

FH01 Raw Data Handling Manual

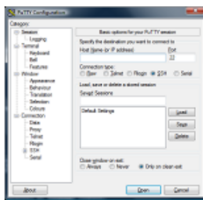
Version 0.2

The on-device firmware currently supports exporting raw serial data over a USB connection.
Please note, raw data from paired tests is saved on the Right side unit only
The data is exported and saved as a .csv file
The baud rate is 57600

The steps:

1. We need a program that can interpret and log an incoming one way data stream
 - a. This manual uses Putty, a generic program for monitoring serial data
 - b. A multitude of other programs can be used if you are familiar with them
2. We need to navigate to the data save slot on-device, then select export once everything is set up

1. Download and install Putty from <https://www.putty.org/>



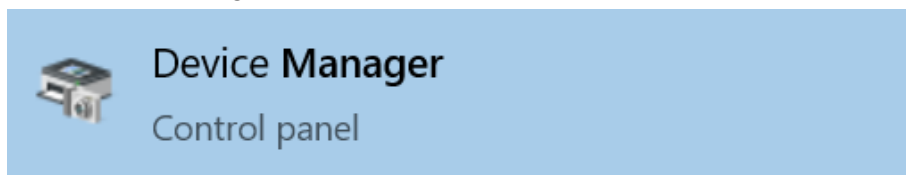
Download PuTTY

PuTTY is an SSH and telnet client, developed originally by Simon Tatham for the Windows platform. PuTTY is open source software that is available with source code and is developed and supported by a group of volunteers.

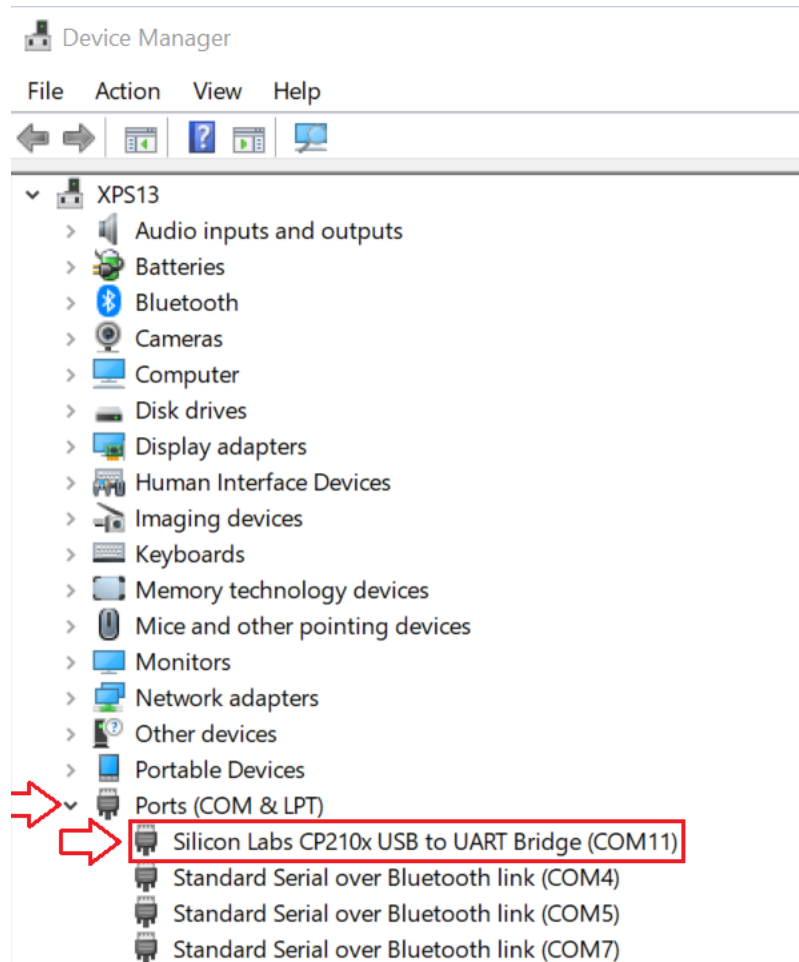
You can download PuTTY [here](#).

