

## YK-LAB

---

# РУКОВОДСТВО ПО ПОЛЬЗОВАТЕЛЬСКОМУ ИНТЕРФЕЙСУ ПРОГРАММНОГО ОБЕСПЕЧЕНИЯ ДЛЯ ПК

---

## USB-мультиметр Shizuku

---

# Руководство по пользовательскому интерфейсу программного обеспечения для ПК

---

## V1.00.44

---

## Версия 0.1 и обновление

---

Из-за сложности функций программное обеспечение / прошивка / оборудование могут часто отличаться, это руководство может быть неприменимо к последней версии программного обеспечения / прошивки / оборудования.

## 0.2 История изменений

---

V1.00.44 20200815

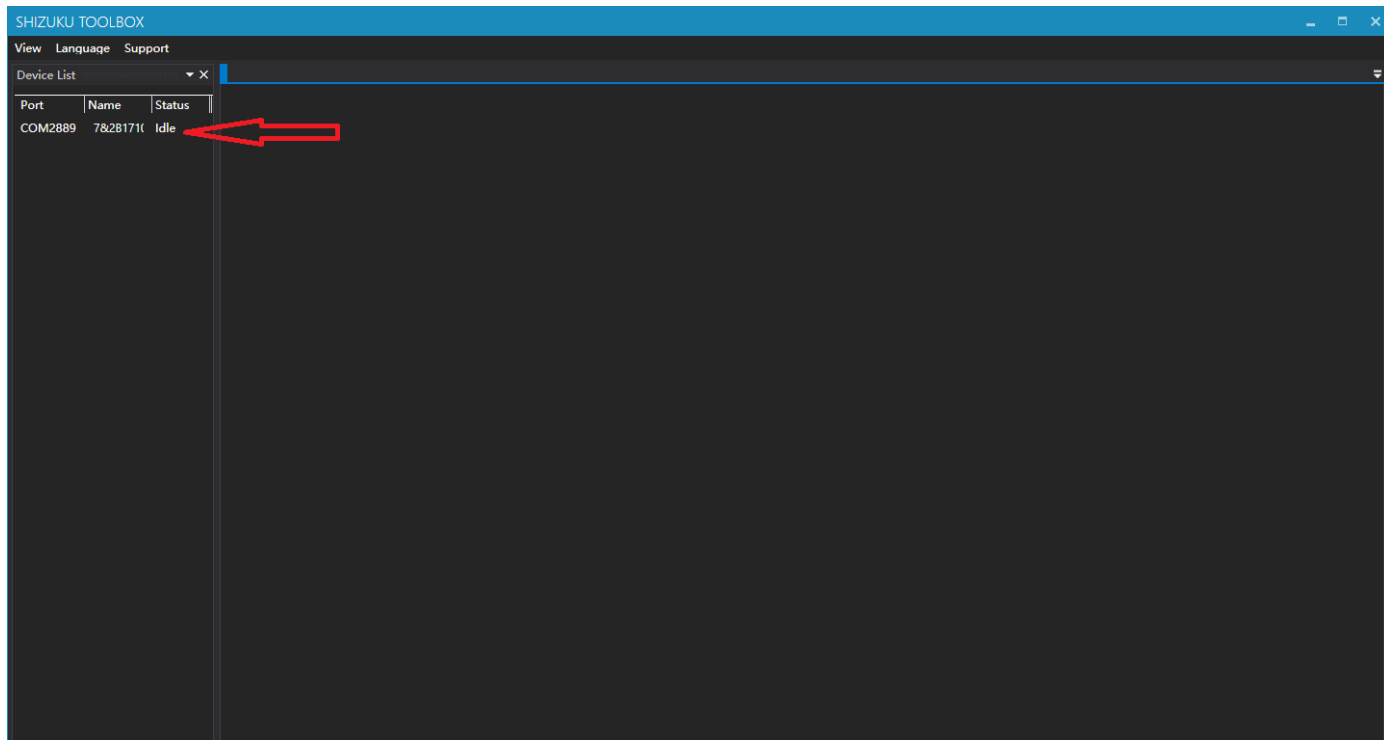
1. Добавлен мануал для загрузочного модуля.

## 1.0 Подключите счетчик

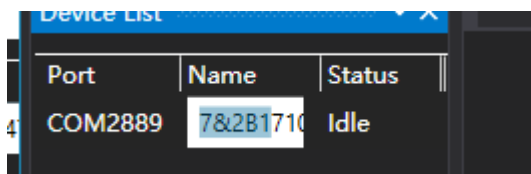
---

Подключите глюкометр и ПК с помощью кабеля micro USB.

Откройте программное обеспечение для ПК, вы должны увидеть что-то вроде следующего:

