FOCIS Flex

Fiber Optic Connector Inspection System
Quick Reference Guide

Controls, Display, Interfaces

Controls

1. Power button - ⏻
2. Power On/Off indicator (GREEN when On)
3. Image Capture button - 📷
4. F1 soft key (typically Back function)
5. F2 soft key (typically Select function)
6. Navigation and Edit functional keys

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

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

Interfaces

11. Optical inspection port
12. Adapter tip
13. Dust cover
14. Micro-USB port
15. 6 VDC input jack
16. Charging indicator

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

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.

Powering Up/Down

Power-Up

1. Press and release the Power button.
2. Power Indicator illuminates GREEN to indicate that FOCIS Flex is On.
3. Display remains dark until FOCIS Flex enters Live Image mode (~7 seconds).

Power-Down

1. Press and hold the Power button until display turns off.
2. Power Indicator darkens to indicate FOCIS Flex is Off.

Configure FOCIS Flex to Auto-Off

- From the Main Menu -> Settings, select Power Save.
- Select desired power save option (1 min, 2 min, 5 min, Never).

Battery Charging and Operation

1. Plug the included AC Charger into AC outlet.
2. Connect charger plug into 6 VDC jack on FOCIS Flex.
3. LED indicates charging status as follows:
   OFF - AC not connected. **RED** - Charging battery.
   GREEN - Fully charged. **RED/GREEN** flashing -
   Overheated, allow to cool before charging.
4. FOCIS Flex charges while operating.
5. Battery icon 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

Live Image Mode

FOCIS Flex powers-up in the Live Image mode. While in the Live Image mode:

1. Pressing and holding the Help **?** soft key displays help tips about FOCIS Flex keys usage.
2. Pressing the Menu ≡ soft key displays the Main Menu that allows user to modify settings.
3. When Auto Focus option is enabled in the Main Menu/Settings and Capture button ⬜ 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
4. When Auto Focus is enabled or disabled:
   - Press Right ▶ arrow key to auto focus once
   - Press Up/Down ⬍ keys to manually adjust focus
5. When Auto Focus is disabled, press Capture ⬜:
   - Image is captured (without adjusting focus)
   - Image is analyzed if Pass/Fail set to On
   - FOCIS Flex transitions to Captured Image mode
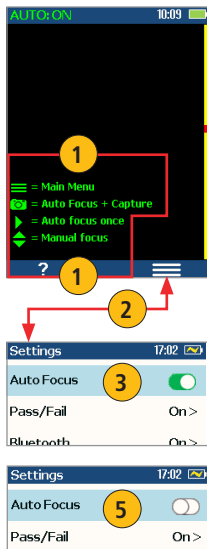
Capture Button Operation

- In the Live Image mode, press the Capture button 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)
- In the Captured Image mode, press the Capture button to return to the Live Image mode.
- In the Main Menu or Settings modes, press the Capture button to return to most recent Live or Captured Image mode.

User Settings and Controls

The Main Menu is accessed from Live Image mode by pressing the Menu ≡ 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:

1. Press Up/Down ⬍ arrow keys to navigate and select (highlight) the desired menu item.
   - **Settings:** Configure Auto Focus, Pass/Fail, Bluetooth, etc.
   - **Results Manager**: Navigate and Review or Send saved test results
   - **Last Image:** Recall most recently viewed image
   - **Device Info**: View serial number, software rev, etc.
2. Press Select or Right ▶ arrow key to display a Main Menu sub-screen (A):

While in the Main Menu sub-screen:

   - Press Up/Down ⬍ arrow keys to navigate and highlight the desired option.
   - Press Select soft key or Right ▶ arrow key to edit highlighted parameter.
   - When selected parameter displays On/Off icon 🟢/⚪ (B), press Select to enable/disable.
3. Press Back soft key to return to the previous menu screen.
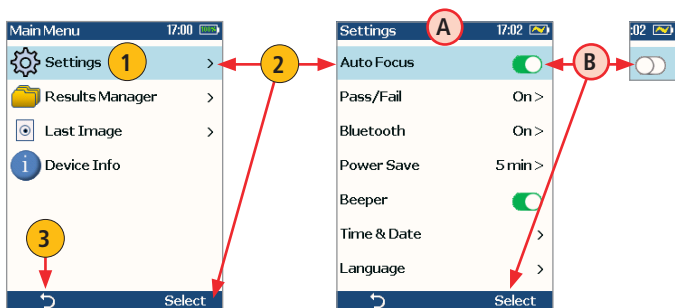
Pass/Fail Settings