2. Find and record the COM port number of each of your devices. -If you already know these, skip to step 3.

- 2a. Plug in your FH01 unit with the provided USB cable
- 2b. Open device manager



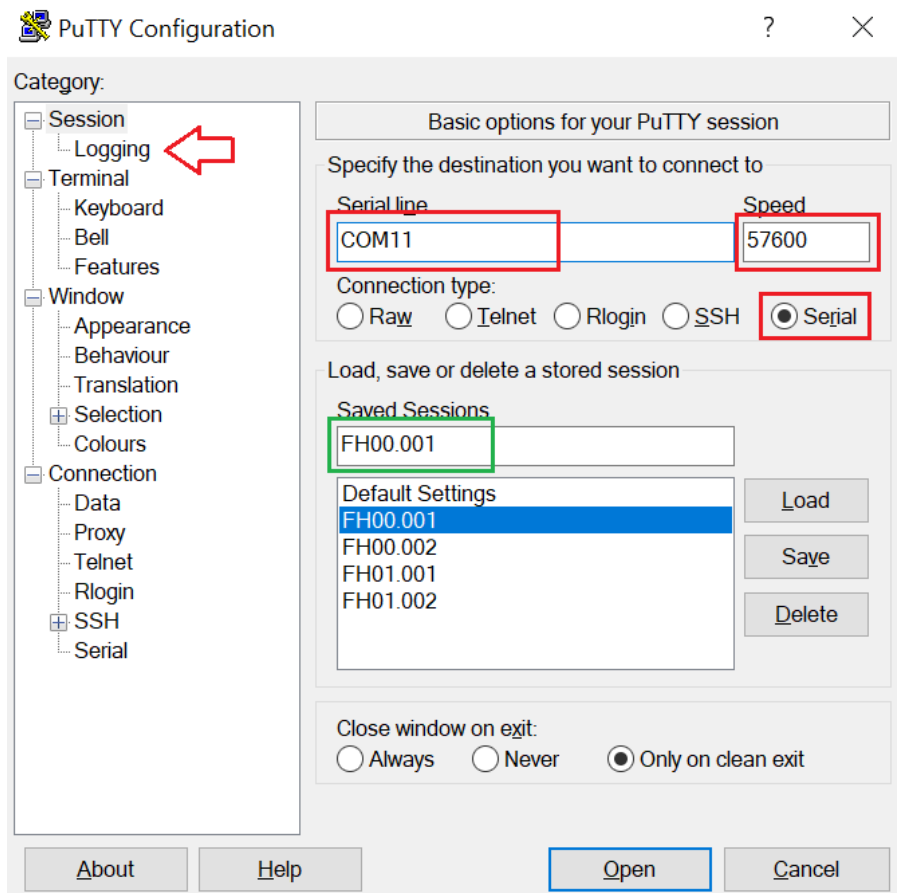
2c. The port number of your device will look something like this. In this example, it is COM11



