KI6106 / T6I06 10G PONPower Meter Data Management Software Operating Manual

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1. Overview

The 10G/XG PON Power Meter is ideal for measuring power in a typical live BPON/EPON/GPON FTTX communication link. The measured data can be saved with a time stamp in the internal memory of the meter for record and analysis at later stages.

The Data Management Software provides users a mean to download data saved in meter onto PC with Window operating system via USB connection. The software can also be used to download pass/fail threshold values of a connected meter onto PC, edit them and then uploaded them back onto the meter. The software also includes a feature for users to calibrate the connected meter for better measurement accuracy if necessary.

2. Software Installation

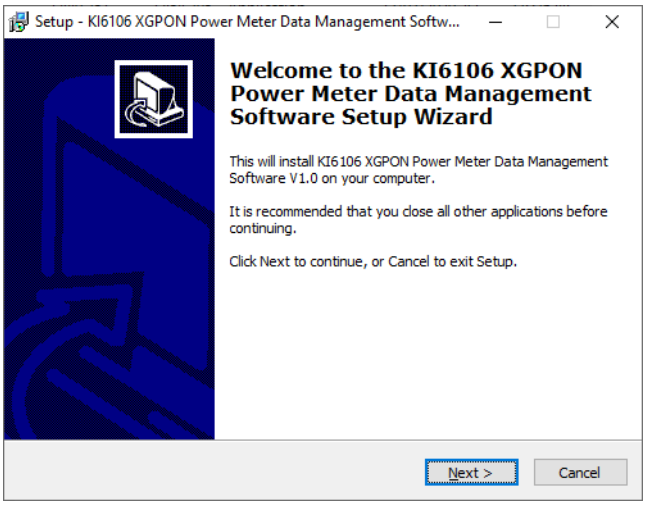
Computer requirement:

- WIN7 or WIN 10.
- Microsoft Office 2003 or more advanced version
- PC with USB port; COM 16 or lower Virtual Com Port configuration

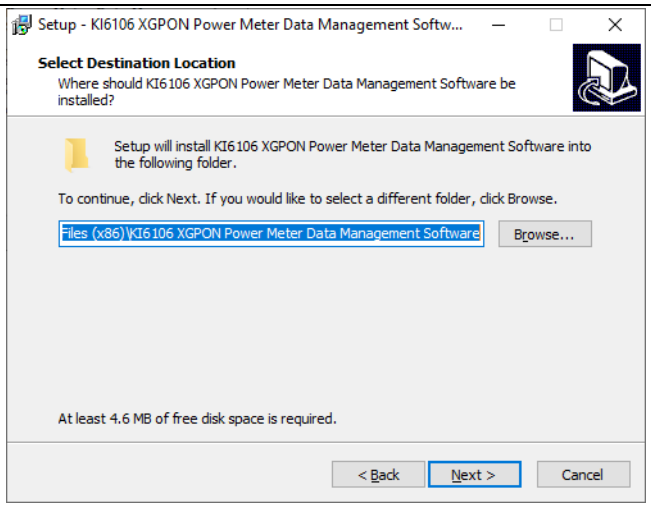
Installation steps:
Note: It is recommended to reboot the PC upon completing the software installation process.

1. Double click to execute the file, *KI6106 XGPON Power Meter Data Management Software.exe* (downloadable from Kingfisher's website or from the supplied CD.

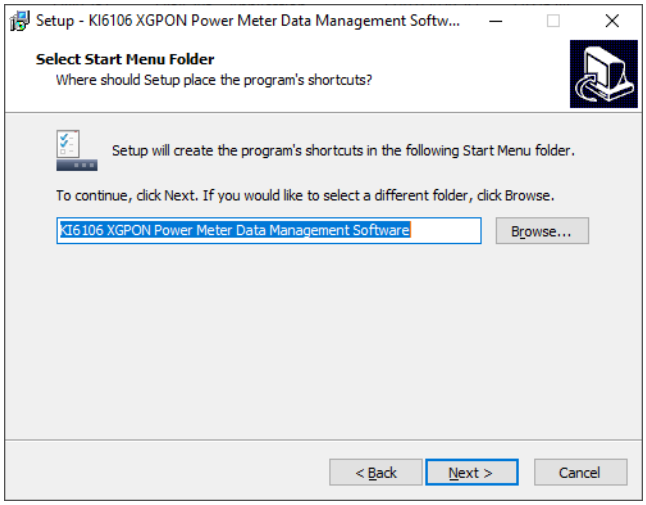
2. Click "Next" to continue.



