

FOCIS Flex

Fiber Optic Connector Inspection System

User Guide

Table of Contents

Safety Information	4
General Information	5
FOCIS Flex aeRos® Solution Overview	5
FOCIS Flex Fiber Optic Connector Inspection System	5
aeRos	5
FOCIS Flex App	5
Made for iPad mini 3 - Legal Notice	5
How to View Device Information Menu	6
Warranty Terms and Conditions	6
Repair Services	6
Standards Compliance Information	6
FOCIS Flex Overview	7
Controls, Display, Interfaces	7
Properly Installing and Removing Adapter Tips	8
Identifying Connector Adapter Tips	8
Getting Started	9
Powering Up/Down	9
Battery Charging and Operation	9
Live Image Mode Features	10
Capture Key Operation	10
Captured Image Mode Features	11
Pass/Fail Results Table	12
Image Information Screen	13
Main Menu and Settings	14
Main Menu Overview	14
Settings Menu Overview	14
IEC Pass/Fail Analysis	15
Example IEC Rule	15
Setting Pass/Fail Criteria	16
Configuring Auto-Save and Auto-Send	18
Configuring Bluetooth	19
Power Save Setting	19
Set Time and Date	19
Saving Captured Images	20
Saving to the Current Folder	20
Saving to a Newly Created Folder	20
Saving to an Existing Folder	20
Configuring Image Pairing	21

Table of Contents

Viewing Saved Results (Results Manager)	22
Opening Image Files - Reviewing Saved Results	22
Creating New Jobs/Cables/Files	22
Deleting Jobs/Cables/Files	22
Using FOCIS Flex with FOCIS Flex App	23
Sharing Captured Test Results.	24
Sending Captured Results to FlexTester/FlexScan	24
Configuring Bluetooth	24
Manually Send Results to FlexTester/FlexScan	24
Uploading Inspection Results to a PC	25
Inspection Reporting using TRM® 2.0	25

Safety Information

IMPORTANT! Proper care in handling should be taken when using any precision optical test equipment. Scratched or contaminated optical connectors can impact the performance of the instrument.

NOTE! FOCIS Flex contains no user serviceable parts. This instrument must be returned to AFL or authorized agents for repair.

IMPORTANT! It is important to keep connector end-faces on the launch and receive cables and those on the Fiber Under Test (FUT) clean, to ensure accurate measurements and operation.

CAUTION! Never view a live fiber. Never look directly into the optical outputs of fiber optic network equipment, test equipment, patch cords and jumpers. Laser radiation is harmful to eyes.

WARNING! Use only the specified AC adapter. Use of another type of AC adapter can damage the instrument and create the danger of fire and electrical shock.

WARNING! To avoid the danger of fire and electrical shock:

- Never use a voltage that is different from that for which the AC adapter is rated.
- Do not plug the unit into a power outlet that is shared by other devices.
- Never modify the power cord or excessively bend, twist, or pull it.
- Do not allow the power cord to become damaged. Do not place heavy objects on the power cord or expose it to heat.
- Never touch the AC adapter while your hands are wet.
- Should the power cord become seriously damaged (internal wiring exposed or shorted), contact the manufacturer to request servicing.

NOTE! Refer to your company's safety procedures when working with optical systems.

NOTE! Follow your company's approved cleaning procedures.

General Information

FOCIS Flex | aeRos® Solution Overview

Paired with AFL's FOCIS Flex Fiber Optic Connector Inspection System, AFL's aeRos cloud with FOCIS Flex app features a complete fiber optic connector inspection and workflow and data management solution.

FOCIS Flex Fiber Optic Connector Inspection System

FOCIS Flex is a self-contained, compact, and hand-held inspection probe that can be used independently or paired with AFL's FOCIS Flex app and aeRos cloud.

FOCIS Flex probe auto-focuses, centers and captures the inspected fiber end-face image, applies pass/fail rules, and displays image and pass/fail results. Inspection results are wirelessly transferred to a smart device and seamlessly synchronized with the aeRos cloud for instant access, analysis, and reporting. If needed, results can be saved internally to FOCIS Flex probe and then transferred to a PC via USB connection.

aeRos

aeRos is an open, cloud-based, workflow management platform that facilitates two-way communication and data exchange from engineering to project management to your technician in the field. Now everyone has access to test results and can address challenges in real-time. aeRos allows project managers to send jobs directly to technicians, defining tests and configurations as needed. Throughout the job, managers can monitor technicians' progress and help to solve problems as they arise.

aeRos solution is available in two options: aeRos BASIC and aeRos PRO:

aeRos® BASIC account — Data Management solution that allows users to save their test data in the aeRos Cloud and then retrieve it from anywhere at any time with a standard Internet browser. aeRos BASIC is free to all owners of AFL's aeRos enable test equipment.

aeRos® PRO account — Workflow Management solution that allows users to manage their entire testing workflow and enables seamless and efficient communications and data management. aeRos PRO is available in annual and lifetime License configurations.

FOCIS Flex App

By pairing the FOCIS Flex inspection probe with the FOCIS Flex app and aeRos PRO, users are enabled to control their test hardware directly from their Android or iOS smart devices. With aeRos PRO account, test projects and setups can be created and predefined in aeRos cloud, and then pushed to the smart device app to simplify the test process for technicians. Technicians receive a notification on their smart device and can work on scheduled projects. As the project is completed, inspection results are automatically synchronized with the cloud for instant access, analysis, and reporting.

FOCIS Flex app is available via Google play store or App Store.



Made for iPad mini 3 - Legal Notice



"Made for iPad" means that an electronic accessory has been designed to connect specifically to iPod, iPhone, or iPad, respectively, and has been certified by the developer to meet Apple performance standards.

Apple is not responsible for the operation of this device or its compliance with safety and regulatory standards. Please note that the use of this accessory with iPod, iPhone, or iPad may affect wireless performance.

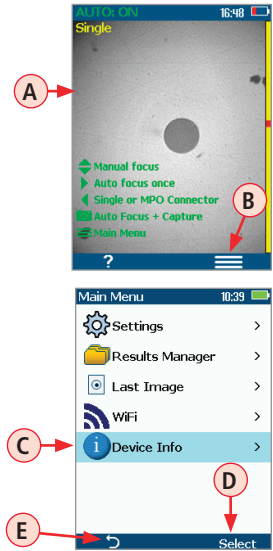
- iPad, and Retina are trademarks of Apple Inc., registered in the U.S. and other countries.
- iPad mini is a trademark of Apple Inc., registered in the U.S. and other countries.
- Android is a trademark of Google Inc.