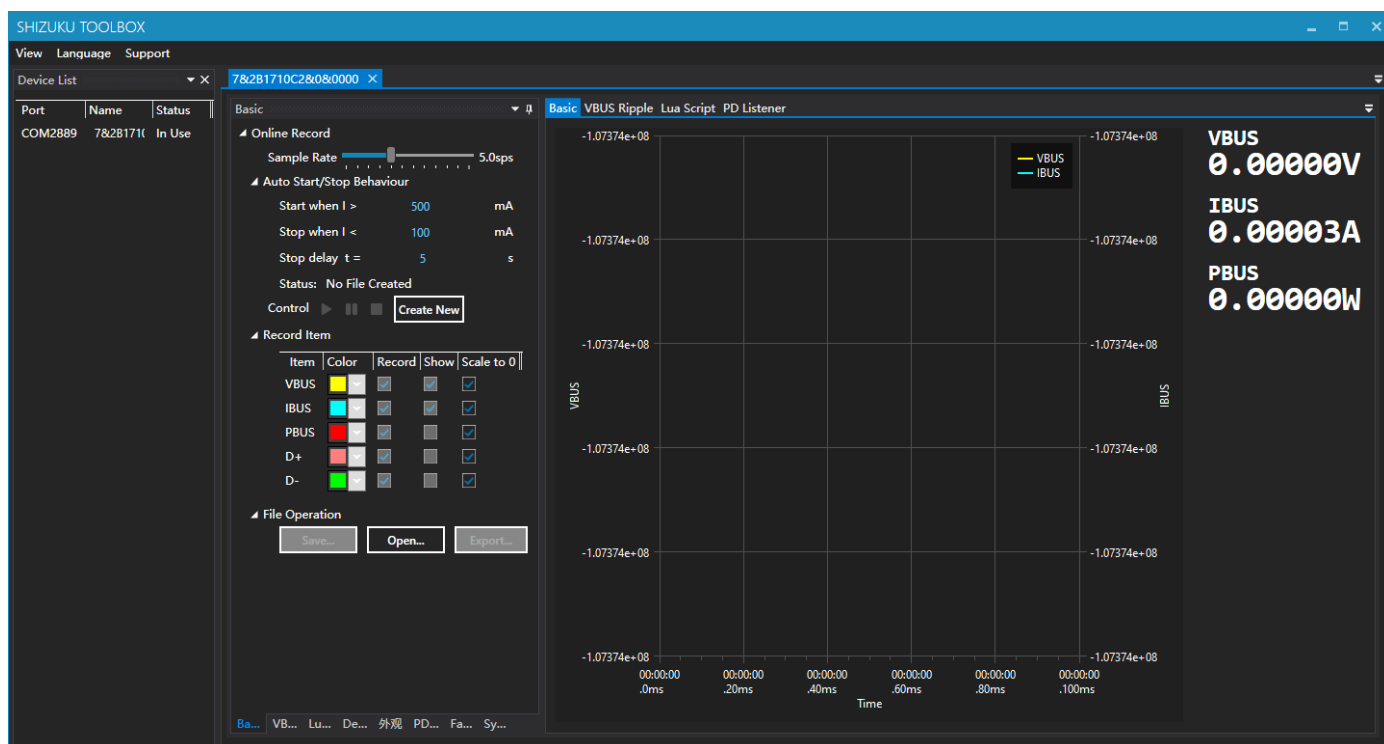


Красная стрелка указывает на только что подключенное устройство.



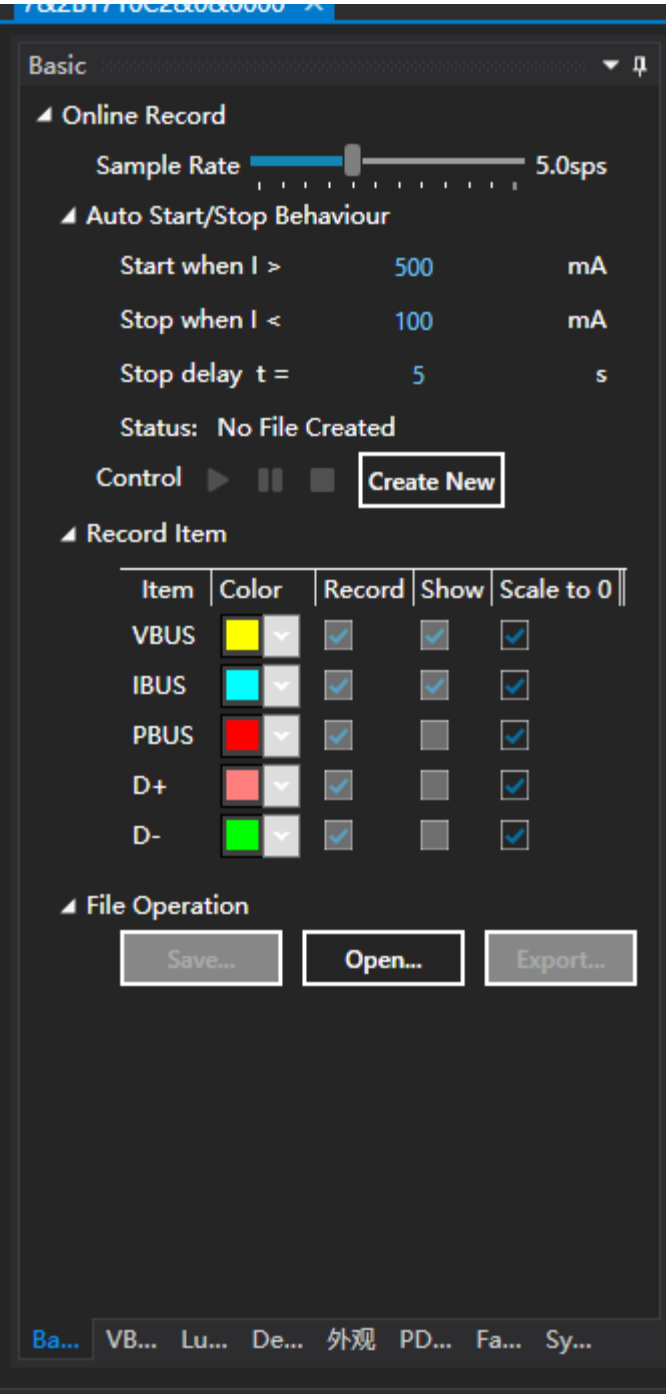
Вы можете щелкнуть имя счетчика, чтобы переименовать его, оно используется для различения их, когда подключено несколько счетчиков.

Дважды щелкните устройство, должно появиться следующее:



Теперь мы по очереди познакомим вас с функциями:

## 2.0 Базовый (регистрация данных)

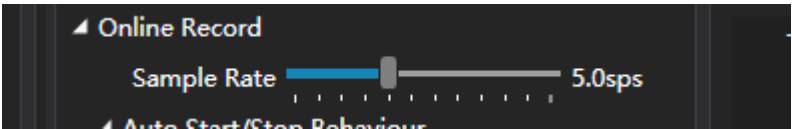


### 2.0.0 Создать новый

Click “Create New” to create a new record.

### 2.0.1 Sample Rate

Drag to adjust the sample rate of the record, range 0.2-1000sps.

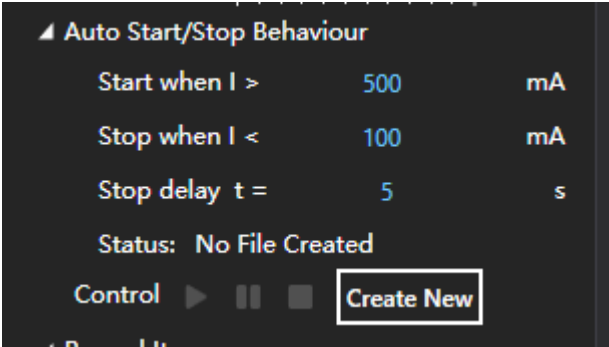


### 2.0.2 Auto Start/Stop Behavior

After clicking the start button, the record will not start immediately. The program waits for the current to go above `Start Current`, then it starts record. If you want the record to start immediately, you should set `Start Current` to 0.

You can specify a current, below which the record stops automatically. If this value is specified as 0, the record will never stop automatically.

To prevent instantaneous low current triggered stop condition unexpectedly, you can set “Stop Delay” parameter, only the current is below the stop threshold for a certain amount of time(Stop Delay t), the record will be stopped.



### 2.0.3 Record Items

- To change the color of a record item, click the color combo box.
- Check/Uncheck “Record” column to specify items to be recorded.
- Check/Uncheck “Show” column to specify items to be graphed.
- Check/Uncheck “Scale to 0” column to specify if a item is graphed relative to 0 (That is, force the lower bound of the graph to be 0).

Record Item				
Item	Color	Record	Show	Scale to 0
VBUS	<div><div></div><div></div></div>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
IBUS	<div><div></div><div></div></div>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
PBUS	<div><div></div><div></div></div>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
D+	<div><div></div><div></div></div>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
D-	<div><div></div><div></div></div>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### 2.0.4 File Operation

Click “Save...” to save the current opened record as file (The record should be stopped).

Click “Open...” to open existing record files (Including offline record created by meter itself).

Click “Export...” to export the current opened record as CSV file to process the data with other application.