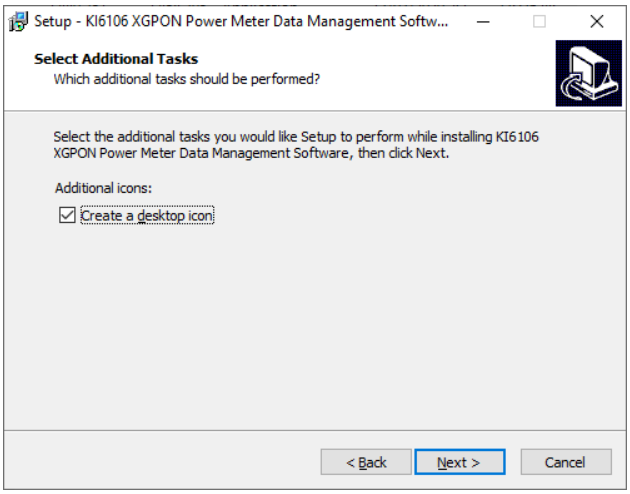
3. Select a directory in your PC to save the software file and click "Next" to continue.



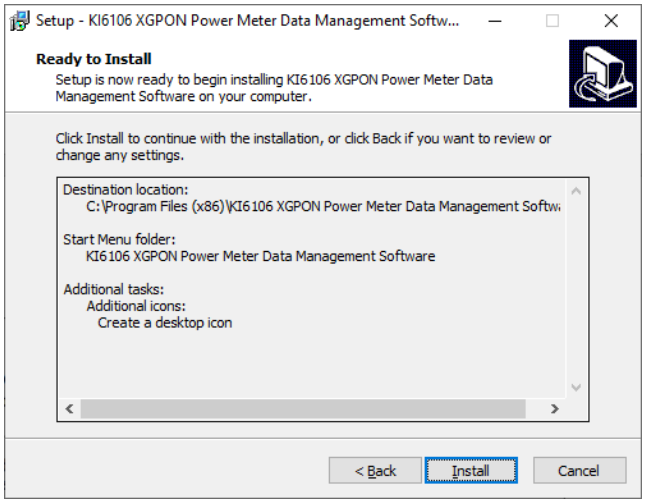
4. Click “Next” to continue.



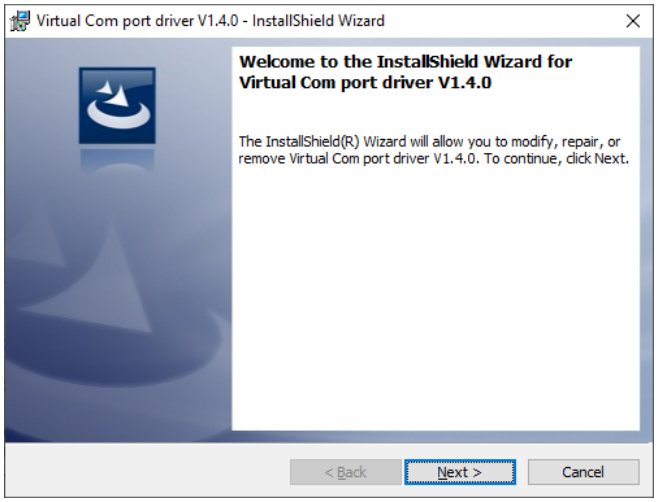
5. If you wish, check “Creat a desktop icon” and click “Next” to continue.



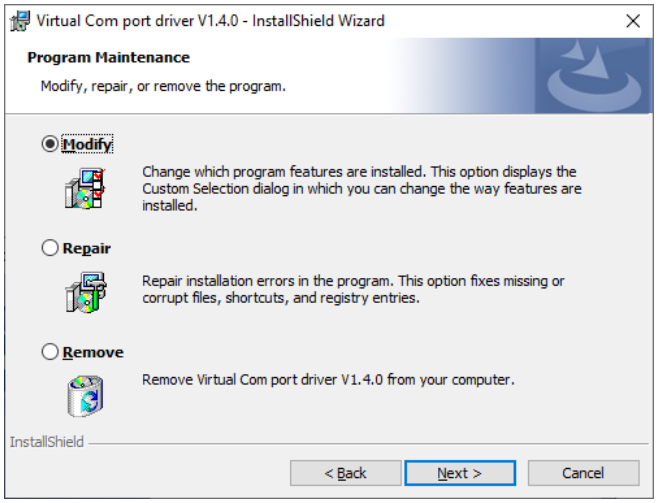
6. Click “Install” to continue.