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

Enable/disable Auto Analysis

1. Highlight Auto Analysis.
2. Use Select or Left/Right ◄► arrow keys to enable/disable Pass/Fail analysis.

Change Rule:

3. Highlight Change Rule and press Select or Right ► arrow key to display a list of Rules sub-screen.
4. Use Up/Down ♦ arrow keys to highlight the desired rule group (IEC or User Rules).
5. Press Select to display a sub-list.
6. Use Up/Down ♦ arrow keys to highlight the desired rule.
7. Press Use to apply the selected Rule in Pass/Fail analysis.

View Rule

8. Highlight View Rule.
9. Press Select or Right ► arrow key to view details for current rule.
10. User Rules may be edited while viewing.
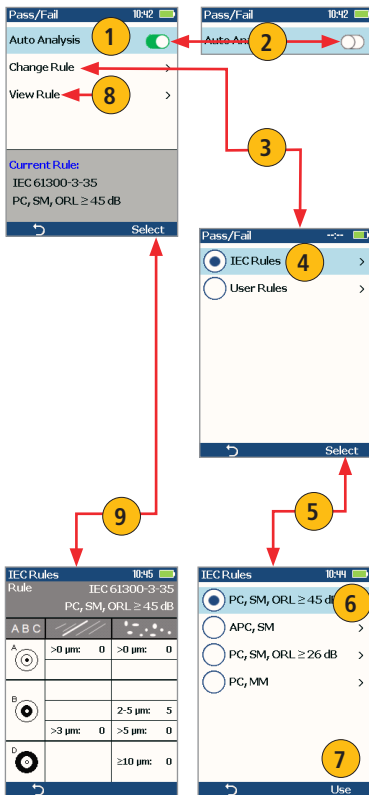
Captured Image Mode Features

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 Out Image
- Zoomed In Image
- Pass/Fail Results Table
- Image Information

Passing scratches/defects highlighted in GREEN

Failing scratches/defects highlighted in RED
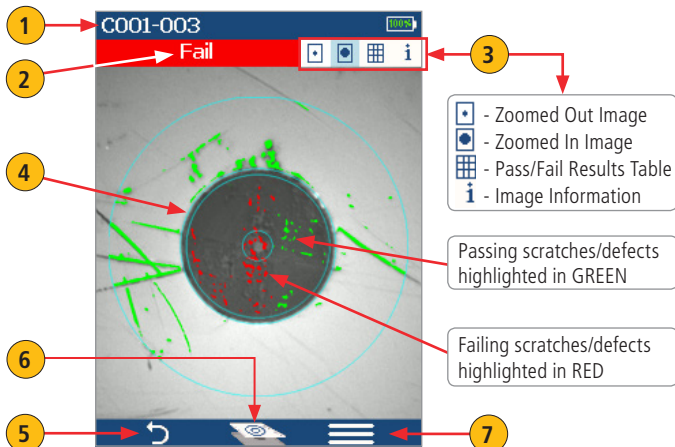
Zoomed in end-face image with Overlay

Captured Image - Pass/Fail Results Table

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 with the Pass/Fail display tab selected.
4. Analysis Rule applied to determine Pass/Fail.
5. Analysis Zones: A - core, B - cladding, 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.
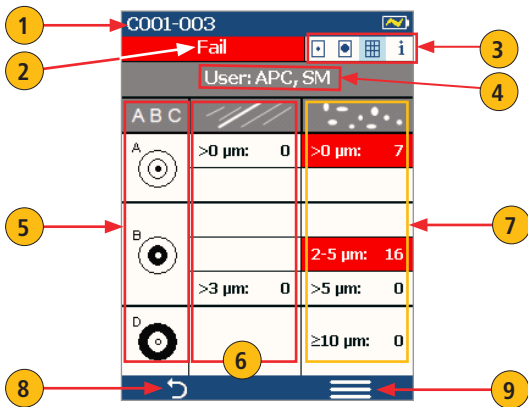
Saving Captured Images

To save results to the current folder

1. While in the Captured Image mode, press Menu ≡ soft key to display Save/Send sub-screen.
2. Highlight Save option and press Select soft key to save image and results to the currently indicated folder.