3. Putty Initial Setup

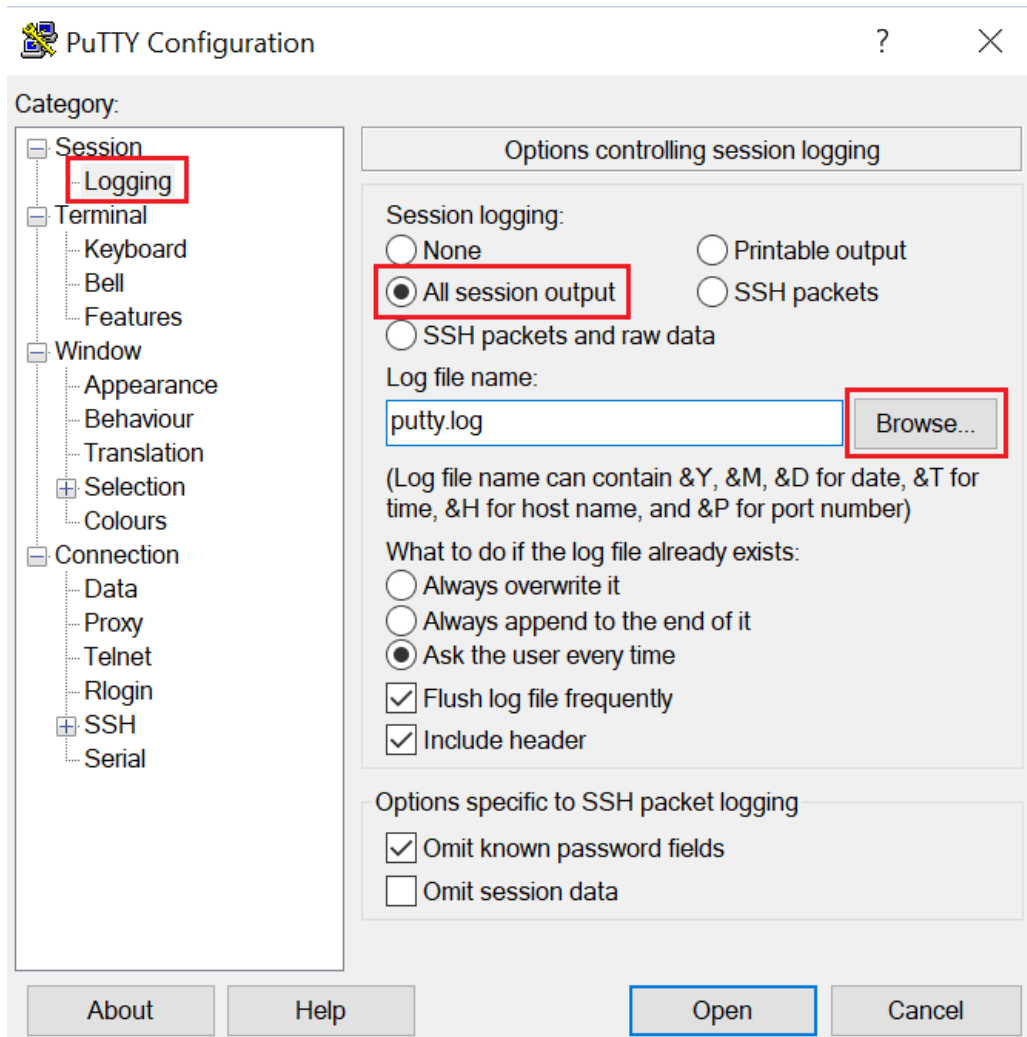
3a. Change these setting on this first screen

- Serial line: The COM number of your device
- Speed: 57600
- Connection type: Serial
- Enter a name for this device (e.g. "FH01 Left")