General Information

How to View Device Information Menu

- From the Live Image mode (A), press the Main Menu (B) key to access the Main Menu screen.
- Press Up/Down $\blacktriangle/\blacktriangledown$ arrow keys to navigate and highlight the Device Info menu (C).
- Press Select (D) or Right \blacktriangleright arrow key to display a sub-screen of the Device Info menu, which will display the following Info:
 - Device name
 - Serial number
 - Controller version number
 - User Interface version Number
- Press Back (E) soft key to return to Live Image mode.

Note: It is helpful to have your FOCIS Flex Device Information available if you need to contact AFL Test & Inspection Customer Service or Technical Support.



Warranty Terms and Conditions

AFL Test and Inspection products are warranted against defective material and workmanship for a period of (1) one year from the date of delivery to the end user. Optional Extended Warranty starts at the end of the standard (1) one year warranty period. Any product that is found defective within the warranty period, will (at the discretion of AFL) be repaired or replaced. Warranty will be voided if the product has been repaired or altered by other than an authorized AFL repair facility or when it has been subjected to misuse, negligence, or accident.

In no case shall AFL liabilities exceed the original purchase price.

Repair Services

Please contact customer service for a return authorization number prior to sending your AFL test equipment in for repair or calibration.

USA Repair and Calibration services

AFL Test & Inspection Division
16 Eastgate Park Road
Belmont, NH 03220
603-528-7780
800-321-5298

Europe Repair and Calibration services

Fujikura Europe Ltd.
C51 Barwell Business Park
Leatherhead Road
Chessington, Surrey, KT9 2NY
+44 (0) 208 240 2020

Standards Compliance Information



FOCIS Flex has been designed and tested to comply with the relevant sections of any applicable specifications including full compliance with all essential requirements of the applicable EU Directives.



FOCIS Flex Overview

Controls, Display, Interfaces

Controls

- 1 Power key - 
- 2 Image Capture key - 
- 3 F1 soft key (typically Back function)
- 4 F2 soft key (typically Select function)
- 5 Navigation and Edit functional keys

Display (2-inch Color LCD [320 x 240])

- 6 Screen title
- 7 Battery status icon
- 8 Image and information display area
- 9 F1 and F2 soft key labels area

Interfaces

- 10. Optical inspection port
- 11. Adapter tip
- 12. Dust cover
- 13. Micro-USB port
- 14. 5 VDC input jack
- 15. Charging indicator



FOCIS Flex Overview

Properly Installing and Removing Adapter Tips

FOCIS Flex is available with the following adapter tips:

Connector	UPC Connectors		APC Connectors	
	Ferrule	Bulkhead	• Ferrule	Bulkhead
SC	FFLX-01-U25	FFLX-01-SC	FFLX-01-A25	FFLX-01-ASC
FC	FFLX-01-U25	FFLX-01-FC	FFLX-01-A25	FFLX-01-AFC
LC	FFLX-01-U125	FFLX-01-LC	FFLX-01-A125	FFLX-01-ALC
ST	FFLX-01-U25	FFLX-01-ST	Not applicable	Not applicable

Note: Contact AFL Sales Representative or Tech Support for additional connector adapter tips

Installing Adapter Tips

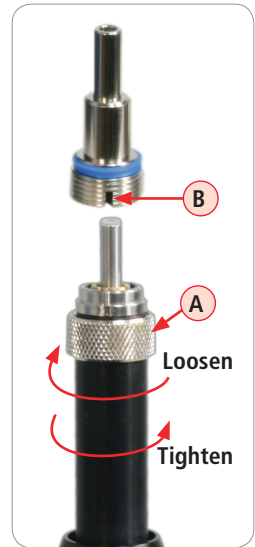
- While holding adapter tip in place, raise captive nut (A) until it engages with adapter tip threads.
- Turn captive nut counter-clockwise (viewed from front/top).
- Hand-tighten (do not over-tighten).

Removing Adapter Tips

Probe tips are held in place with a captive nut (A).

- Turn captive nut clockwise (viewed from front/top).
- Continue until captive nut is free of adapter tip.
- Remove adapter tip by pulling it gently straight off the probe base.

Note: For proper viewing, APC connectors must be aligned with the slot (B) in the threaded area of the correct APC adapter tip.



Identifying Connector Adapter Tips

- FOCIS Flex adapter tips are engraved to indicate connector type and application.
- FOCIS Flex adapter tips are shipped in labeled containers. Labels indicate:
 - AFL part number.
 - Connector type, ferrule type (UPC or APC), application.
- Blue ring on the adapter tip base indicates tip for UPC polished connector.
- Green ring on the adapter tip base indicates an adapter tip for angle-polished (APC) connector.

AFL NO.	Engraved ID	Description
FFLX-01-SC	SC	SC-UPC, Bulkhead
FFLX-01-FC	FC	FC-UPC, Bulkhead
FFLX-01-ST	ST	ST-UPC, Bulkhead
FFLX-01-LC	LC	LC-UPC, Bulkhead
FFLX-01-U25	U25	2.5 mm, UPC, Ferrule
FFLX-01-U125	U125	1.25 mm, UPC, Ferrule
FFLX-01-ASC	ASC	SC-APC, Bulkhead
FFLX-01-AFC	AFC	FC-APC, Bulkhead
FFLX-01-ALC	ALC	LC-APC, Bulkhead
FFLX-01-A25	A25	2.5 mm, APC, Ferrule
FFLX-01-A125	A125	1.25 mm, APC, Ferrule

Getting Started

Powering Up/Down

Power-Up

- Press and release the Power key **(A)**.

Power-Down

- Press and hold the Power key **(A)** until display turns off.

Configure FOCIS Flex to Auto-Off

- From the Main Menu -> Settings, select Display & Power Save option.
- Select desired power save option: 2 min, 5 min, 10 min, Never.








