	Select the components you want to install; clear the components you do not want to nstall. Click Next when you are ready to continue.
1	ver gogram Files ☑ PPF-PseudoPrinter
	Current selection requires at least 41.3 MB of disk space.
	< Back Ned > Cancel
	Sector Contraction of the Contra

 At the Select Components menu, make sure the box next to PDF-PseudoPrinter is checked and click Next > to continue.

### **CHAPTER 1**

Setup - FiberChek2	
Select Additional Tasks Which additional tasks should be performed	?
Select the additional tasks you would like Se then click Next.	stup to perform while installing FiberChek2.
Additional icons:	
Create a desktop icon	
Create a Quick Launch icon	
New York	
	and the second sec
	< Back Next > Cancel

 At the Select Additional Tasks menu, select/check options for FiberChek2<sup>™</sup> icon placement then click Next > to continue.

Setup - FiberChek2		
Ready to Install Setup is now ready to begin installing FiberC	Thek 2 on your computer.	Ö
Click Install to continue with the installation, change any settings.	or click Back if you want to	review or
Destination location: C:\Program Files\Westover Scientific\F	RberChek2	^
Setup type: Installation Options		
Selected components: Program Files		
Additional tasks: Additional icons: Create a desktop icon Create a Quick Launch icon		~
<		2
	< Back Instal	Cancel

• At the *Ready to Install* menu, confirm settings then click **Install** to continue.



 At the Welcome to the Device Driver Installation Wizard menu, click Next > to continue.



• At the *Completing the Device Driver Installation Wizard* menu, click **Finish** and continue to hardware installation.

Setup - FiberChek2	
Information Please read the following important information before continuing.	J.
When you are ready to continue with Setup, click Next.	
RberChek2 Release Notes	-
1.0 Installing FiberChek2 Software	
NOTE: For best results, install the software before connecting either the Westover USB2 video capture device or the hardware lock device to your computer!	
Before installing, remove any previously installed versions of FiberChek2:	
a) Click on the Start menu button.	~
Next >	$\rangle$

• At the *Information* menu, click **Next >** to continue.

📳 Setup - FiberChek2	
	Completing the FiberChek2 Setup Wizard
	Setup has finished installing RberChek2 on your computer. The application may be launched by selecting the installed icons.
	Click Finish to exit Setup.
	View User Guide (UserGuide.pdf)
	< Back Finish
	1999

• At the *Completing the FiberChek2 Setup Wizard* menu, click **Finish** to complete software/driver installation.

### HARDWARE INSTALLATION

### NOTE: If you are installing this software (FiberChek2 REV 1.07) for a previous version of the FVD or P5000 model (REV B), go to page 19 for driver installation procedures.



**3.** PLUG THE MICROSCOPE INTO THE COMPUTER

 Wait for the automatic Found New Hardware Wizard menu to launch.

### uEye boot DRIVER INSTALLATION

### 4. INSTALL "uEye boot" DRIVER



 At the Welcome to the Found New Hardware Wizard menu, make sure the circle next to Install the software automatically (Recommended) is checked, then click Next > to continue.



 At the Completing the Found New Hardware Wizard menu, click
 Finish to complete "uEye boot" driver install.

### FOR NON-WINDOWS® VISTA® COMPUTERS ONLY

uEye UI-1483 WO Series INSTALLATION

### 4a. INSTALL "uEye UI-1483-WO Series" DRIVER



 At the Welcome to the Found New Hardware Wizard menu, make sure the circle next to Install the software automatically (Recommended) is checked, then click Next > to continue.



 At the Completing the Found New Hardware Wizard menu, click
 Finish to complete
 "uEye UI-1483-WO Series" driver
 install.

# INSPECT FIBER 5. OPEN/LAUNCH FIBERCHEK2™



• Locate FiberChek2<sup>™</sup> application and open.

### FOR P5000 PROBE ONLY

INSTALL INSPECTION TIP & SELECT CALIBRATION

# 5a. FOR P5000 PROBE MICROSCOPE ONLY



 Select the appropriate inspection tip that corresponds to the connector type and side being inspected and attach to probe.



 From the pre-configured Calibration settings dropdown list, select the appropriate inspection tip type being used (see page 17 for Calibration descriptions).

### 6. ATTACH FIBER TO THE MICROSCOPE



 Insert the probe into the bulkhead (for probe) or attach the patch cord to the microscope.

# 7. FOCUS THE FIBER END FACE IMAGE ON SCREEN



 Adjust the focus of the fiber end face image on the computer screen by turning the Focus Control on the microscope.

# 8. SELECT PROFILE SETTING



 From the pre-configured Profile settings drop-down list, select the appropriate connector being inspected (see page 18 for available Profiles).

# 9. INSPECT & ANALYZE



 Press the QuickCapture<sup>™</sup> button on the probe or benchtop microscope OR click the Test Fiber! button from the FiberChek2<sup>™</sup> toolbar to run analysis.