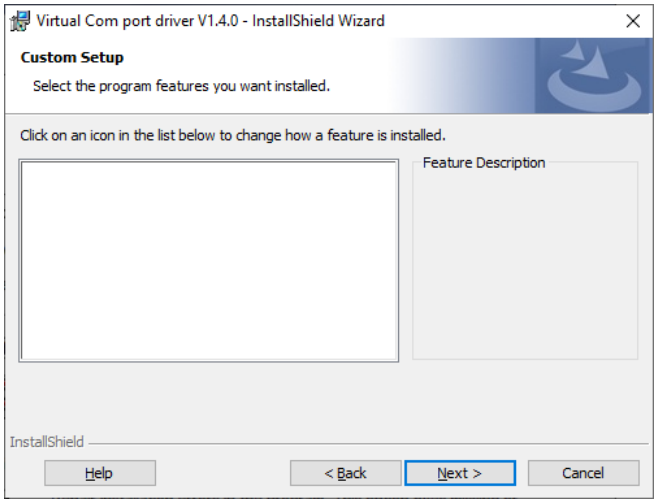
7. Upon completion of the installation, click “Next” to continue.



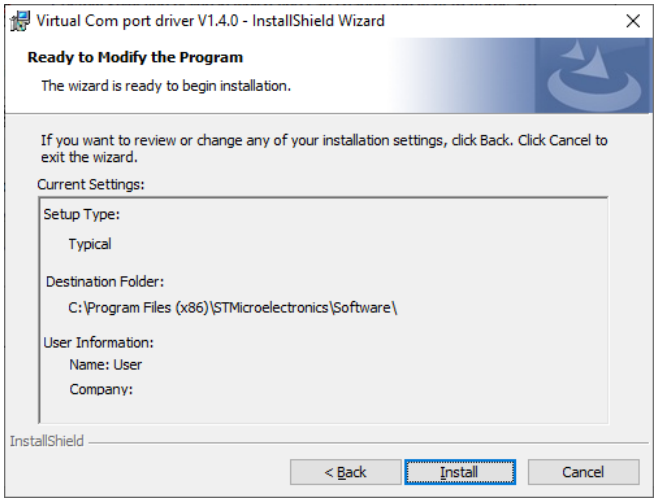
8. If the Virtual Com port driver has been installed in the PC prior to this, select “Modify” and click “Next” to continue.



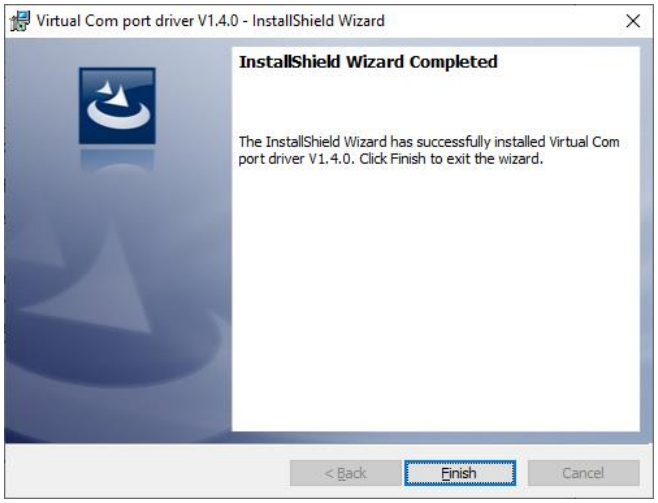
9. Click “Next” to continue.



10. Click “Install” to continue.



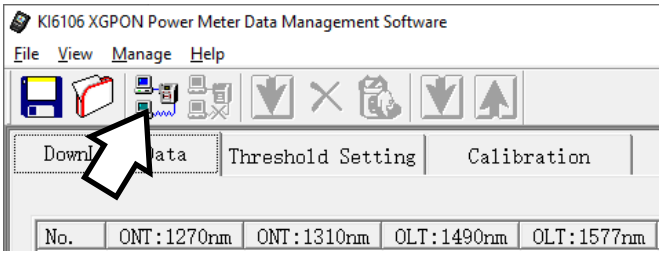
11. Click “Finish” to complete the installation processes.



3. Connecting Meter to the Software

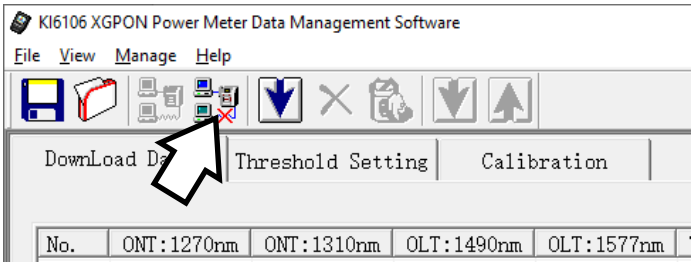
To connect:

1. Start the software by double-click on its Icon.
2. Connect the meter to the computer using the supplied USB cable.
3. Turn the meter on.
4. Click button as shown below to initiate the connection. A dialog box should pop up to confirm a successful connection otherwise, refer to section 9 at the end of this manual for possible causes and solutions.



