

OceanX Updater User Manual

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1 OCEANX UPDATER SOFTWARE

1.1 INTRODUCTION

The OceanX Updater application is used to download the Microcontroller and FPGA firmware for the newer spectrometers from Ocean Optics. Moreover, end users can query the firmware version running on the instrument. The software is a proprietary software provided by Ocean Optics as a Windows installer.

1.2 FIRMWARE FILES

Ocean Optics provides updated firmware files as new features or bug fixes are released. These files are named following the pattern **Product_Target_x.y.z.obp** where the last three numeric digits x.y.z is the firmware version.

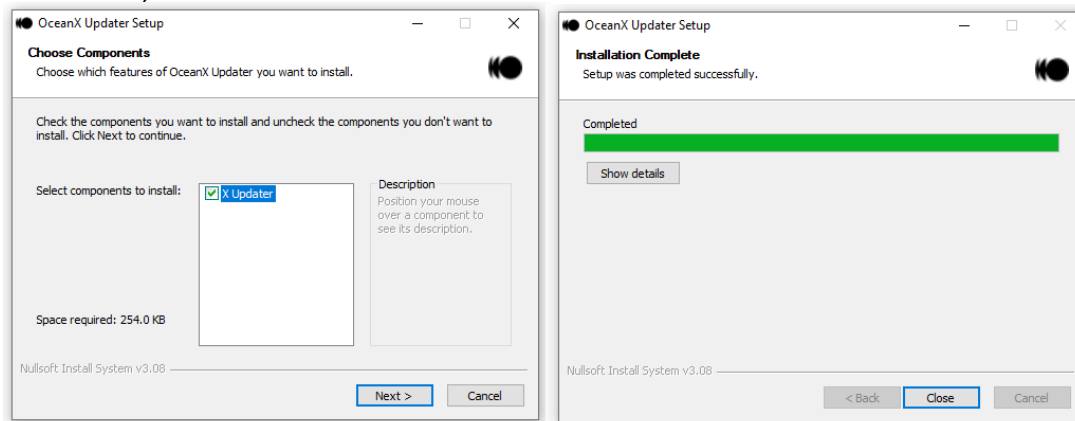
All instruments require two Target images, a microcontroller and FPGA image. Each image has its own version number.

Below is an example for the SR2 product microcontroller firmware version 1.2.3.

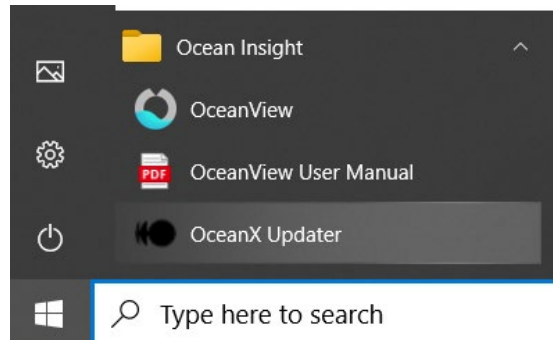
SR2_micro_1.2.3.obp

1.3 INSTALLATION

The software is provided as a Windows installer (e.g., OceanX-updater-x.x.x-win64-installer.exe)



Double-click on the installer to begin the installation procedure. The installer will guide you through the install process. Use all the default options. You may not see anything for a few seconds while the Windows antivirus is analyzing the software on the background.

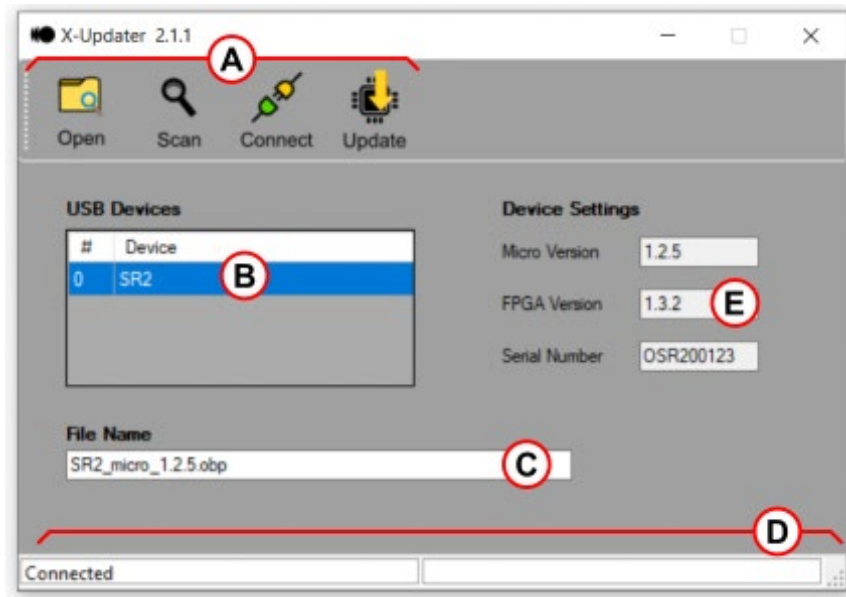


Once the software installation is completed, verify on the Windows Start menu that a link to the OceanX Updater program has been added as above. Again, you may not see anything for a few seconds while the Windows antivirus is analyzing the software on the background for the first time.