# P5000 DIGITAL PROBE MICROSCOPE

# 2

INTRODUCTION The WESTOVER P5000 Digital Probe Microscope is a portable handheld microscope used to view and inspect both the bulkhead (female) and patch cord (male) sides of fiber connectors as well as other optical devices, such as transceivers. The probe is specially designed to fit and operate comfortably and easily in-hand, allowing the user to inspect hard-to-reach connectors that are installed on the backside of patch panels or inside hardware devices. The P5000 requires an FBPT inspection tip and is connected to the PC/laptop with a USB 2.0 connector.



- FEATURES Inspects and analyzes both the bulkhead (female) and patch cord (male) sides of fiber interconnects
  - Eliminates human subjectivity
  - Instant automated PASS or FAIL result
  - Comprehensive selection of precision FBPT inspection tips and adapters that enable inspection of every connector and application
  - 5 MP high-resolution camera and coaxial illumination for crisp, clear view of fiber end face



Laptop not included.

P5000 PROBE SPECIFICATIONS	Dimensions	140 x 46 x 44 mm (5.5 x 1.8 x 1.7 in)
	Weight	110 g (3.88 oz)
	LOW Mag Field-of-View (FOV)	Horizontal: 714 μm Vertical: 535 μm Diagonal: 892 μm
	HIGH Mag Field-of-View (FOV)	Horizontal: 446 µm Vertical: 335 µm Diagonal: 558 µm
	Connector	USB 2.0 (with latch lock)
	Cord Length	180 cm (6 ft)
	Camera Sensor	1280 x 1024 black & white, 1.27 cm CMOS
	Live Image	800 x 600; 15 fps
	Particle Size Detection	< 1 µm
	Light Source	Blue LED, 100,000+ hour life
	Lighting Technique	Coaxial
	Power Source	From PC/Laptop USB port
	Certification	CE
	Warranty	1 yr

# **FVD BENCH-TOP MICROSCOPE**

# 3

INTRODUCTION The FVD Series Digital Fiber Microscope has been specifically designed to inspect the polished surface or cleaved ends of fiber optic cable. This high-resolution bench-top inspection microscope is ideally suited for post-polish inspection of high-quality end faces and can repeatably detect scratches that human technicians would often miss, delivering the sensitivity the industry has long sought. The FVD requires a connector adapter and PC (see system requirements, page 2). The PC powers the unit through the USB 2.0 cable.



- FEATURES Inspects and analyzes patch cord (male) sides of fiber interconnects
  - Eliminates human subjectivity
  - Instant automated PASS or FAIL result
  - Comprehensive selection of precision FMA adapters that enable inspection of every connector
  - 5 MP high-resolution camera and coaxial illumination for crisp, clear view of fiber end face



PC / display not included.

FVD SPECIFICATIONS	Dimensions	17.8 x 7.9 x 1	17.8 x 7.9 x 11.7 cm (7.0 x 3.1 x 4.6 in)		
	Weight	1.36 kg (3.0 l	1.36 kg (3.0 lbs)		
	LOW Mag Field-of-View (FOV)	Horizontal: Vertical: Diagonal:	298 µm 223 µm 372 µm		
	HIGH Mag Field-of-View (FOV)	Horizontal: Vertical: Diagonal:	186 μm 140 μm 233 μm		
	Connector	USB 2.0			
	Cord Length	180 cm (6 ft)			
	Camera Sensor	1280 x 1024	black & white, 1.27 cm CMOS		
	Live Image	800 x 600; 15	fps		
	Particle Size Detection	< 0.5 µm			
	Light Source	Blue LED, 100,000+ hour life			
	Lighting Technique	Coaxial			
	Power Source	From PC/Laptop USB port			
	Certification	CE			
	Warranty	1 yr			

# FIBERCHEK2



**INTRODUCTION** FiberChek2<sup>™</sup> is an advanced application that determines the acceptability of optical fiber end faces through automated inspection and analysis. It identifies and characterizes defects and contamination, and determines their location relative to the fiber core. It then provides a PASS or FAIL result according to the pre-configured failure criteria.



RED LINE The **Focus Quality Meter** is a visual gauge that aids the users in finding the optimal focus point. Optimal focus level is reached when the blue bar is closest to the red line. **NOTE:** The percentage number/value is relative.