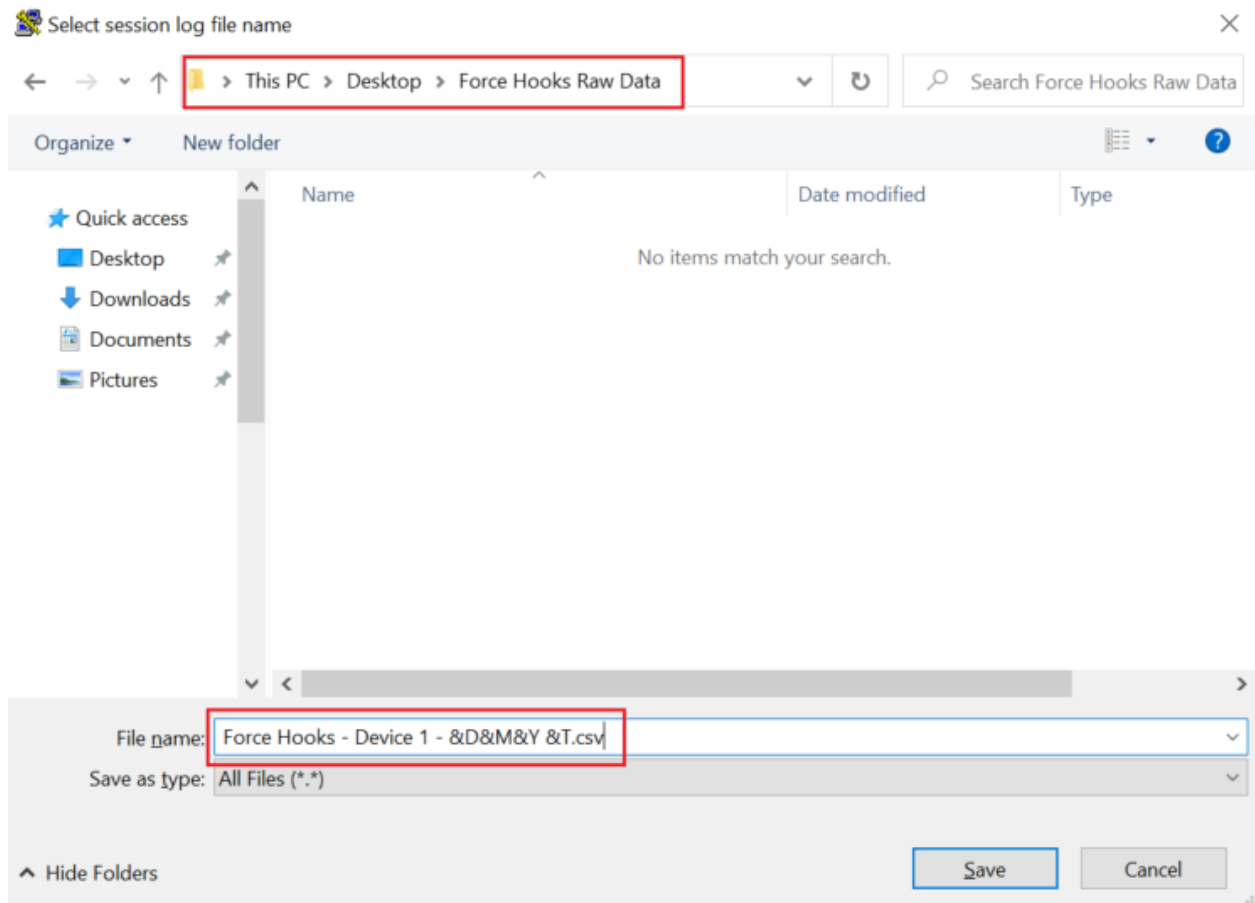
3b. Go to the “Logging” settings tab

- Session logging: All session output
- Select “Browse” button to choose where the data will be saved