## 2.0.5 Online record typical procedure

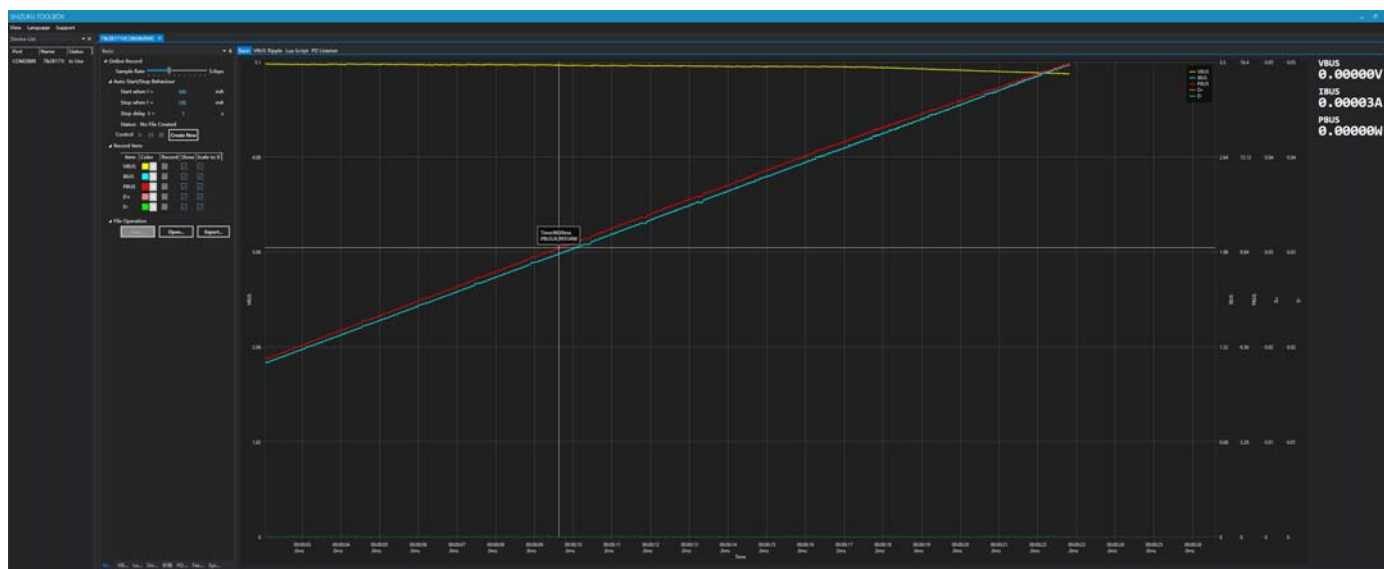
1. Click “Create New”.
2. Adjust **Sample Rate**, **Auto Start/Stop** Parameters to proper values, check items you want to record.
3. Click green start button.
4. After manual/auto stop, analysis/save/export the record.

## 2.0.6 Graph Area

Click and hold some point on the graph, to view detailed value at that point.

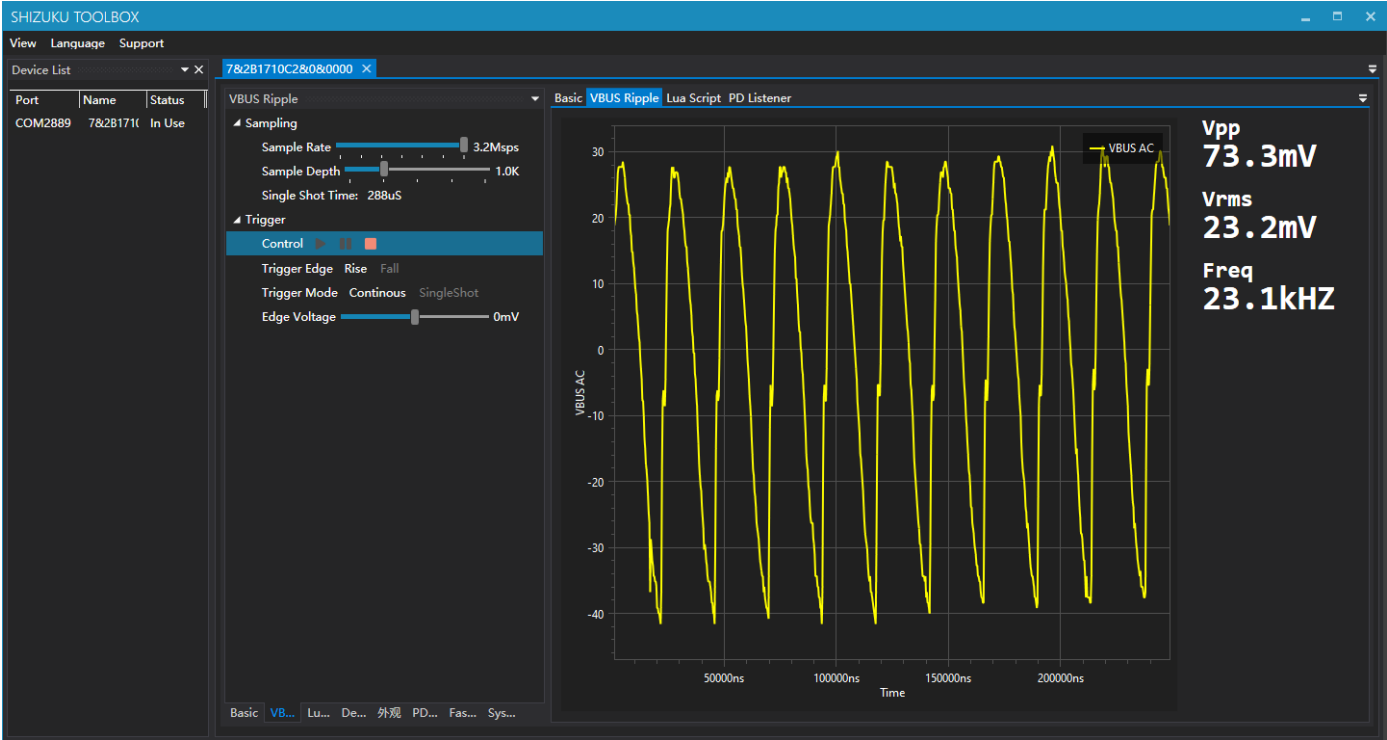
Right click and drag to move the graph horizontally.