### FOR P5000 PROBE ONLY

PRE-CONFIGURED CALIBRATION SETTINGS

Calibration (Active Calibration: Password Protection Warning: If you enable password proview or edit the calibrations without e	tection, it will not be possible to		×
Password:		<b>↓</b>	- CALIBRATION SETTINGS ON MAIN DROP-DOWN LIST
Other available calibrations: FBPT-U12-A6 Tp E2000 Standard Tps (with BAP2) Mi(Aero Guides (with BAP3) FBPT-SC-A6 Tp	Calibrations: Standard Tpps Ribbon Tpp Simplex Long R Ribbon Tips - L	each (-L) Tips	↑ Add ↓ Edt Delete
	OK Cancel	Help	

### • STANDARD TIPS (WITH BAP1)

Select when using **standard tips with FBPP-BAP1** barrel assembly. *Tips that use this* setting include FBPT-SC, FBPT-LC, FBPT-ST, FBPT-FC, FBPT-SC-APC & FBPT-FC-APC.

#### STANDARD TIPS (WITH BAP2)

Select when using **standard tips with the FBPP-BAP2** barrel assembly for longer reach inspection. *Note:* The FBPP-BAP2 accepts the same tips as the FBPP-BAP1.

#### MIL/AERO TIPS & GUIDES (WITH BAP3)

Select when using **guides designated for inspecting Military & Aerospace connectors** with the narrow barrel assembly (*FBPP-BAP3*).

### • LONG REACH (-L) TIPS

Select when using **long reach inspection tips**. *Note:* Long Reach inspection tips are noted with the suffix "-L" on the part number (ex: FBPT-SC-L, FBPT-LC-L, etc.).

#### RIBBON TIPS

Select when using **tips designated for inspecting ribbon connectors.** *Note: Ribbon connectors contain an array of multiple fibers in a single connector (ex: FBPT-MTP).* 

#### E2000 TIPS

Select when using long reach E2000 inspection tips (ex: FBPT-E2000).

#### SC-A6 TIP (60 DEGREE ANGLE)

Select when using **SC inspection tips with a 60 degree angle.** *Note: Angled inspection tips are typically noted with the suffix "-A6" on the part number (ex: FBPT-SC-A6, FBPT-SC-A6, FBPT-SC-A6).* 

**CHAPTER 4** 

**PROFILES PROFILES** contain the analysis parameters by which PASS/FAIL criteria are determined within FiberChek2<sup>™</sup>.

A set of pre-configured **PROFILES** are included with FiberChek2<sup>™</sup>. These settings have been carefully engineered and optimized to meet industry standards.

**NOTE:** JDSU strongly recommends using the pre-configured Profiles.

PROFILES MENU	FBP-P5000 Profiles		X
	Other available profiles:	Profiles:	New profile Copy
	SM, Post Polish MM, Post Polish Rib, SM, Post Polish Rb, MM, Post Polish SFP Lenses	SN, In-Service       >>     MN, In-Service       Rb, SM, In-Service       Rb, MM, In-Service       OK	Edit profile     Elit profile

### PRE-CONFIGURED PROFILES SETTINGS

- SM, Post Polish
- SM, In-Service
- MM, Post Polish
- MM, In-Service
- Rib, SM, Post Polish
- Rib, SM, In-Service
- Rib, MM, Post Polish
- Rib, MM, In-Service
- SFP Lenses

#### ABBREVIATIONS

- SMSingle-modeMMMultimode
- Rib Ribbon
- SFP Small Form-factor Pluggable (Transceivers)

**NOTE: Post Polish** Profiles are configured and designated for **FVD microscopes.** 

Driver Installation for REV B Models

# **APPENDIX**

# DRIVER INSTALLATION FOR REV B MODELS

VERIFYING REV B MODEL



If the label reads **"USB Driver B,"** on the bottom of the FVD microscope or at the end of the P5000 probe USB cord, the then your microscope is a previous REV B model. Follow the driver installation procedures below.

"uEye UI-1543-WO Series" DRIVER INSTALLATION FOR PREVIOUS REV B MODELS

### 1. INSTALL SOFTWARE

• See software installation procedures, STEPS 1–2 on pages 4–7.

### 2. PLUG IN THE MICROSCOPE TO THE COMPUTER

• Wait for the automatic *Found New Hardware Wizard* menu to launch.

### 3. INSTALL "uEye UI-1543-WO Series" DRIVER



 At the Welcome to the Found New Hardware Wizard menu, check the circle next to Install the software automatically (Recommended) then click Next > to continue.

 At the Completing the Found New Hardware Wizard menu, click
 Finish to complete
 "uEye UI-1543-WO Series" driver install.

FIBERCHEK2<sup>™</sup>

# **CUSTOMER SUPPORT**

### Please have the following information available:

#### FOR PRODUCT PROBLEMS

- Catalog Number and Serial Number (*if applicable*) of the product(s)
- Description of problem

#### FOR SOFTWARE PROBLEMS

- Type of computer you are using
- Operating System you are using
- FiberChek2<sup>™</sup> software version (click About FiberChek2<sup>™</sup> from Help menu)

### **TOLL FREE (US & Canada)**

Customer & Technical Service 800-304-3202

### Local & International

►	Customer Service	425-398-1298
►	Fax	425-398-0717

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