To disconnect:

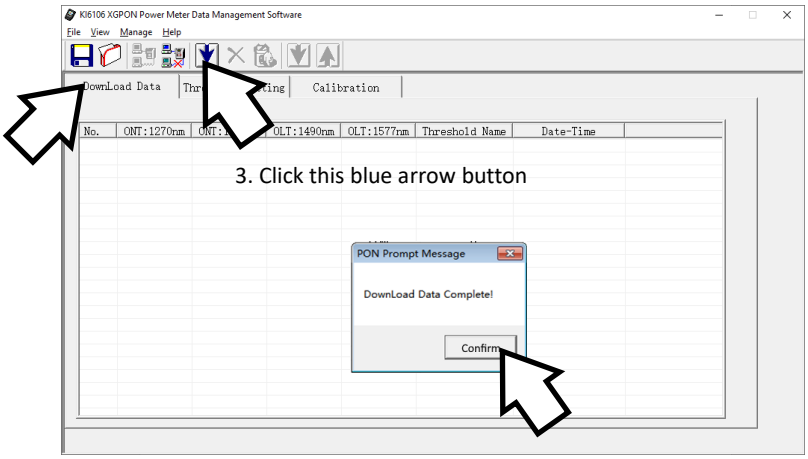
Click on the button as shown below, a dialog box will pop up confirming that connection has been successfully terminated.



5. Download Data from Meter to the Software

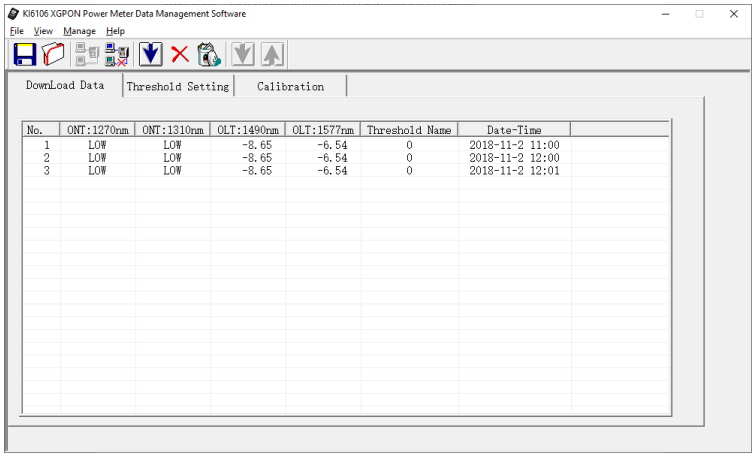
1. Ensure that the meter is connected to the software.

2. Click “DownLoad Data” tab or “Downward arrow” button.



5. All data records saved in the meter’s memory will be downloaded and displayed on the software as shown

below.



6. Managing Data Saved in Meter using the Software

Continue from step 5 of Section 6 above and follow the steps in the subsections below to delete data saved in meter, export data in meter onto PC or open data files saved in PC.

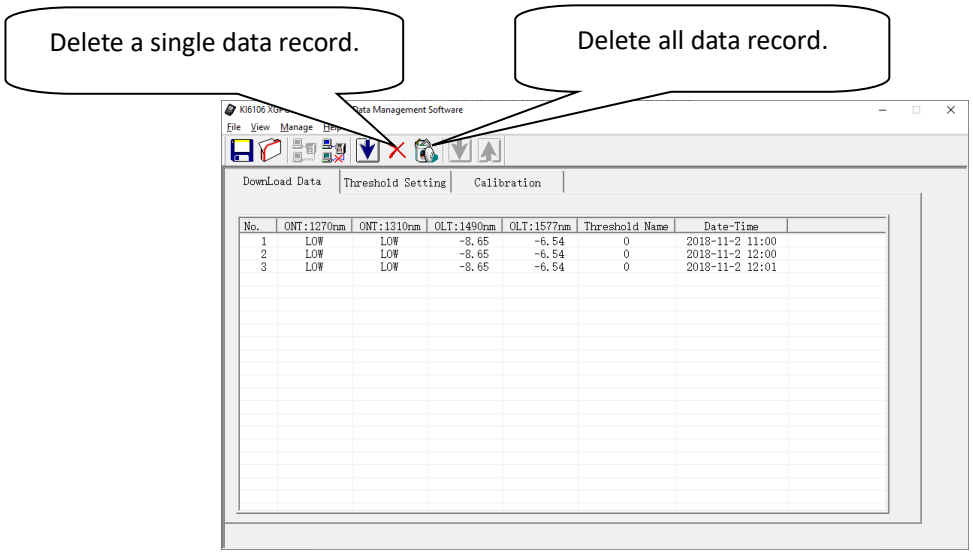
6.1 Deleting data

A. Deleting single data record:

Click button,  in the Tool Bar and the last data record saved in meter will be deleted.