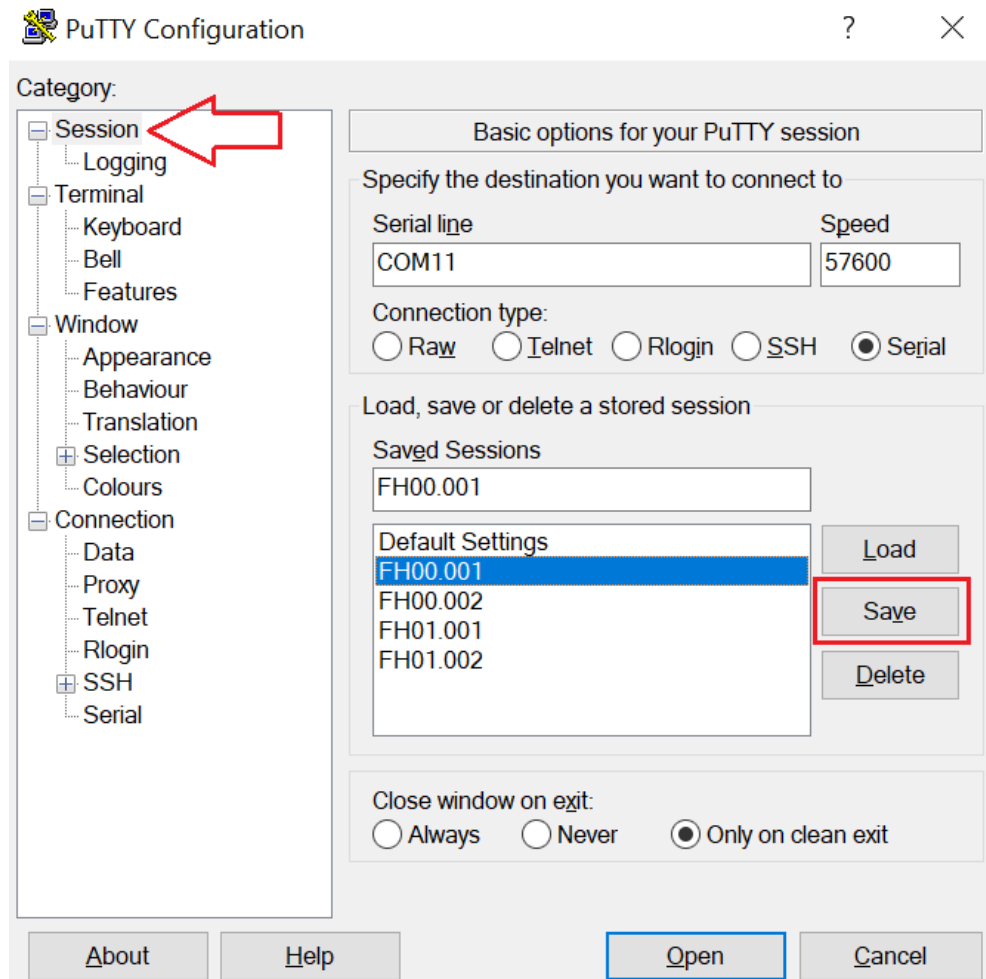
3c. In this example, we are saving the data to the desktop.

- Best practice is to use the file name similar to the example below.
- The ampersand (&) symbol will automatically date and timestamp the file, meaning no file will ever overwrite each other
- The .csv file extension means it will automatically open in Excel
- **“Force Hooks - Device 1 - &D&M&Y &T.csv”**



3d. Once that is done, head back to the “Session” tab and click “Save”

- Once you’ve done that, the settings are now saved under the named profile “FH00.001” in this example.
- From now on, we can just double click the saved session and all settings will be automatically applied



4. Using Putty in normal operation

1. Plug in the device through USB
2. Open Putty
3. Double click on the corresponding saved session. The device may restart at this point, which is completely normal.
4. On the device, navigate to the desired save slot under "View Tests"
5. Press enter to export the data over usb
6. During this process, you should see the raw values being displayed on your PC screen
7. After the data has finished exporting, close the session window and the data will be automatically saved to your designed folder

Device start up

```
***** Force Hooks Testing *****
Practical Isometric Testing in the Weight Room
***** Dev Ver 3.2 *****
***** https://www.forcehooks.com *****

----- Self-Test -----
Battery Monitor: Pass
Battery: Pass
ADC: Pass
Flash: Pass
EEPROM: Pass
LCD: Displaying...

-----*****settings*****-----
Threshold:20 TestDuration:10 Fs:600
calibration Factor:859256

-----
new Fs:600
Tare Value = 8391555
```

Screen after exporting a test

```
COM11 - PuTTY
5979,9.965000,1
5980,9.966667,1
5981,9.968333,1
5982,9.970000,1
5983,9.971667,1
5984,9.973333,1
5985,9.975000,1
5986,9.976667,1
5987,9.978333,1
5988,9.980000,1
5989,9.981667,1
5990,9.983333,1
5991,9.985000,1
5992,9.986667,1
5993,9.988333,1
5994,9.990000,1
5995,9.991667,1
5996,9.993333,1
5997,9.995000,1
5998,9.996667,1
5999,9.998333,1
Max:269 Min:1 Impulse (0-0.2s):2
End of File
```

Future Feature Additions:

- Ability to export all save slot data at once
- Custom PC application to communicate with the device
- Please contact info@forcehooks.com with any feature requests