Battery Charging and Operation

- Plug the included AC Charger into AC outlet.
- Connect charger plug into 5 VDC jack **(B)** on FOCIS Flex.
- LED **(C)** indicates charging status as follows:
 - **OFF** - AC not connected
 - **RED** - Charging battery
 - **GREEN** - Fully charged
 - **RED/GREEN flashing** - Charging error. Verify correct 5VDC 2A charger is used. Allow to cool before charging.



- FOCIS Flex charges while operating.
- Battery icon **(D)** indicates battery state as follows:

-  - AC connected; charging, not fully charged
-  - AC connected; charging, fully charged
-  - Battery operation, fully charged
-  - Battery operation, partially charged
-  - <15 min Battery operating time remaining

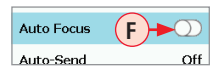
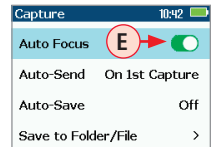
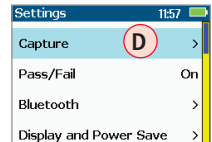
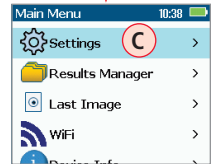
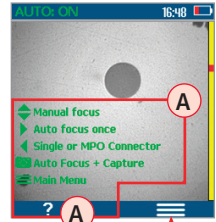


Getting Started

Live Image Mode Features

FOCIS Flex powers-up in the Live Image mode.

- Pressing and holding the Help **?** soft key **(A)** displays help tips about FOCIS Flex keys usage. **Note:** pressing the Left **◀** arrow key toggles between connector types:
 - Single** (single fiber connector, UPC or APC)
 - MPO-PC/APC** (MPO/MTP® multi-fiber connector; PC or APC finish)
 - MPO-Flat** (MPO/MTP multi-fiber connector; Flat finish [rare])
- Pressing the Menu **≡** soft key **(B)** displays the Main Menu that allows the user to set preferences, perform general settings, manage saved test results and perform other non-test functions.
- Pressing Menu > Setting **(C)**> Capture **(D)** displays the Capture settings menu.
- When the Auto Focus option is enabled **(E)** in the Capture screen and Capture key **(⏏)** is pressed:
 - Auto focus is initiated
 - Image is captured when auto focus completes
 - Image is analyzed if Pass/Fail set to On
 - FOCIS Flex transitions to Captured Image mode
- When Auto Focus is enabled or disabled:
 - Press Right **▶** arrow key to auto focus once
 - Press Up/Down **▼▲** arrow keys to manually adjust focus
- When the Auto Focus option is disabled **(F)** in the Setting screen and Capture key **(⏏)** is pressed:
 - Image is captured (without adjusting focus)
 - Image is analyzed if Pass/Fail set to On
 - FOCIS Flex transitions to Captured Image mode



Capture Key Operation

- In the Live Image mode, press the Capture key **(⏏)** to perform the following:
 - Auto Focus image (if the Auto Focus option is enabled)
 - Capture the displayed image and enter the Captured Image mode
 - Analyze image (if the Pass/Fail option is enabled)
 - Save results and send image to Bluetooth-paired device (if auto-save and auto-send enabled on **"1st Capture Key"**, see ["Configuring Auto-Save and Auto-Send" on page 18](#) for details)
 - If auto-save or auto-send enabled on **"2nd Capture Key"** (see ["Configuring Auto-Save and Auto-Send" on page 18](#)), press the Capture key again to save and/or send
- In Captured Image mode, press the Capture key to return to Live Image mode.
- In the Main Menu or Settings modes, press the Capture key to return to the most recent Live or Captured Image mode.

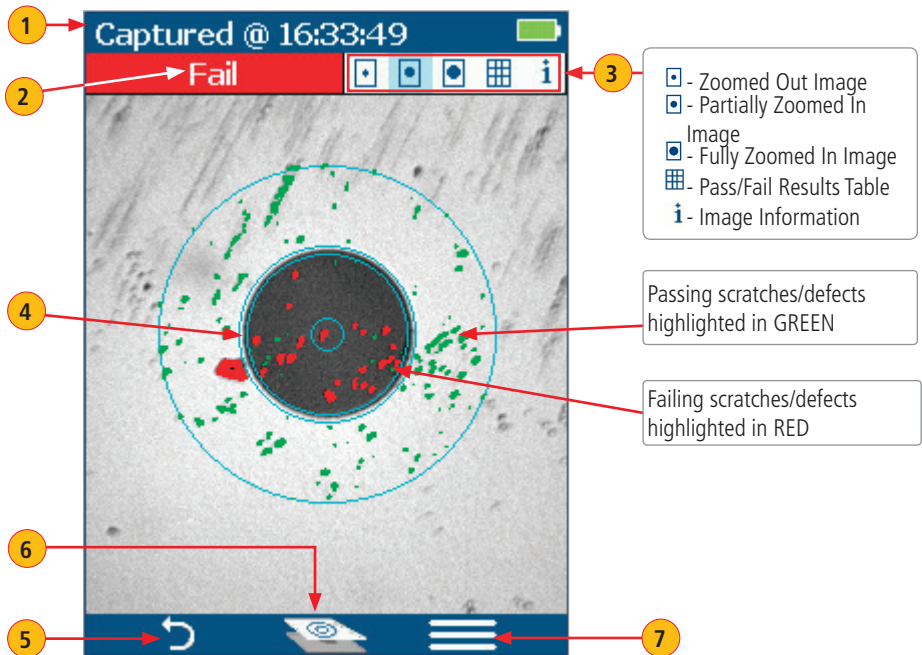
Getting Started

Captured Image Mode Features

Once an end-face image has been captured and analyzed, a zoomed-out view of the end-face and results is displayed.

Description

- 1 Screen Title: displays File Name (e.g. COO1-003) if saved image is shown or Captured @ hh:mm:ss if unsaved image is shown.
- 2 Pass/Fail Indication: shown only if Pass/Fail option is enabled in Settings.
- 3 Display Tabs: select the desired view using the Left/Right ◀▶ arrow keys.
- 4 End-face Image: displays end-face image with Pass/Fail overlay (if enabled).
- 5 Back soft key: press to return to previous screen.
- 6 Image Layers soft key: use Up/Down ⬆️⬇️ keys to view image layers as follows,
 - End-face image with overlay layer shown (default view)
 - End-face image only
 - Overlay only
- 7 Menu ≡ soft key: press to display the Save/Send Menu.