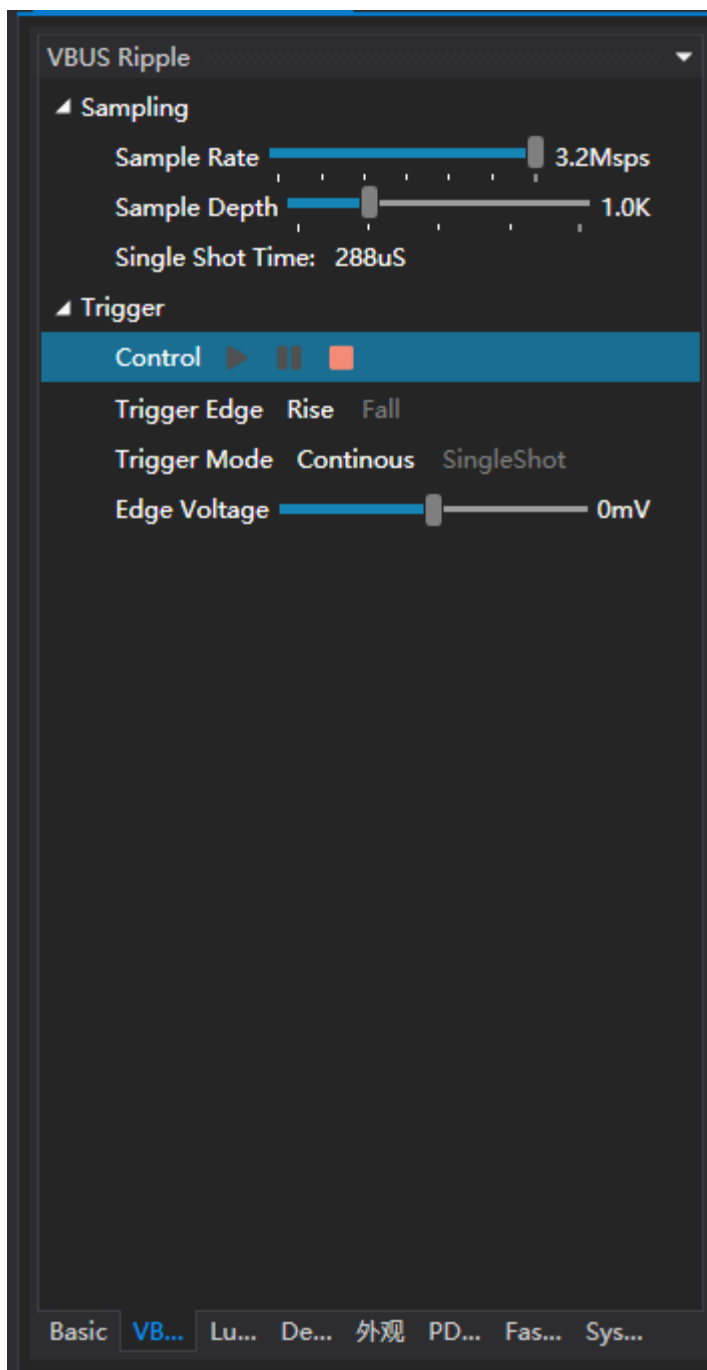
Use the wheel to zoom in/out.



## 2.1 VBUS Ripple

View AC-coupled voltage on VBUS:





### 2.1.1 Sample Rate

Drag to adjust the sample rate, range 0.1-3.2Msps.

### 2.1.2 Sample Depth

Drag to adjust the sample depth (How many points are contained per sample).

### 2.1.3 Trigger Edge

Click to select the trigger edge.

### 2.1.4 Trigger Mode

Click to select the trigger mode.

## 2.1.5 Edge Voltage

Drag to specify the edge voltage.

## 2.1.6 Graph Area

Graph area is on the right side of the screen.

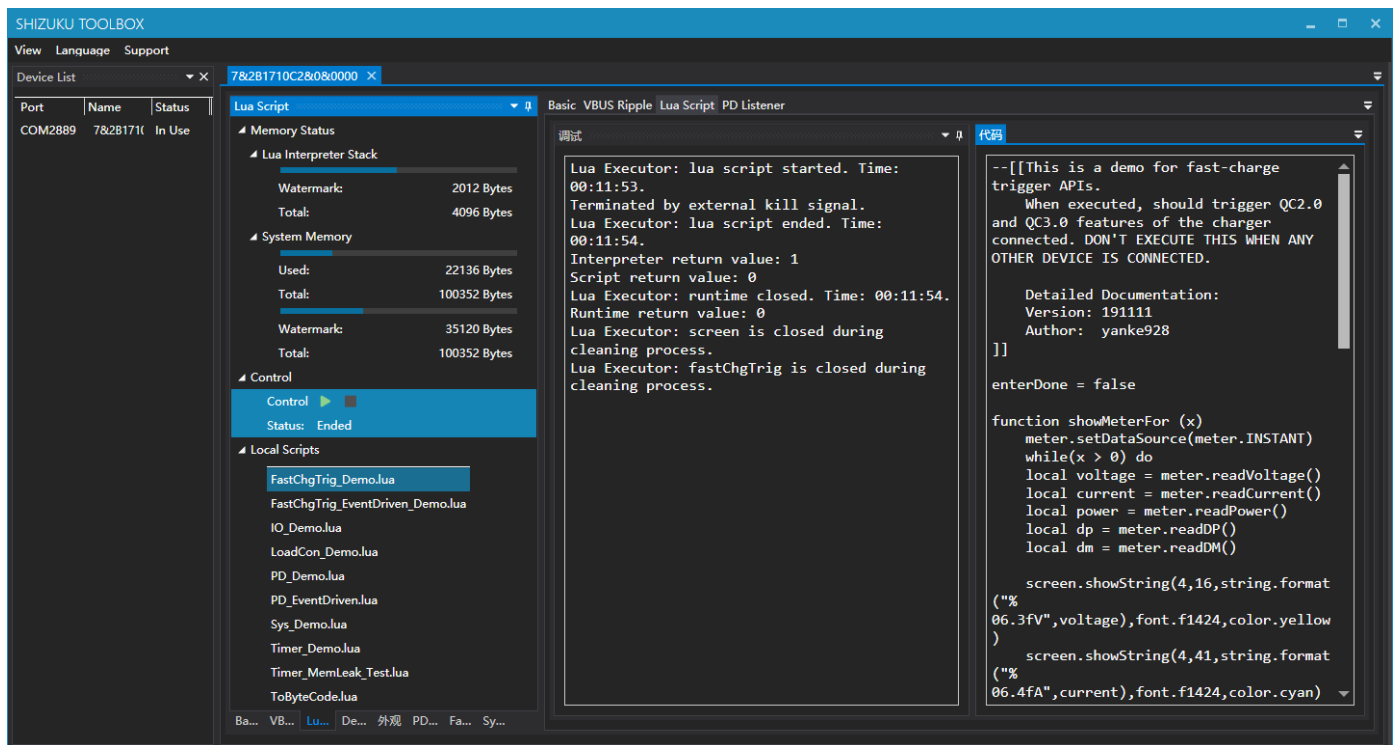
Click and hold a point on the graph to see precise value on that point.

Right click and drag to move the graph horizontally.

Use the wheel to zoom in/out.

## 2.2 Lua Script

This article only describes lua related features on the software, for more information, please go [here](#).



### 2.2.1 Memory Status

Real-time memory status is shown here.

### 2.2.2 Local Scripts

Here local scripts are listed, example codes are stored by default.

### 2.2.3 Debug

This is the output terminal. Outputs of Lua program, Lua executor, Lua Interpreter are all here.