B. Deleting all data records:

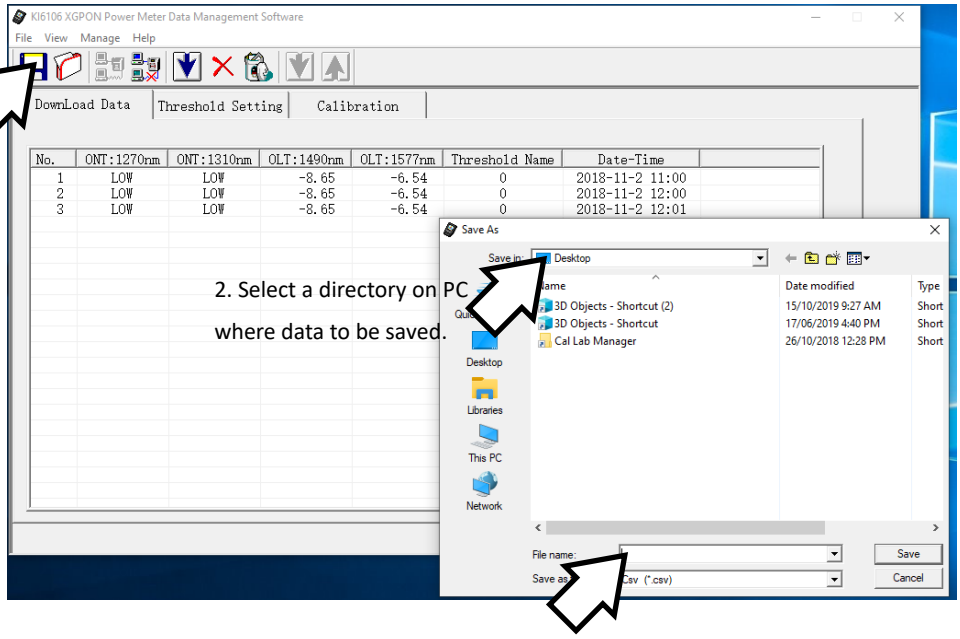
Click button,  to delete all record (clear memory content) saved in meter.



6.2 Saving Data downloaded from meter onto PC

With the software, data saved in meter can be transferred and saved in a PC, see figure below for

1. Click this button

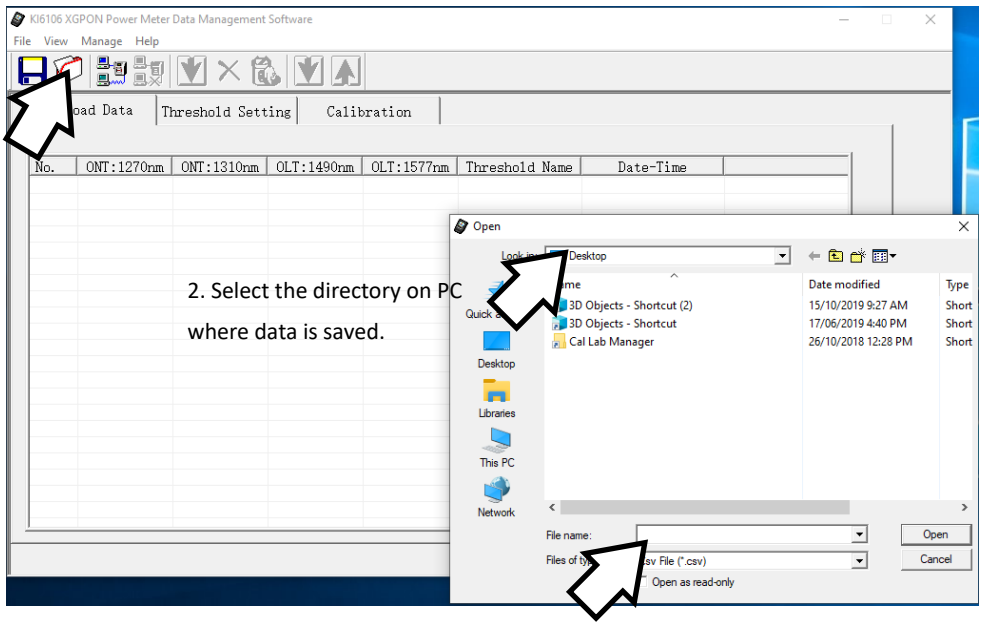


2. Select a directory on PC where data to be saved.

3. Enter file name for data to be saved and click “Save”. A popup message will be displayed confirming data has been exported successfully.