Zoomed in end-face image with Overlay

Getting Started

Pass/Fail Results Table

Description

- 1 Screen Title: displays File Name (e.g. CO01-003) if saved image is shown or Captured @ hh:mm:ss if unsaved image is shown.
- 2 Pass/Fail Indication: shown only if Pass/Fail option is enabled in Settings.
- 3 Display Tabs with the Pass/Fail display tab selected.
- 4 Analysis Rule applied to determine Pass/Fail.
- 5 Analysis Zones: A - core, B - cladding, C - adhesive, D - contact area.
- 6 Scratch analysis results for each zone:
 - Reports the number of detected scratches exceeding limit for each region
 - Highlights failed rules in RED
- 7 Defect analysis results for each zone:
 - Reports the number of detected defects exceeding limit for each region
 - Highlights failed rules in RED
- 8 Back soft key: press to return to previous screen.
- 9 Menu soft key: press to display the Save/Send Menu.

A B C			
A		>0 μm: 0	>0 μm: 1
B		>3 μm: 0	2-5 μm: 16 >5 μm: 4
C			
D			>10 μm: 1

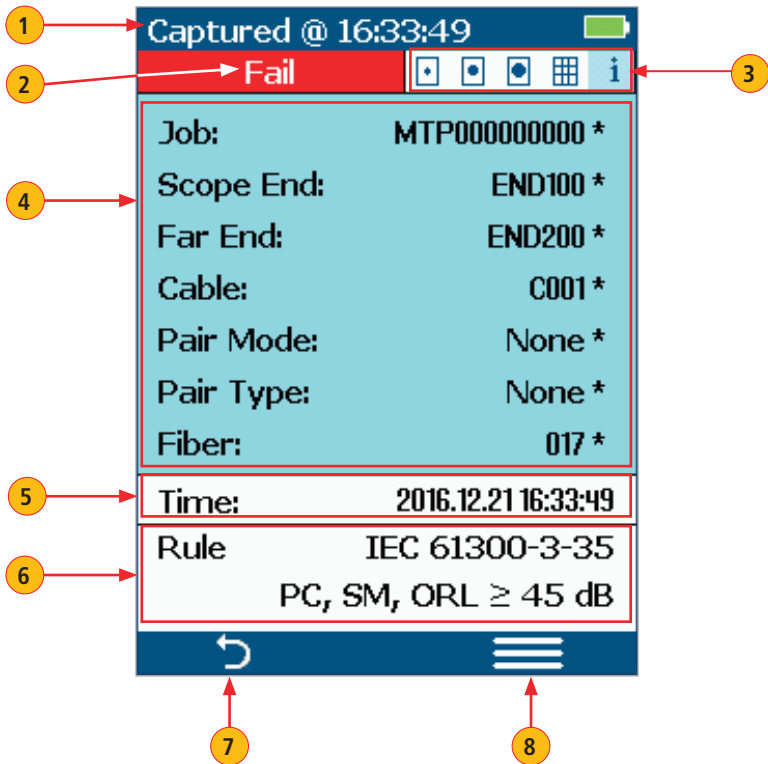
Note: See section [“Setting Pass/Fail Criteria”](#) on page 16 for details on how to select and/or edit pass/fail analysis rules.

Getting Started

Image Information Screen

Description

- 1 Screen Title: displays File Name as follows,
 - <Cable>-<Fiber> (e.g. C001-003) if saved image is shown.
 - 'Captured @ hh:mm:ss' if unsaved image is shown.
- 2 Pass/Fail Indication: shown only if Pass/Fail option is enabled in Settings.
- 3 Display Tabs with the Image Information display tab selected.
- 4 Results ID field: indicates default folder/file names.
 - Blue highlighted indicates that results are not saved.
- 5 Time & Date field: indicates Time & Date of the displayed captured image.
- 6 Rule field: indicates pass/fail analysis rule applied.
- 7 Back soft key: press to return to previous screen.
- 8 Menu soft key: press to display the Save/Send Menu.



Note: See section "[Saving Captured Images](#)" on page 20 for details on how to name and save results.

Main Menu and Settings

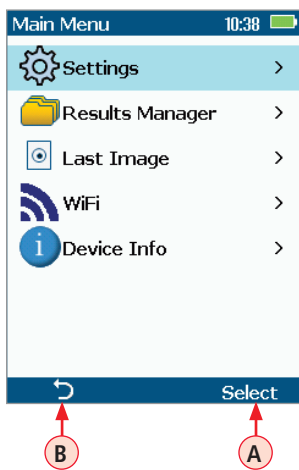
Main Menu Overview

Main Menu

The Main Menu is accessed from Live Image mode by pressing the Menu \equiv soft key. Main Menu is used to select user preferences, perform general settings, manage saved test results, and perform other non-test functions.

While in the Main Menu:

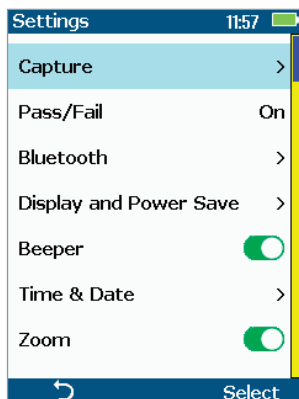
- Press Up/Down $\blacktriangle/\blacktriangledown$ arrow keys to navigate and select (highlight) one of the menu item as follows.
 - **Settings:** Use to configure Auto Focus, Pass/Fail criteria, Bluetooth, and general settings
 - **Results Manager:** Use to navigate and review or send saved test results
 - **Last Image:** Use to recall most recently viewed image
 - **WiFi:** Configure WiFi for remote access (future)
 - **Device Info:** Use to view serial number, software revision, etc
- Press Select (A) or Right \blacktriangleright arrow key to display a sub-screen of the selected menu item
- Press Back (B) soft key to return to Live Image mode



Settings Menu Overview

While in the Settings Menu:

- Press Up/Down $\blacktriangle/\blacktriangledown$ arrow keys to navigate and select (highlight) the desired menu item.
- For Beeper and Zoom settings:
 - Pressing Select soft key toggles setting between enable/disable.
 - Pressing Right \blacktriangleright arrow key enables setting.
 - Pressing Left \blacktriangleleft arrow key disables setting.
- For all other settings, press Select soft key or Right \blacktriangleright arrow key to display a sub-menu and edit the selected parameter.
- Press Back soft key to return to the previous menu screen.
- Press Capture Key to return to live image mode.