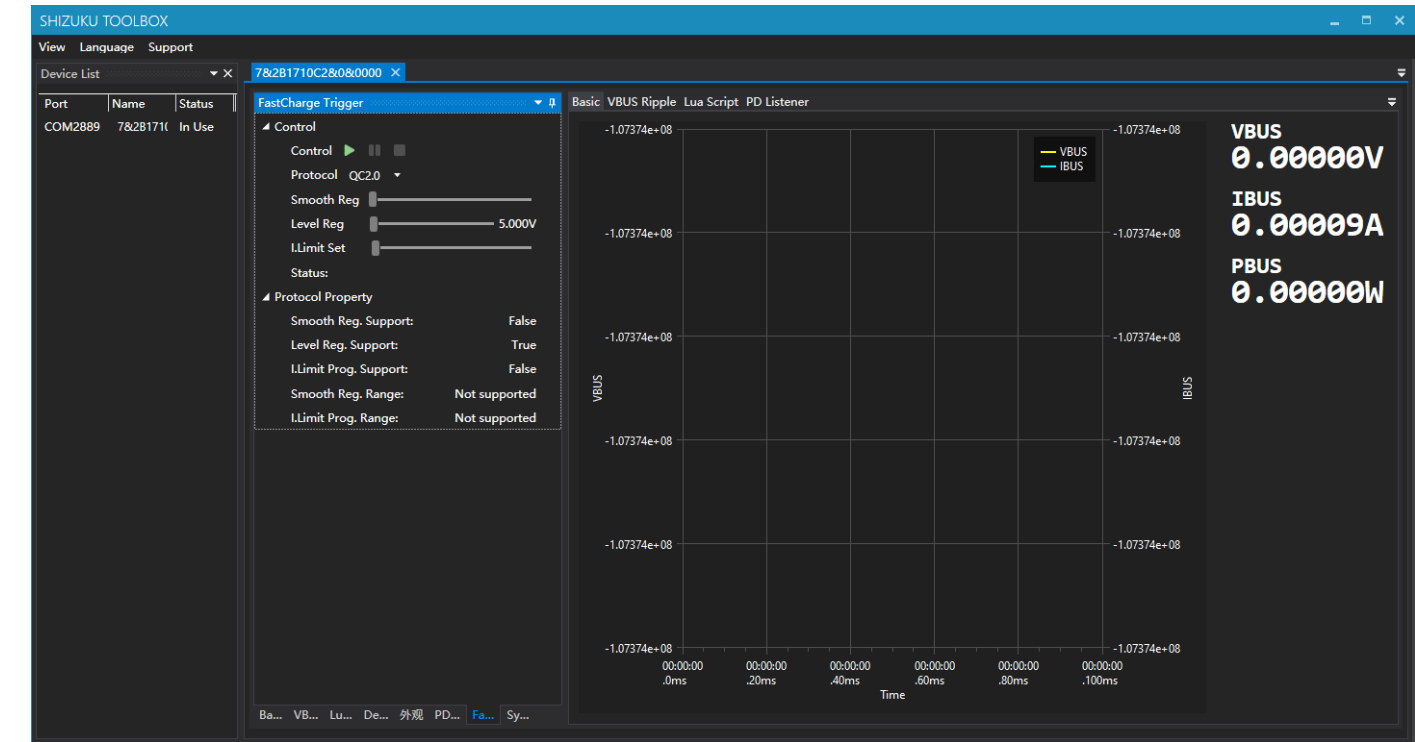


## 2.2.4 Code

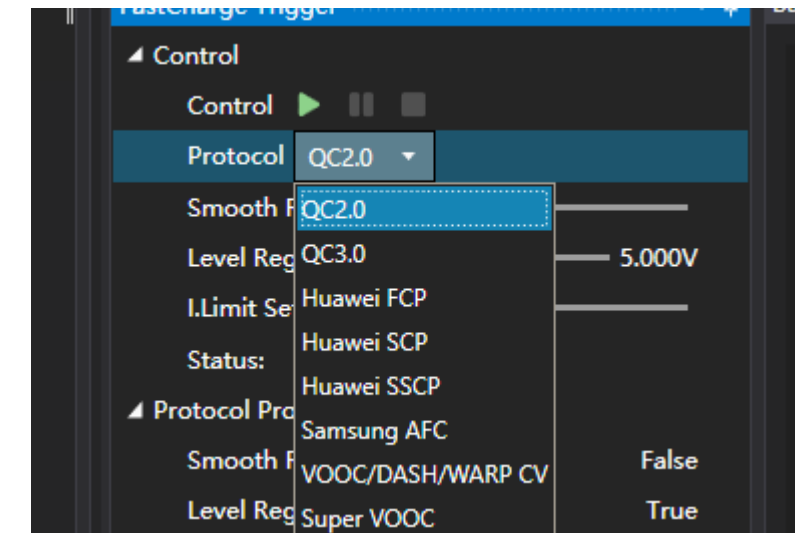
Currently loaded code, click green button to download and execute.

## 2.2 FastCharge Trigger

You can use fast-charge trigger feature on the PC software as well as the meter itself.

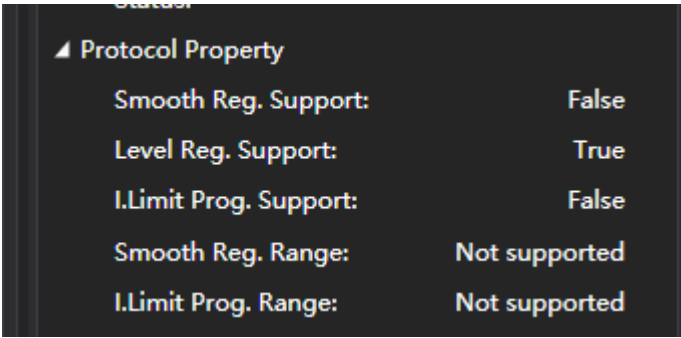


### 2.3.1 Select the protocol



Select the protocol being triggered here.

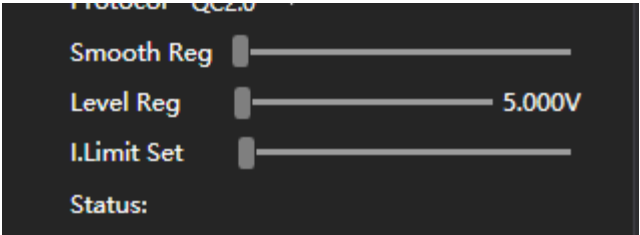
### 2.3.2 Protocol Properties



Here properties of the protocol you’ve selected are shown.