6.3 Open a data file saved in PC

1. Click this button.



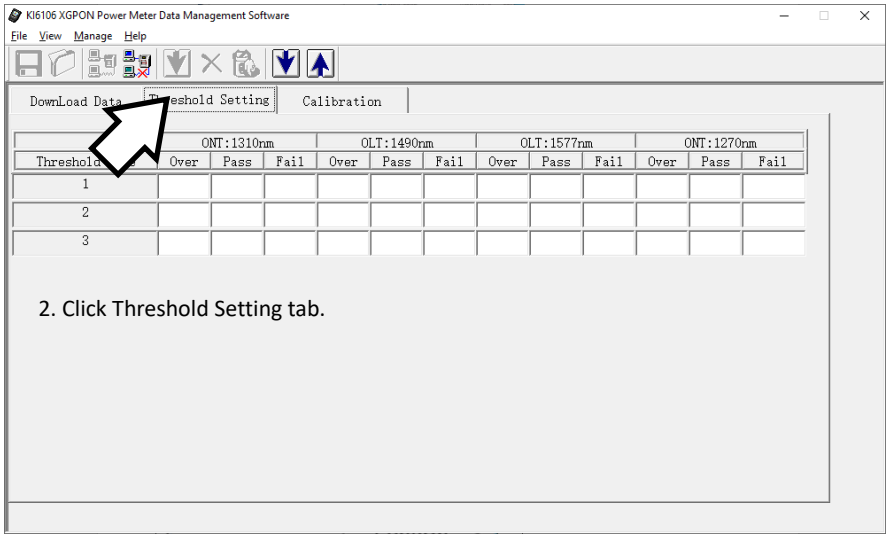
2. Select the directory on PC where data is saved.

3. Select the data file to open, then click “Open”.

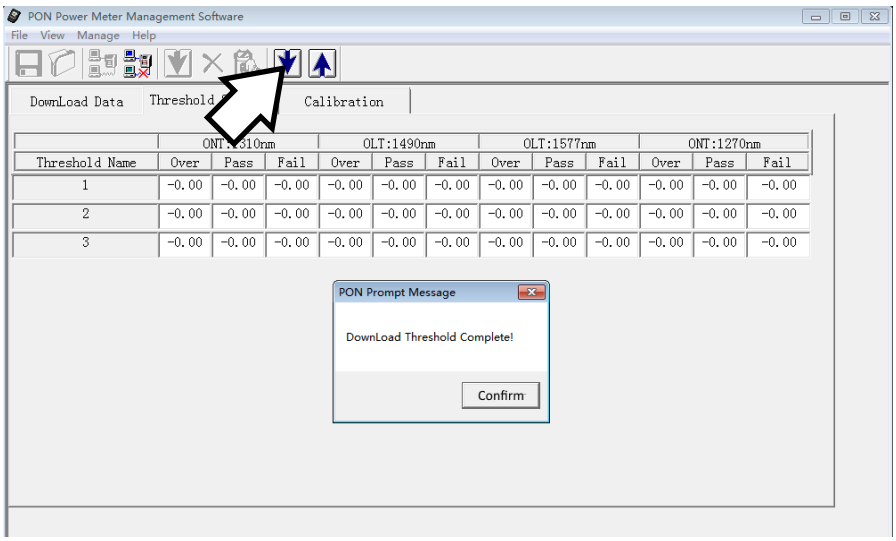
7. Setting meter's pass/fail thresholds using the software

The software can be used to remotely program Over/Pass/Fail threshold values of the meter, see instructions below.