Note: enabling Zoom allows the user to enlarge the end-face live view by a magnification factor of 2X making subjective analysis of the end-face cleanliness easier to perform.

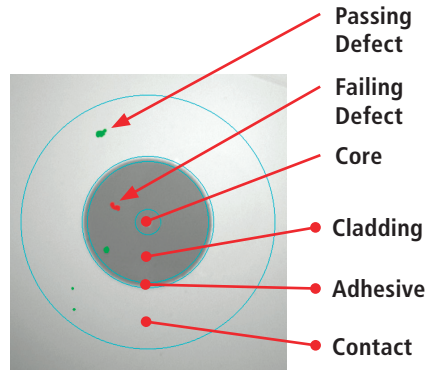
Main Menu and Settings

IEC Pass/Fail Analysis

IEC 61300-3-35 defines connector inspection pass/fail criteria.

Pass/Fail criteria depends on:

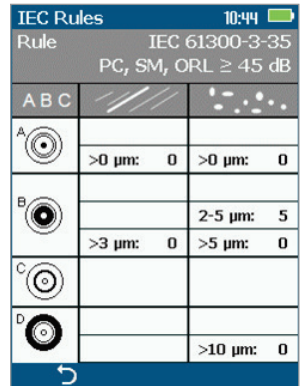
- Fiber type (SMF or MMF)
- Connector end face regions
 - A region: Core
 - B region: Cladding
 - C region: Adhesive (between cladding and ferrule)
 - D region: Physical contact area
- Type of end face flaw:
 - Scratches
 - Defects (contamination, particles, chips)
- Size of flaw



Example IEC Rule

Shown below is the display when the IEC rule for single-mode PC connector with return loss ≥ 45 dB is selected. The table identifies the number of scratches or defects of a certain size, which may be allowed in each of the core, cladding, and contact regions.

Region	Scratch	Defect
A: Core	>0 μm : 0 No scratches >0 μm allowed	>0 μm : 0 No defects >0 μm allowed
B: Cladding	>3 μm : 0 No scratches >3 μm allowed	2-5 μm : 5 Up to 5 defects 2-5 μm diameter allowed
		>5 μm : 0 No defects >3 μm allowed
C: Adhesive	Blank (No limitations on scratches)	Blank (No limitations on scratches)
D: Contact	Blank No limitations on scratches	0 ≥ 10 μm No defects ≥ 10 μm allowed



Main Menu and Settings

Setting Pass/Fail Criteria

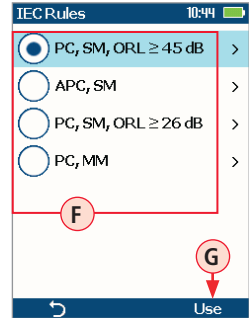
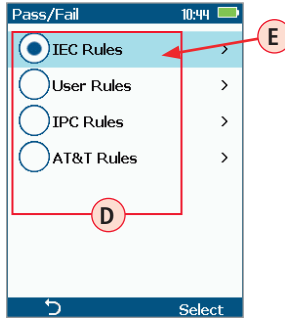
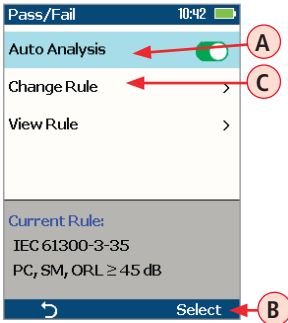
Pass/Fail menu is accessed from the Live Image mode > Main Menu > Settings.

Enable/disable Auto Analysis

- Highlight Auto Analysis (A).
- Use Select key (B) to enable/disable / Pass/Fail analysis.

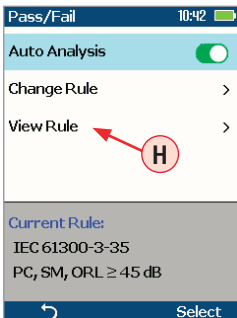
Change Rule:

- Highlight Change Rule (C).
- Press Select or Right ► arrow key to display a list of the available Rules (D).
- Use Up/Down ◀▶ arrow keys to highlight the desired Rule group (E).
- Press Select or Right ► arrow key to display a sub-list (F).
- Use Up/Down ◀▶ arrow keys to highlight the desired rule.
- Press Use (G) to apply the selected Rule in Pass/Fail analysis.



View Rule

- Highlight View Rule (H).
- Press Select or Right ► arrow key to view details for the current rule.
- User Rules may be edited while viewing.



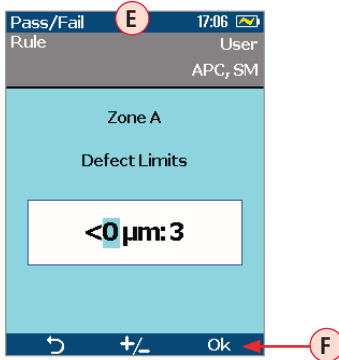
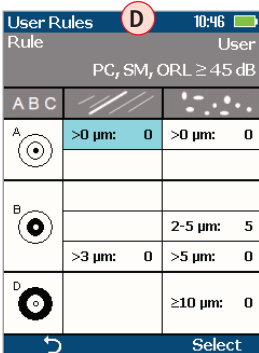
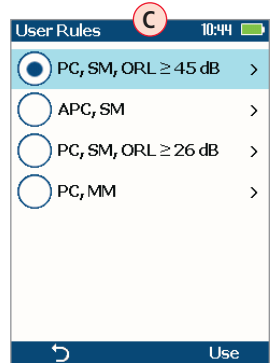
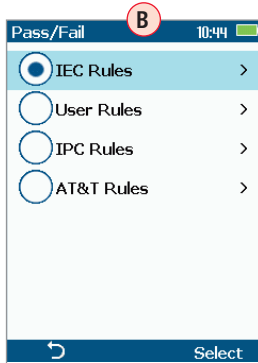
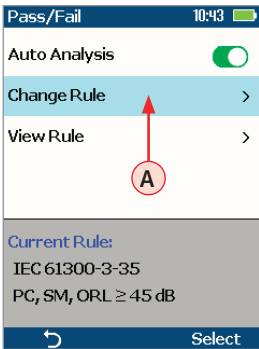
Rule		IEC 61300-3-35	
PC, SM, ORL ≥ 45 dB			
A B C			
A	>0 μm:	0	>0 μm: 0
B	>3 μm:	0	2-5 μm: 5
C	>5 μm:	0	>5 μm: 0
D			>10 μm: 0