### 2.3.3 Adjustment

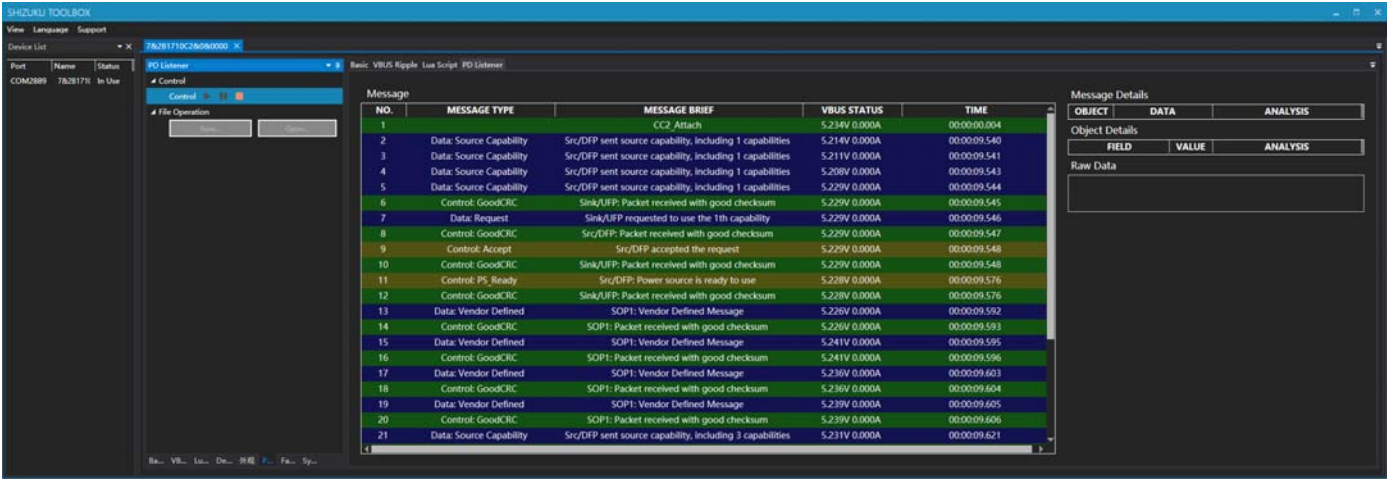
After click the green start button, you can make adjustments on voltage and current limit:



## 2.4 PD Listener

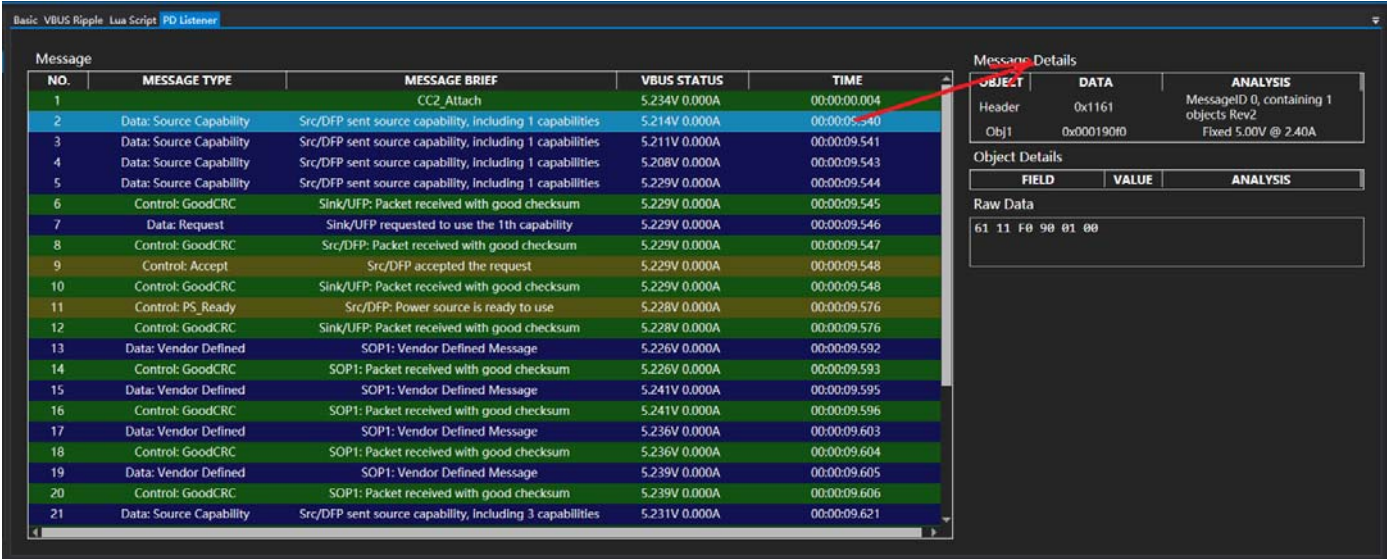
To use listener, please follow the following procedure strictly:

- 1. Make sure PD communication switch is on the “ON” position.
- 2. Connect the charger and the meter with a C-C cable.
- 3. Click green start button.
- 4. Use another C-C cable to connect the other Type-C port to your being tested device.
- 5. **If you expected some message to appear but it didn’t, you might need to flip one of the Type-C plug connected on the meter.**