To edit file name

3. Navigate to Job, Cable End, Cable, or Fiber to edit using Up/Down ⬍ arrow keys.
4. Press Select or Right ▶ arrow key to display Editor.
5. Use ◀▶ ⬍ arrow keys to edit text field.
6. Press Ok soft key to save new name.

To save results to an existing folder

7. Highlight Existing folders option.
8. Press Select or Right ▶ arrow key to display a list of existing folders.
9. Use Up/Down ⬍ arrow keys to select desired Job folder.
10. Press Right ▶ arrow key to open selected Job folder.
    - Repeat for desired Cable folder and Fiber number as needed.
11. Press Use soft key to confirm selection.
12. When back in the Save/Send screen, highlight Save and press Select.
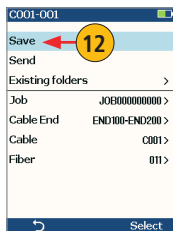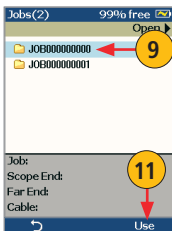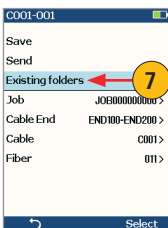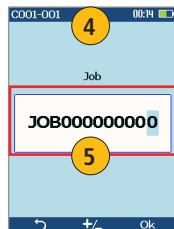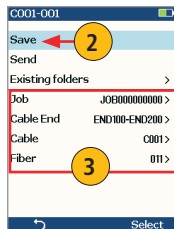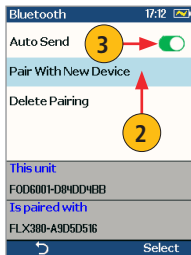
Sending Captured Results to FlexTester

Automatically send results to FlexTester via Bluetooth

On FlexTester

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

On FOCIS Flex

2. From the Main Menu >Settings > Bluetooth, select Pair With New Device and pair FOCIS Flex with FlexTester:
    - Wait for list of visible devices to be shown.
    - Use ⬍ arrow keys to select FlexTester to pair with.
    - Select Set Default Connection to complete pairing.
    - After pairing, set FlexTester Visibility to Off.
3. Enable Auto Send.
4. Press the Capture button to return to the Live Image mode.
5. Press the Capture button to focus, capture, analyze and send image.

On FlexTester

6. After a few seconds, captured image will appear on your FlexTester.
7. Press Right ▶ arrow key on FlexTester to view Pass/Fail results table.

Manually Send Results to FlexTester

8. Pair FOCIS Flex to FlexTester (steps 1-4 above).
9. Press the Capture button to focus, capture and analyze image or recall saved image (see Results Manager for details).
10. Press Menu ≡ soft key to display Save/Send sub-screen.
11. Highlight Send and press Select.
12. After a few seconds, captured image will appear on FlexTester.
13. Press Right ▶ arrow key on FlexTester to view Pass/Fail results table.

Results Manager – View Saved Images

1. From the Main Menu, access the Results Manager by pressing Select or ▶ key.
2. Use ♦ keys to navigate and highlight the desired Job folder, press ▶ key to open.
3. Use ♦ to navigate and highlight the desired Cable folder, press ▶ key to open.
4. Use ♦ to navigate and highlight the desired File, then press ▶ to open.
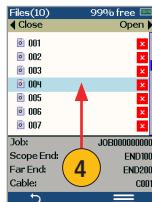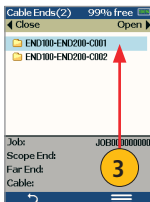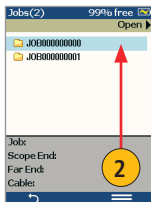
Transferring Results via USB

- 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.
- Turn the FOCIS Flex on and verify that Power Indicator lights-up GREEN.
- At 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 on PROBE (E:\) device to view contents of the FOCIS Flex internal USB memory.
- Double-click on RESULTS folder.
- Drag, copy, or move some or all of the results to your PC.
- When finished, turn off FOCIS Flex and disconnect USB cable.

www.AFLglobal.com or +1 (800) 321-5298, +1 (603) 528-7780