

FX180X OCC Firmware/Software Updates

Refer to the last section of this document for software upgrade guide. The update process may take a few minutes to complete. Do not turn the test set off or disconnect its AC/DC adapter during the process.

Do not downgrade software version, unless instructed by a customer support agent. (Note: Brand new units may come with newer versions not yet available in our website)

Reminder: VeEX recommends a 2-year calibration interval for our OSA/OCC products so please contact a customer support agent to return the older FX180X DWDM units for re-calibration.

Software version: ver. 02.01.0001

January 10, 2023

Release Scope:

New Release. General availability

Firmware versions:

- OSA FW version 15.01.0F
- Boot Rom version: 4.0.1
- CPLD version: 10

Micro OSA new features and improvements:

1. General enhancements
 - a. Added new toolbox widget for switching between wavelength/frequency
 - b. Improved Table Edit
 - c. Added scroll button functionality
 - d. Fixed calibration date/channel display initialization bug
2. File operation and related enhancements
 - a. Incorporated new FW
 - b. Fixed crash when WiFi/BT option is disabled
3. Fiber Inspection
 - a. Included fiber tool version number

Known issues and limitations:

1. FX180X DWDM calibrated on or after 5/29/2019 will have 97 calibrated channels C14 to C62.
2. FX180X DWDM calibrated before 5/29/2019 will only have 96 calibrated channels H15 to C63

There may be a few units that have calibration date after 5/29/2019 but only show 96 channels. If does happen, please contact Customer Support to have your unit re-calibrated.



Software version: ver. 02.00.0001**January 12, 2022****Release Scope:**

New Release. General availability

Firmware versions:

- Boot Rom version: 2.0.7
- CPLD version: 10

Micro OSA new features and improvements:

1. General enhancements
 - a. No change
2. File operation and related enhancements
 - a. Added 97 channel fix to show channels from C14 - C62 on DWDM units*
3. Fiber Inspection
 - a. No Change

Known issues and limitations:

1. FX180X DWDM calibrated on or after 5/29/2019 will have 97 calibrated channels C14 to C62.
2. FX180X DWDM calibrated before 5/29/2019 will only have 96 calibrated channels H15 to C63

Software version: ver. 02.00.0000**November 22, 2021****Release Scope:**

New Release. General availability

Firmware versions:

- Boot Rom version: 2.0.7
- CPLD version: 10

Micro OSA new features and improvements:

1. General enhancements
 - a. Released the Next Generation OCC GUI mirroring FX182 UI design
 - b. Added 4-color coded View Modes: Summary, Tiles, Bar Graph, and Table Graph
 - c. Added Quick CWDM/Quick DWDM for single channel measurement or locating peak channel in test profile
2. File operation and related enhancements
 - a. No Change
3. Fiber Inspection
 - a. No Change



Software version: ver. 01.00.0116**July 26, 2021****Release Scope:**

New Release. General availability

Firmware versions:

- Boot Rom version: 1.2.0
- CPLD version: 10

Micro OSA new features and improvements:

1. General enhancements
 - a. Improved on double touch screen event error
 - b. Added 200GHz Even and 200GHz Odd to ITU Grid Setup to avoid duplicate 100GHz channel number if input source used is 100GHz but ITU Grid setting is 200GHz.
2. File operation and related enhancements
 - a. No Change
3. Channel Checker Mode
 - a. Improved OCC Span Power measurement.
 - b. Changed the ITU-T CWDM channel #s to match the de facto standard channel #s adopted by transceiver vendors.
4. Fiber Inspection
 - a. Added support for DI-3000 Fiberscope (WiFi + USB connection).

Software version: 01.00.0113**June 30, 2020****Release Scope:**

New Release. General Availability

Firmware versions:

- Boot Rom version: 1.1.20
- CPLD version: 10

Optical Channel Checker features and improvements:

1. General enhancements
 - a. Reports Power for composite, not peak power
 - b. Aligned OCC marker movement with arrow direction
 - c. Added A-B span power measurement including side edges
 - d. Added language support for Chinese
 - e. Added % deviation setup for Pass/Fail
2. File operation and related enhancements
 - a. Now the View of Saved Results matches to the Printout format



Software version: 01.00.0109**December 23, 2019****Release Scope:**

New Release. General Availability

Firmware versions:

- Boot Rom version: 1.1.20
- CPLD version: 10

Optical Channel Checker features and improvements:

1. General enhancements
 - a. Rebuild software using new platform revision for outstanding R-Server issues
 - b. Auto populate TechName/ID when sync'd with R-Server
2. File operation and related enhancements
 - a. Improved File Manager to minimize crash potential
 - b. Setup parameters moved to end of report. Report label is WDM instead of OCC.