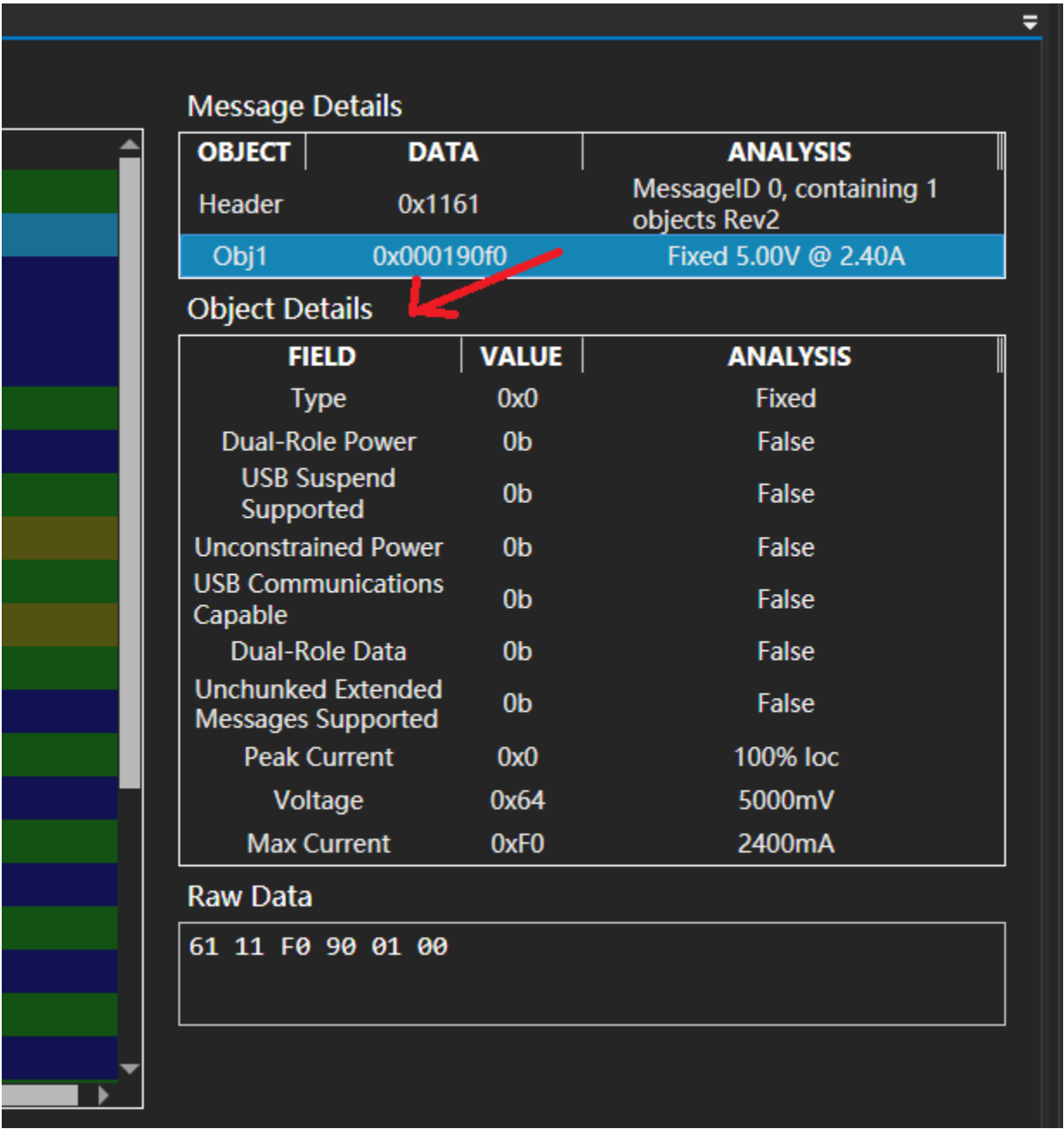
### 2.4.1 Message Details

Click a message and you’ll see message details on the right side:



## 2.4.2 Object Details

Click a data object and you'll see object details on the bottom:

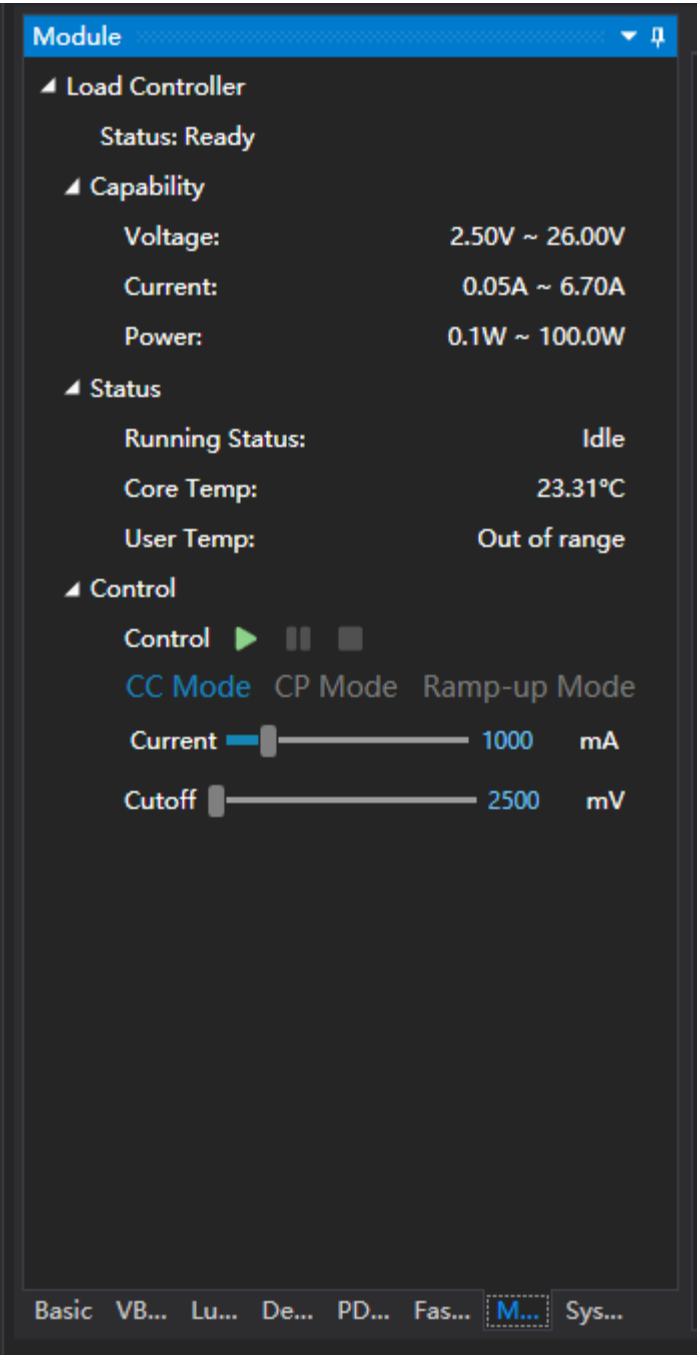


## 2.4.2 File Operations

You can save and open PD listener stream:



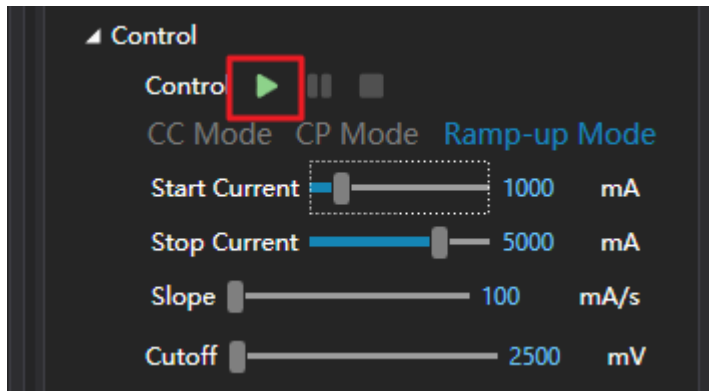
## 2.5 Modules



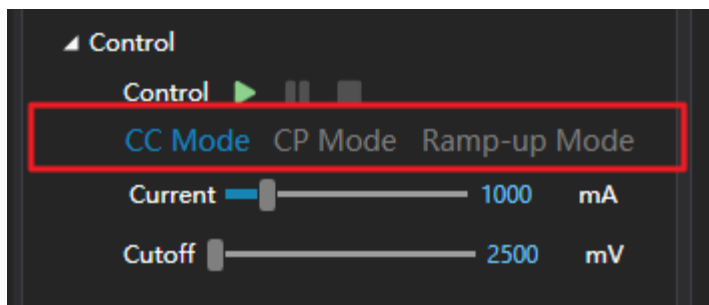
The module panel contains the expansion modules accessible from the software.

### 2.5.1 Load Controller

You can operate load modules mounted on the meter here.



Capabilities and the status of the module is shown above.