Main Menu and Settings

Setting Pass/Fail Criteria

Edit User Rule:

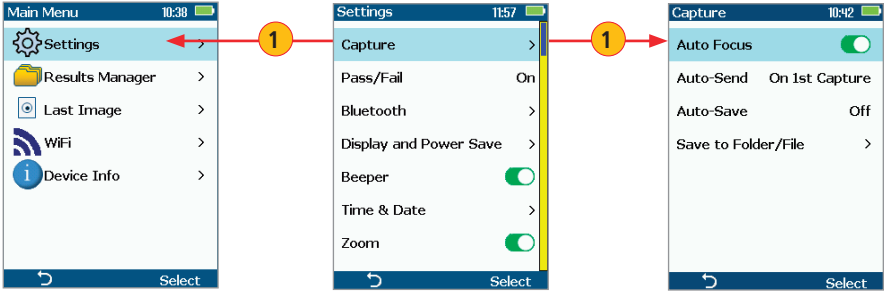
- Highlight the Change Rule option (A).
- Press Select or Right ► arrow key to display a list of Rules sub-screen (B).
- Highlight the User Rules group.
- Press Select to display a list of User Rules (C).
- Use Up/Down ▲▼ arrow keys to highlight the desired rule to edit.
- Press the Right ► arrow key to view details screen for currently selected rule.
- While in the Rule details screen (D), use arrow keys to highlight the desired Region and Scratches/Defects parameter.
- Press Select to display the Limits Editor screen (E).
- Use Left/Right ◀▶ arrow keys to select a digit.
- Use Up/Down ▲▼ arrow keys to change the value.
- Press Ok (F) to confirm changes.



Main Menu and Settings

Configuring Auto-Save and Auto-Send

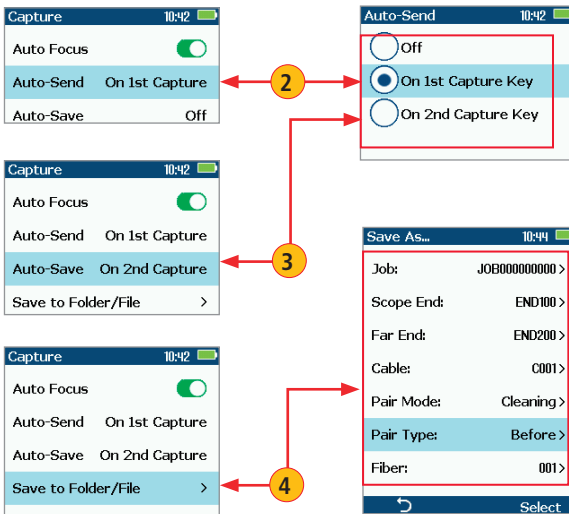
- 1 From the Main Menu, select Settings > Capture > Auto Focus
 - Use ◀▶ to enable or disable the auto-focus option /◻ as needed.



- 2 Highlight and Select Auto-Send. Use ▼▲ to disable auto-send, enable on 1st Capture key, or enable on 2nd Capture key.
- 3 Highlight and Select Auto-Save. Use ▼▲ to disable auto-send, enable on 1st Capture key, or enable on 2nd Capture key.
- 4 Highlight and select Save to Folder/File. Use ▼▲ to select and edit the desired folder/file field.

When Auto-Send/Save is enabled, press Capture from Live Image mode to auto-focus (if enabled), capture image, analyze pass/fail (if enabled), then send image and pass/fail results to paired device and save image and pass/fail results to configured Job/Cable folder.

Note: If Auto-Save or Auto-Send on 2nd Capture key is enabled, you will be prompted to press the Capture key again to save or send. Press the Back key if you do not wish to save or send image.



Main Menu and Settings

Configuring Bluetooth

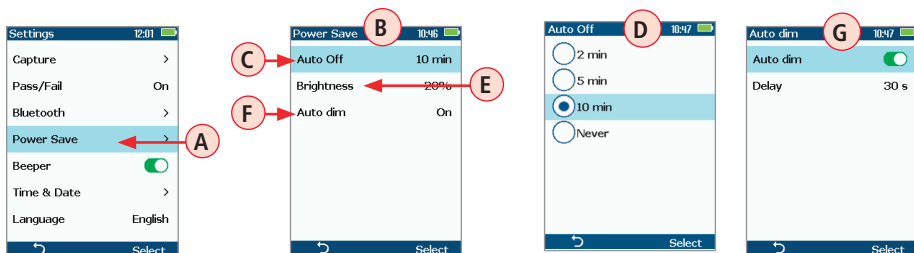
See section [“Sharing Captured Test Results”](#) on page 24.

Power Save Setting

Select desired Power Save Setting

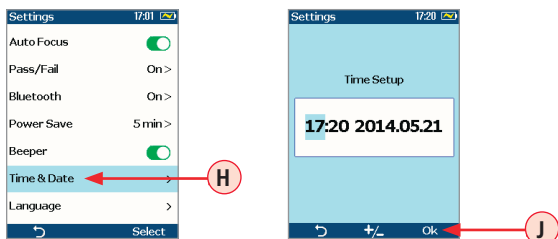
From the Main Menu > Settings, highlight and select the Power Save **(A)** option to display the Power Save settings menu **(B)**. From the displayed Power Save menu, you may perform the following settings:

- Highlight and select the Auto Off option **(C)**
 - From the displayed Auto Off sub-menu **(D)**, highlight and select the desired time option.
- Highlight and select Brightness **(E)**
 - Use Up/Down \blacktriangle arrow keys to increase or decrease the brightness
 - Note: dimmer display extends battery life
- Highlight and select the Auto dim option **(F)**. From the displayed sub-menu **(G)**:
 - Select Auto dim; use Left/Right \blacktriangleleft arrow keys to enable/disable auto-dimming
 - Select Delay, use Up/Down \blacktriangle arrow keys to increase / decrease auto dim time



Set Time and Date

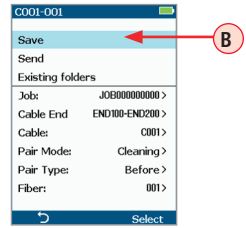
- Highlight Time & Date **(H)**.
- Use Select or Right \blacktriangleright arrow key to display the Time/Date setup menu **(J)**.
- Use Left/Right \blacktriangleleft arrow keys to select the desired time/date field to edit.
- Use Up/Down \blacktriangle arrow keys to change the selected value.
- Press OK to confirm time/date settings and return to the Settings screen.