2 SOFTWARE USAGE

2.1 GUI OVERVIEW

Below is an annotated screenshot of the OceanX Updater software.



Here is a brief description of each area of the GUI annotated:

Section	Name	Description
A	Tool Bar	Buttons to accomplish specific actions for the firmware update
B	USB Devices	Devices connected to the PC over USB
C	File Name	Firmware file to download
D	Status Bar	Displays status feedback
E	Device Settings	Firmware versions installed on the device

2.2 FIRMWARE UPGRADE

The following instructions are going to reference the annotated GUI shown above.

NOTE: Do not connect more than one spectrometer at a time.

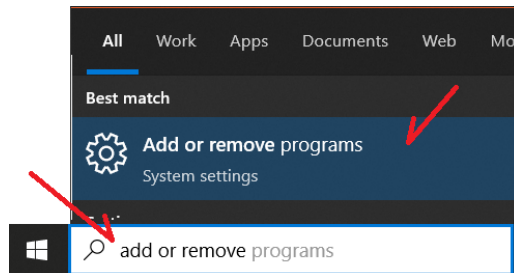
1. Obtain the appropriated firmware images for your specific product. Save the images in a known location in your PC.
2. Insert the USB C connector end of the cable into the USB C port of the spectrometer and the larger end of the cable into the USB port of the computer.
3. Click the **Open** button (A) and select the firmware image using the Windows Explorer dialog. You can start the upgrade process with any target as long as you follow up with the other target. *Target* is defined as the device receiving the firmware image, i.e. FPGA or Microcontroller.
4. Make sure the OBP File (C) text field is populated with the filename.
5. Click the **Scan** button and verify that the USB Devices (B) displays a device name. If the bootloader is running, it is going to say **Bootloader** otherwise it is going to display the product name.
6. On the USB Devices list, click on the device entry (B). Once selected, the entry background will turn blue.
7. Click the **Connect** button to link the spectrometer to the PC. The status bar (D) is going to display "Connected".
8. Click on the **Update** button to start the firmware download. The download progress is going to be displayed on the status bar (D). At this point the device bootloader is going to apply the new firmware image.
9. Once the download is completed, the new firmware version is displayed on the Device Settings (E) panel.
10. You may repeat the whole process listed above to download a different target image.

2.3 SOFTWARE UPDATE

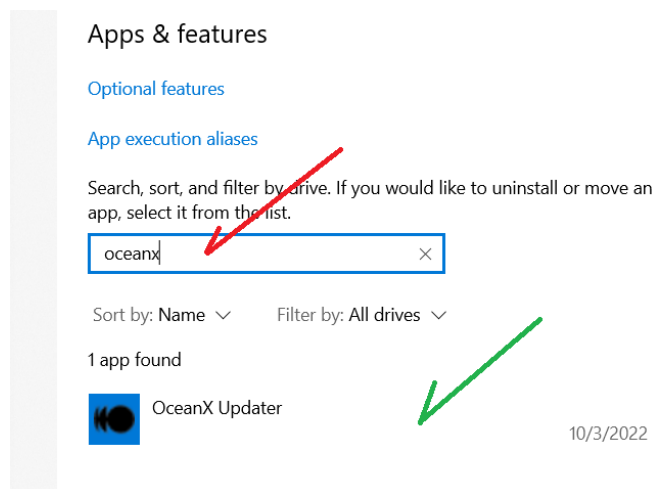
This section describes the process to upgrade the OceanX Updater software.

You must uninstall the existing OceanX Updater software before running the new version installer. Follow the instructions below:

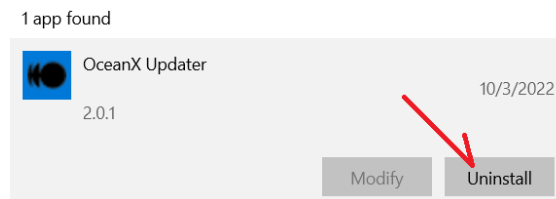
1. Select the search button on the taskbar and type **Add or remove programs**.



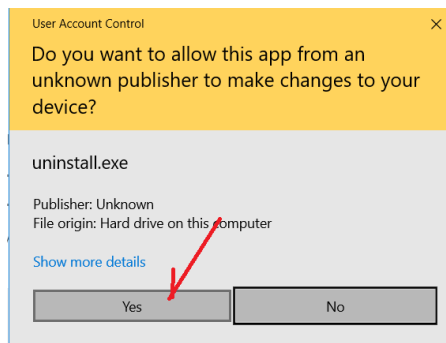
2. Click on the **Add or remove programs** to open the Windows add or remove program.



3. Type **oceanx** on the search field (red arrow above) to locate the application. Click on the OceanX Updater application (green arrow).



- Click on the Uninstall button (red arrow above). A new dialog is going to ask for confirmation, click on the new Uninstall button to continue.



- Click **Yes** on the User Account Control dialog (see above). It may take a couple of seconds for the installer to show up while the antivirus is inspecting the program so be patient.
- Click on the **Uninstall** button to start the process and once completed click on the **Close** button.
- Now run the new installer program to install the new program.