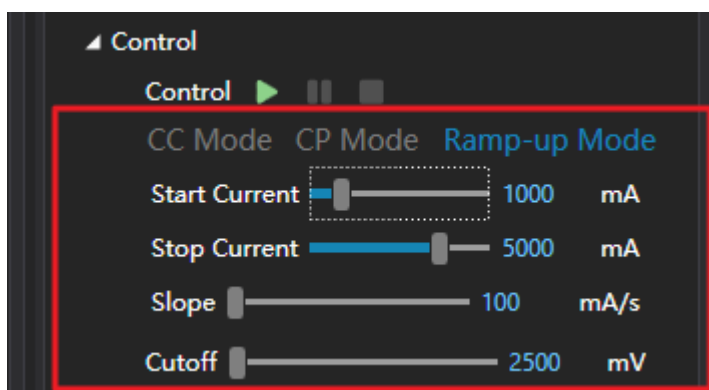


To start the load, you select the load mode here first. Modes:

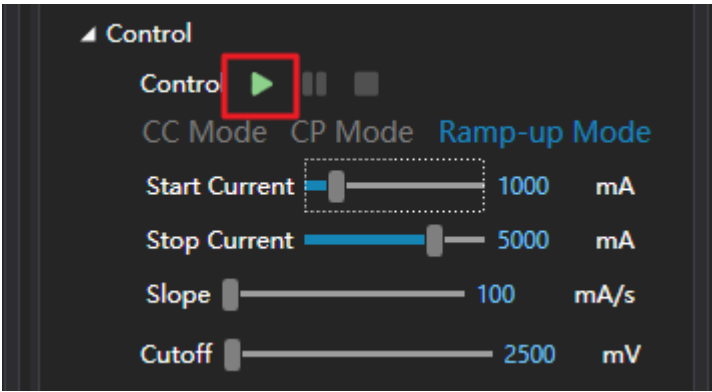
**CC Mode**: Constant current mode, usually used for aging or capacity tests.

**CP Mode**: Constant power mode, usually used for aging or capacity tests.

**Ramp-Up Mode**: In this mode, the load is increased gradually, from **Start Current**, to **Stop Current**, with specified slope **Slope**. This is usually used to determine the maximum load capability of a power source. Apply this combined with graphing yields a V-I graph of the power source.



Then, you set the parameters for your mode (Different modes have different parameters). You can either drag the scrollbar or edit the value in the textbox directly.

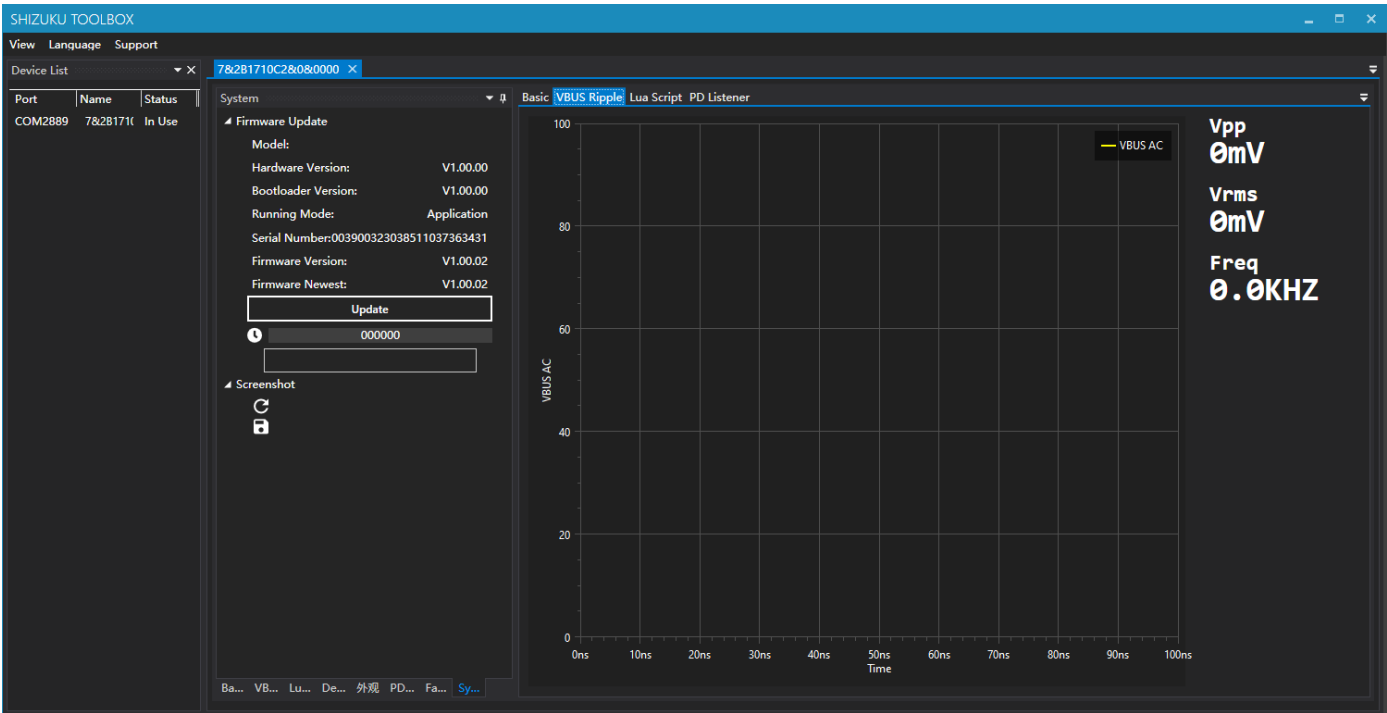


Finally, you click the start button.

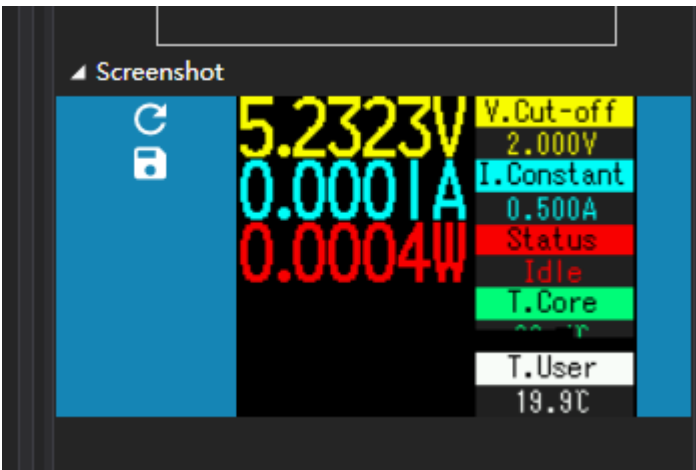
## 2.6 System

### 2.6.1 Firmware Update

Click “Update” to perform a firmware update, this process should take around 20 seconds.



### 2.6.2 Screenshot



Click refresh button to capture new screenshot, click save button to save the screen shit.

Обратите внимание, что некоторые пользовательские интерфейсы могут быть недоступны (в основном графические, такие как осциллограф VBUS, график VBUS и IBUS), поскольку они используют другой графический режим.