Saving Captured Images

Saving to the Current Folder

- While in the Captured Image mode, press the Menu \equiv soft key to display the Save/Send screen.
- Highlight Save **(A)** and press Select soft key to save image and results to the current folder.

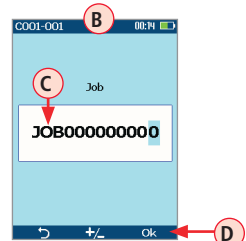


Saving to a Newly Created Folder

New Job, Cable End, Cable, or Fiber names are created by editing an existing file name.

To edit a file name

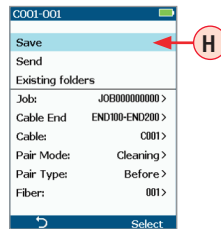
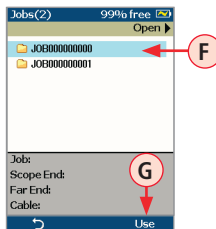
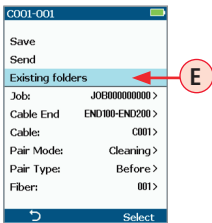
- While in the Save/Send screen, using Up/Down $\blacktriangledown/\blacktriangle$ keys, navigate to the desired parameter: Job, Cable End, Cable, Pair Mode, Pair Type, or Fiber.
- Press Select or Right \blacktriangleright arrow key to display Editor **(B)**.
- Use $\blacktriangleleft/\blacktriangleright/\blacktriangle$ arrow keys to edit text field **(C)**.
- Press Ok **(D)** soft key to save new name .



Note: this will make the newly created Job, Cable End, Cable, or Fiber current.

Saving to an Existing Folder

- Highlight the Existing folders **(E)** option.
- Press Select or Right \blacktriangleright arrow key to display a list of existing folders.
- Use Up/Down $\blacktriangle/\blacktriangledown$ arrow keys to select desired Job folder **(F)**.
- Press Right \blacktriangleright arrow key to open selected Job folder.
 - Repeat for desired Cable folder and Fiber number as needed.
- Press Use soft key **(G)** to confirm selection.
- When back in the Save/Send screen, highlight Save **(H)** and press Select.



Configuring Image Pairing

Image Pairing functionality allows user to capture and save two images for each fiber.

Available Pairing Modes and Pairing Types

Pairing Mode	Pairing Type
None	None – Image pairing disabled
Cleaning	Before – image before connector cleaned After – image after connector cleaned
Input / Output	Input – network input connector image Output – network output connector image
Documentation	As built – image of connector when network built As found – connector as found when troubleshooting
Mating	Jumper – image of patch cord connector Bulkhead – image of panel-mounted bulkhead connector

TRM 2.0 reporting software allows user to prepare reports containing paired images

Save As... 10:44 🔋

Job:	JOB00000000 >
Scope End:	END100 >
Far End:	END200 >
Cable:	C001 >
Pair Mode:	Cleaning >
Pair Type:	Before >
Fiber:	001 >

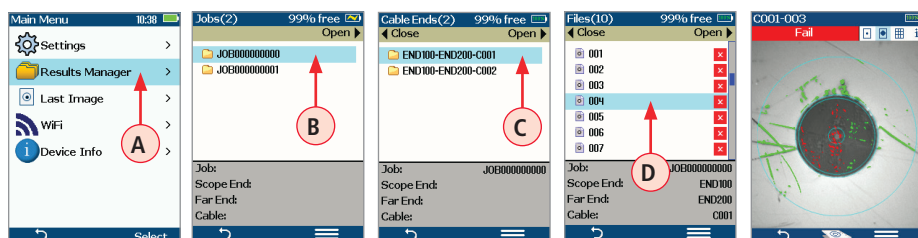
↶
Select

Viewing Saved Results (Results Manager)

Opening Image Files - Reviewing Saved Results

The Results Manager is accessed from the Live Image mode > Main Menu.

- From the Main Menu, use Up/Down $\blacktriangle/\blacktriangledown$ arrow keys to navigate and highlight the Results Manager (A).
 - Press Select or Right \blacktriangleright arrow key to display a list of existing Job folders.
- Use Up/Down $\blacktriangle/\blacktriangledown$ arrow keys to navigate and highlight the desired Job folder (B).
 - Press Right \blacktriangleright arrow key to open the selected Job folder and display a list of existing Cables.
- Use Up/Down $\blacktriangle/\blacktriangledown$ arrow keys to navigate and highlight the desired Cable folder (C).
 - Press Right \blacktriangleright arrow key to open the selected Cable folder and display a list of existing files.
- Use Up/Down $\blacktriangle/\blacktriangledown$ arrow keys to navigate and highlight the desired image File (D).
 - Press Right \blacktriangleright arrow key to open the selected image File.
- Press Back soft key or Capture key to return to Live Image mode.

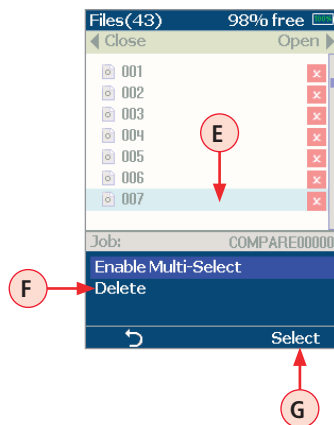


Creating New Jobs/Cables/Files

New Job, Cable End, Cable, or Fiber names are created in the Captured Image mode by editing an existing file name. For details see section titled [“Saving to a Newly Created Folder”](#) on page 20.