Known issues and limitations:

1. Marker control buttons move opposite of arrow direction

Software version: 01.00.0106**October 9, 2019****Release Scope:**

New Release. General Availability

Firmware versions:

- Boot Rom version: 1.1.20
- CPLD version: 10

Optical Channel Checker features and improvements:

1. General enhancements
 - a. Now shows Composite (Total) instead of Peak for the user-measured Channel Power in Settings menu
 - b. Enabled the left/right arrows in the Bar Graph view
 - c. Rearranged the right-side menu to improve fit and maintain consistency with FX180/RXT-45XX OSA products
2. File operation and related enhancements
 - a. Rebuild software using the new platform revision 62360 to add updated R-Server support
 - b. Updated html file save format to support new VeEX html report design. User can add company log, job information, company information using R-Server
3. FiberScope option
 - a. No change



Software version: 01.00.0102

August 2, 2019

Release Scope:

New Release. General Availability

Firmware versions:

- Boot Rom version: 1.1.20
- CPLD version: 10

Note: This version requires a clean upgrade (use Option A of the Upgrading procedure in the end of this document)

Optical Channel Checker features and improvements:

1. General enhancements
 - a. Improved touchscreen initialization during power cycle
 - b. Saves user settings for compensation power between power cycling
 - c. Added support for additional channels
 - Changed DWDM C-band 50GHz channel measurement range from H15 to C63 (96-channels) to CH14 to C62 (97-channels)
2. File operation and related enhancements
 - a. Added support for new OCC file type and storage location support in Utilities>File>Saved
3. FiberScope option
 - a. No change

Software version: 01.00.0022

May 1, 2019

Release Scope:

Initial Release. General Availability

Firmware versions:

- Boot Rom version: 1.1.20
- CPLD version: 10

Optical Channel Checker features and improvements:

1. General enhancements
 - a. Two Models available: CWDM or DWDM C-band
 - b. Two View Modes: Bar graph and Table
 - c. Repaired EZ-Remote Registration
 - d. Added R-Server support
2. File operation and related enhancements
 - a. Added Save/View in HTML format for test reports
3. Supports FiberScope option



Upgrading procedure

To download the latest software version available, go to <https://www.veexinc.com/support/software>, enter the first four characters of the test set's serial number (e.g. TEBC) and use the links to download the software package and Release Notes to the PC.

FX180X OCC image file can be recognized by its **fx180x-veex-arm.tar.gz** file name. Extract this file from the ZIP folder and copy to the root of a FAT32 USB memory stick. This upgrade integrates the micro OSA software, Boot Rom, and CPLD into a single file.

The test set must be connected to AC/DC charger at all times during the whole upgrade process. DO NOT turn it off at any time; the update process would take a few minutes.

To verify the software version number installed, turn the test set back on, open the **Utilities** section, select **Settings**, and open **About**. You may also use the Web Remote Access to get the information

Using a micro-B USB memory stick or USB-A Memory Stick with an OTG adapter

Make sure the test set can detect the memory stick, before starting this procedure.

1. Turn the test set's power OFF
2. Connect the USB stick via OTG cable to FX180 micro-USB port and connect the AC adapter.
3. **Option A:** For a clean install (reset all settings and clear internal storage), turn the test set ON, by pressing the **SAVE+POWER** buttons simultaneously and holding them until a tone (beep) is heard, then wait for the boot up process to finish.
4. **Option B:** To preserve some existing settings and data, turn the test set ON, by pressing the **POWER+HOME** buttons simultaneously and holding them until a tone (beep) is heard, then wait for the boot up process to finish.
5. The test set will reboot itself at the end of upgrading

Updating the Test Set Software via WiFi or LAN

Make sure the test set is ON and connected to WiFi, or to a LAN using the micro-B USB-RJ45 adapter cable.

PCs, Mac, tablets, and smartphones can be used to perform this task, as long as they provide access to the file system and allow you to select the install package file.

- Open the Web Browser and enter the IP address of the test set into the browser's address/search field (e.g., 10.0.20.1). The test set's IP address is displayed at the bottom-left corner of the screen,
- Once the test set's Web Remote Access page loads, select **Upgrade** from the menu on the left side of the screen.
- Tap or click on the **Select File** button and point it to the Software Image file.
- Tap or click on the **Upload** button to transfer the Software Image file to the test set.
- Once the file transfer is done, tap or click on **Upgrade** and let the test set go through the process, uninterrupted. This will take a few minutes. The test set will reboot itself at the end.

© 2019-2022 VeEX Inc. All rights reserved.

VeEX, VePAL, ReVeal, VeExpress, V-SAM, V-SCAN, Multi-BERT, Fiberizer and the V logos are trademarks or registered trademarks of VeEX Incorporated, or one of its affiliates. All other trademarks or registered trademarks are the property of their respective owners.

Some features listed in this document require software options that may require paid activation or license and may or may not be available in all products. VeEX Inc., reserves the right to change product offerings or specifications without notice.