1. Make sure that the meter is connected to software.

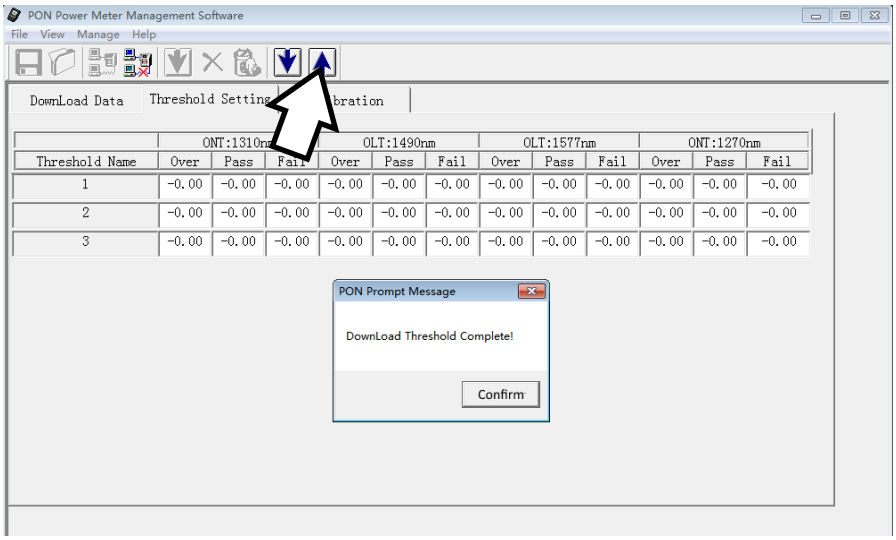


3. Click "downward arrow" and then "Confirm" to download thresholds from meter.



4. 3 groups (Threshold Name 1~3) of Alarm/Pass/Fail threshold values can be programmed in the meter. Select group and edit the values as necessary with mouse and keyboard.

5. Click "Upward arrow" button to upload the new threshold values onto the meter.



8. Calibration Meter via the Software

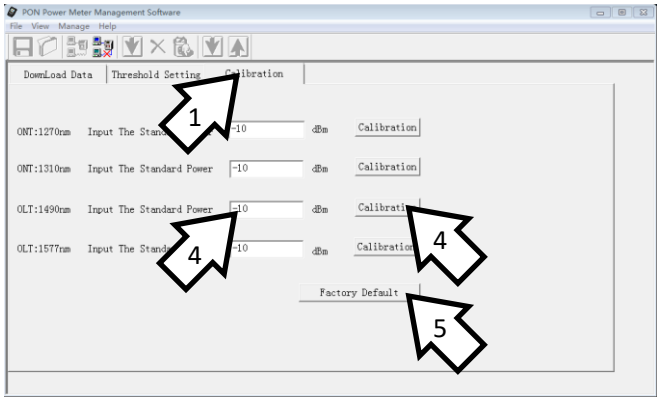
The software can be used to calibrate the meter. Note that the instrument has already been calibrated in the factory. It usually does not require recalibration before the recommended 3-year calibration cycle.
To calibrate the instrument, a stable light with narrow spectrum width (e.g. DFB lasers), a reference power meter with the relevant wavelength capabilities and a test grade SM optical patchlead are needed. Follow the steps below to do the calibration.

1. Make sure that software is connected to the instrument and click “Calibration” tab.

2. Connect the light source with the reference meter using the SM patchcord. Select the same wavelength (to be calibrated) on both equipment. Read and note down power value on reference meter.

3. Disconnect patchcord from reference meter and reconnect it to the appropriate port (ONT port for 1270 and 1310 nm; OLT port for 1490 and 1577 nm) on the instrument to be calibrated.

4. On the software, enter the power value read from reference meter in the box beside “Input The Standard Power” and, click the "Calibration" button of the wavelength being calibrated, see figure below.



5. Repeat steps 2 through 4 for all the wavelengths that need recalibrations.

6. To restore the default factory calibration values, click the "Factory Default" button in the lower right corner.

9. Common Problems and Solutions

The Data Management software and the instrument fail to connect.

Possible causes & solutions:

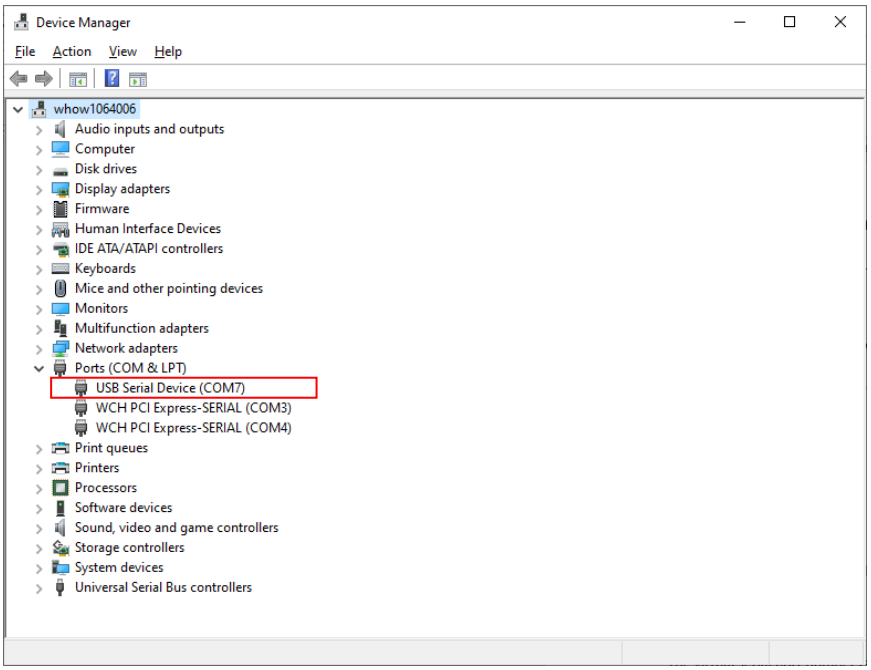
1. Operating system compatibility problem. Refer to Computer requirement in section 2 of this manual.