Deleting Jobs/Cables/Files

- Access the Results Manager.
- Use the Up/Down $\blacktriangle/\blacktriangledown$ keys to navigate and highlight the desired job/cable/file (E).
- Press the Menu \equiv soft key.
- Press the Up/Down $\blacktriangle/\blacktriangledown$ keys to highlight Delete (F).
- Then press Select (G) to delete the highlighted job/cable folder or results file.



Using FOCIS Flex with FOCIS Flex App

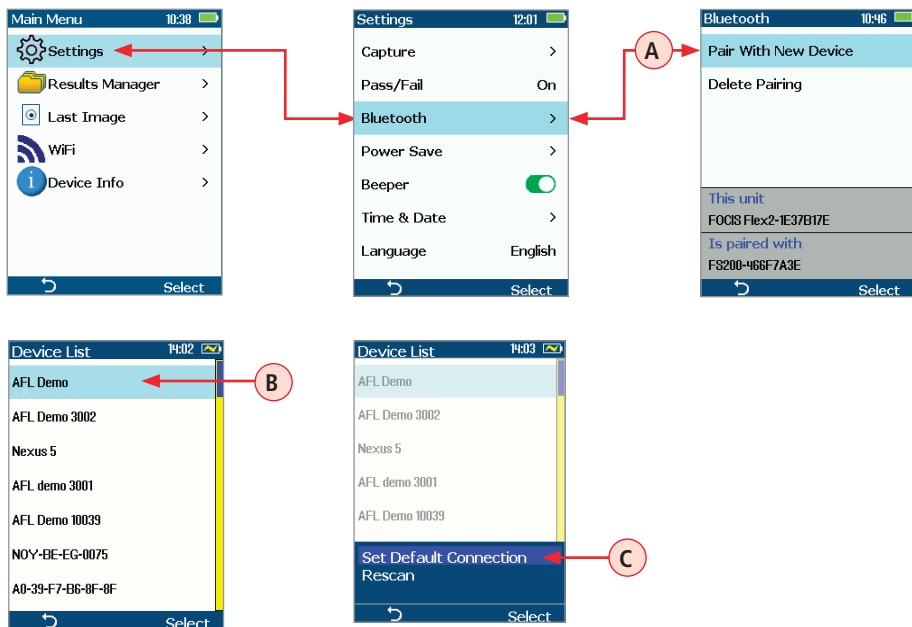
- Download FOCIS Flex App from Google Play or Apple App Store to your smart device.
- Pair FOCIS Flex to your smart device.

In smart device Bluetooth Settings:

- Enable Bluetooth and make your device visible.

In FOCIS Flex:

- From the Main Menu, select Settings > Bluetooth Settings > Pair With New Device **(A)**.
- Press Select and wait for a list of detected devices to be displayed.
- From the displayed Device List screen, select your smart device **(B)**.
- Press Select.
- Select Set Default Connection **(C)**.
- Press Select.
- Verify that FOCIS Flex indicates that it is paired with your smart device.
- In Capture Settings, configure FOCIS Flex to send on 1st or 2nd Capture Key.
- From Live Image mode, view connector end-face and press the Capture Key
- FOCIS Flex will capture image and send it to your smart device.
- FOCIS Flex App on your smart device will display received image.
- For App details, see FOCIS Flex Inspection | aeRos User's Guide.



Sharing Captured Test Results

Sending Captured Results to FlexTester/FlexScan

Automatically sending results to FlexTester/FlexScan

Note: Auto Send option cannot be enabled unless FOCIS Flex is paired to another Bluetooth device.

Configuring Bluetooth

On FlexTester/FlexScan

- Configure FlexTester/FlexScan for pairing:
 - Select Settings > Bluetooth.
 - Enable Bluetooth with Visibility option setting them to On.

On FOCIS Flex

- From the Main Menu > Settings > Bluetooth, select Pair With New Device **A** and pair FOCIS Flex with FlexTester/FlexScan:
 - Wait for list of visible devices to be shown.
 - Use ▼▲ arrow keys to select FlexTester/FlexScan device to pair with.
 - Select Set Default Connection to complete pairing.
 - After pairing, set FlexTester Visibility to Off.
- From the Main Menu > Settings > Capture, configure FOCIS Flex to auto-send captured images on 1st or 2nd Capture Key. See [“Configuring Auto-Save and Auto-Send” on page 18](#).
- Press the Capture key to return to Live Image mode.
- Press the Capture key to focus, capture, analyze and send image to FlexTester/FlexScan.
- **On FlexTester**
 - After a few seconds, captured image will appear on your FlexTester.
 - Press Right ► arrow key on FlexTester to view Pass/Fail results table.



On FlexScan

- After a few seconds, captured image and pass/fail results will appear on your FlexScan.

Manually Send Results to FlexTester/FlexScan

- Pair FOCIS Flex to FlexTester/FlexScan.
- Press the Capture button to focus, capture and analyze image or recall saved image (see [“Viewing Saved Results \(Results Manager\)” on page 22](#) for details).
- Press Menu ≡ soft key to display Save/Send sub-screen.
- Highlight Send and press Select.
- After a few seconds, captured image will appear on FlexTester/FlexScan.
- Press Right ► arrow key on FlexTester to view Pass/Fail results table.

Sharing Captured Test Results

Uploading Inspection Results to a PC

On FOCIS Flex

- Turn your FOCIS Flex unit off.
- Using the supplied USB cable, connect the micro-USB port on your FOCIS Flex unit with a USB port on your PC.
- Verify FOCIS Flex powers up and displays:
 - Mass Storage
 - Video
- Select the Mass Storage mode.

On PC

- Select 'My Computer'.
- Verify that device labeled 'PROBE (E:\)' appears in My Computer window
Note: drive letter assigned to PROBE device may be different.
- Double-click PROBE (E:\) to view contents of the FOCIS Flex internal memory.
- Double-click on RESULTS folder.
- Drag, copy, or move some or all of the results to your PC.
- When finished, disconnect USB cable and turn off FOCIS Flex (since FOCIS Flex will remain on and return to normal operation if USB cable simply disconnected.)

Inspection Reporting using TRM® 2.0

On PC

- Install and run TRM 2.0
- Select Report Wizard
- Navigate to uploaded FOCIS Flex Results.
- Select entire [Cable] for all results.
- Select individual fiber for single result.
- Select desired inspection template (2 or 12 results per page).
- Select Finish and print or save as PDF file.

Thank you for choosing AFL Test & Inspection!