2. Improper USB cable connection between the computer and meter. Unplug and re-plug connectors at both devices to reconnect.

3. The meter is not turned on. Turn on the meter.

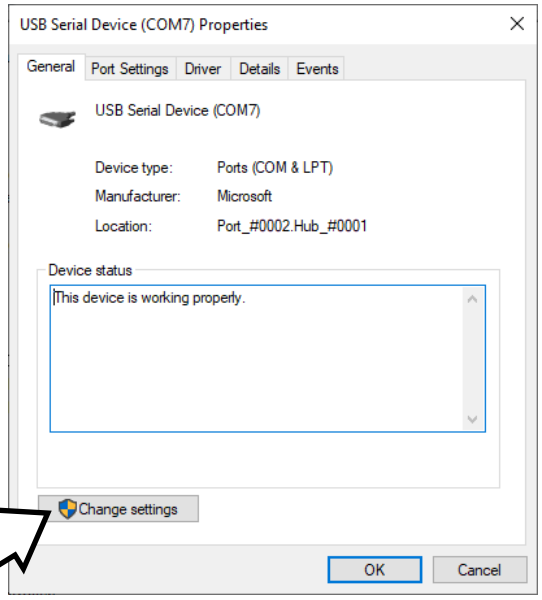
4. USB Virtual COM port driver has not been installed or updated. Make sure that the COM port driver has been properly installed on your PC.

   Open **Device Manager** of your PC, if the COM port driver is installed, “USB Serial Device” should be seen under “Ports (COM & LPT)” as highlighted below when the meter is connected to PC.

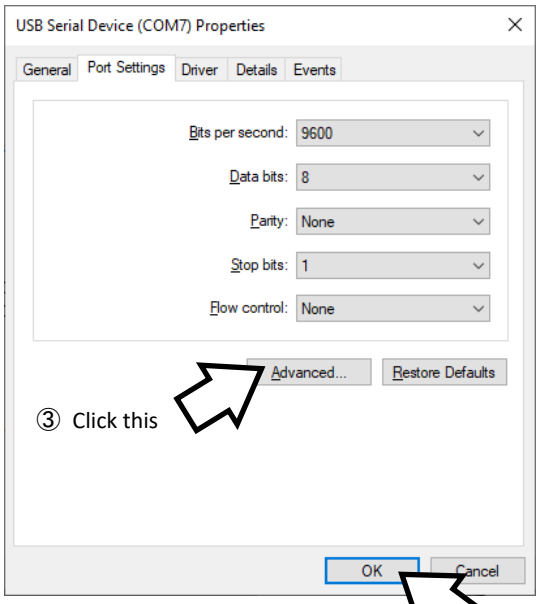


   Make sure that the serial port number COMx is not bigger than 17 i.e. COM17. If you see a serial port number bigger than that, change it by doing the following,

   ① Right-click on “USB Serial Device (COMx)” and select “Properties”.

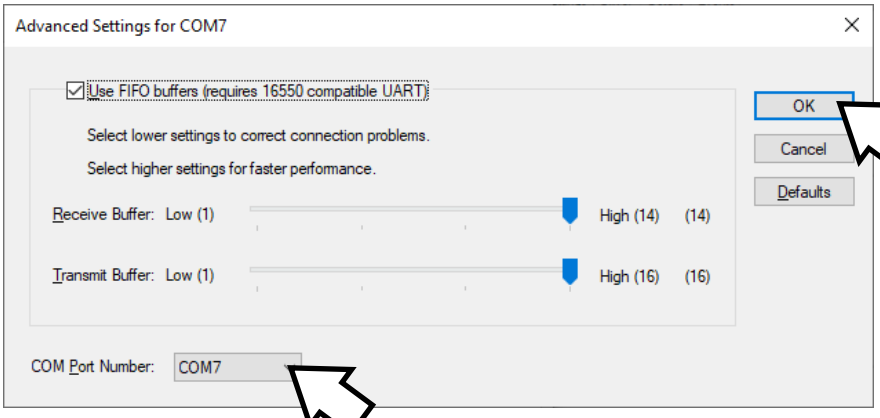


② Click this



③ Click this

⑥ Click this to complete the setting



⑤ Click this

④ Select from the drop-down menu an available COM number, in the case COM7.