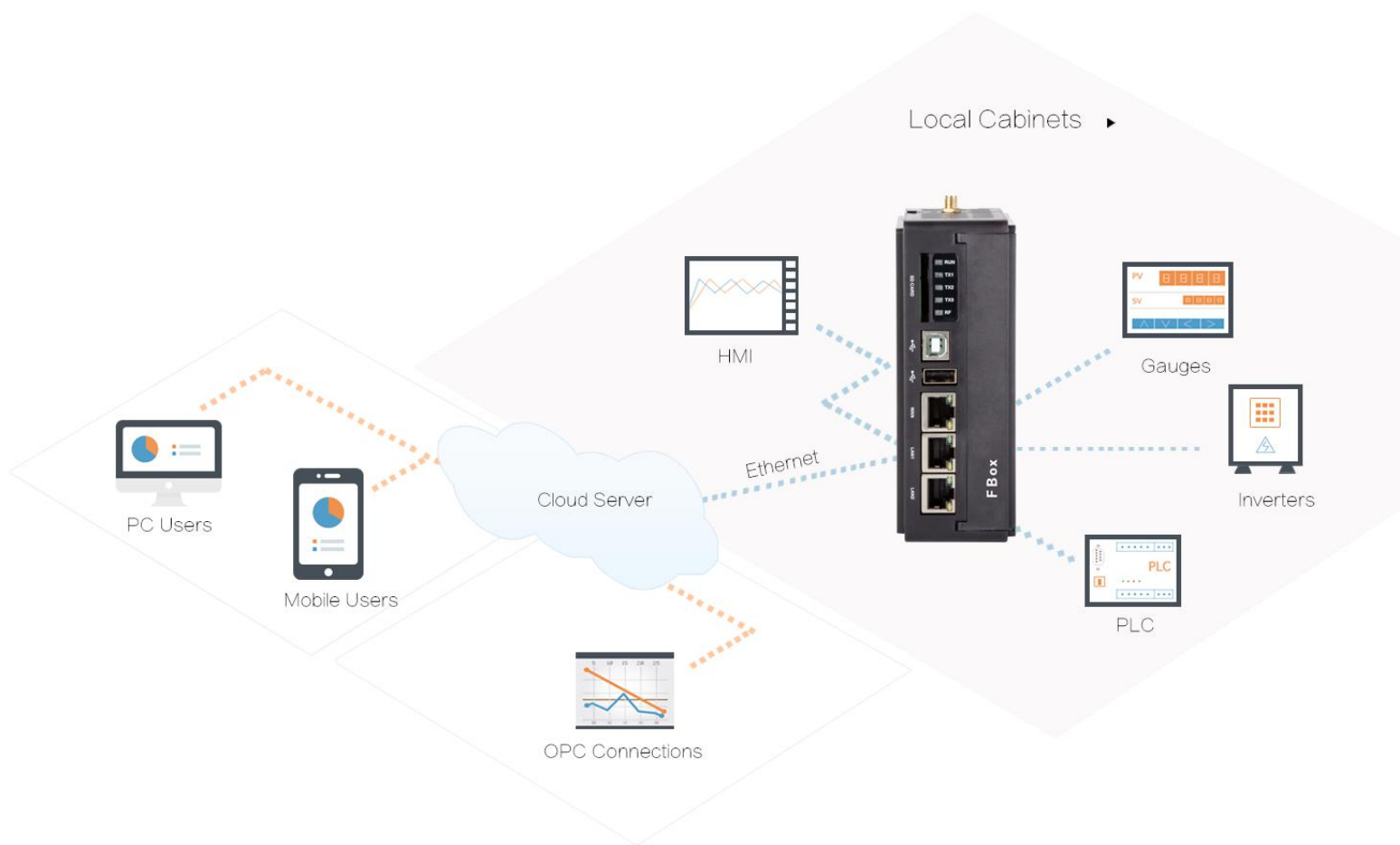


# FBox QUICK START INSTRUCTION:



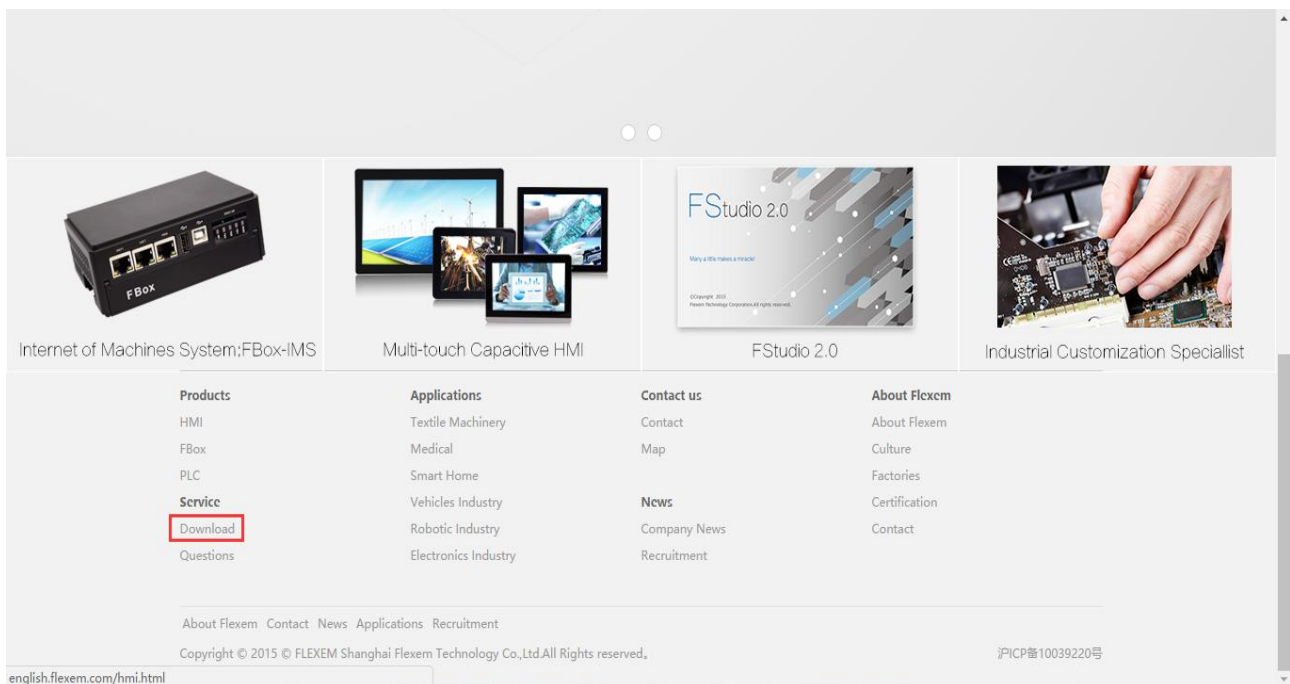
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## I .Software Preparation

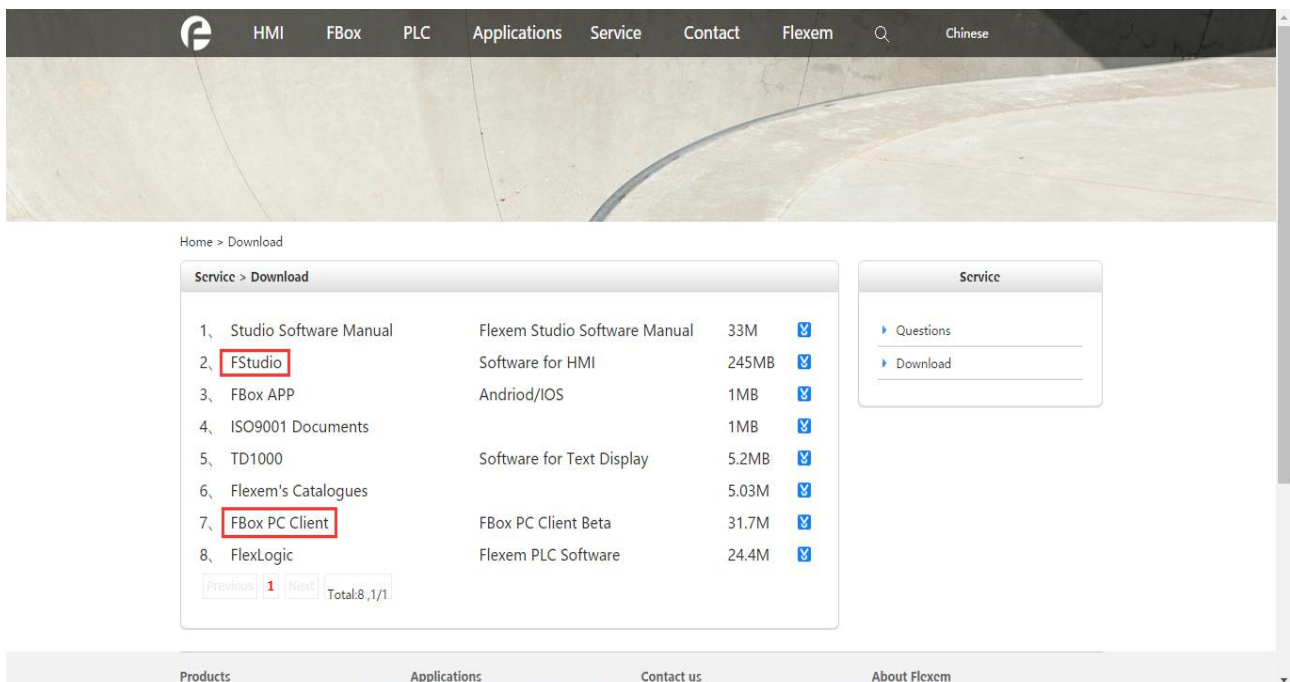
### 1. Download and install the software

You can go to Flexem official website(<http://flexem.com>) to download the software, as shown in Figure 1-1, click ‘‘Download’’ to enter the download page, as shown in Figure 1-2, select and download the newest version of FStudio and FBox PC Client software(Please click FBoxClient Global Downloads). Please pay attention to the selection of the system version,



and install according to the tips.

Figure 1-1 Flexem official website



**Figure 1-2 Download Center**

## 2. Software Configuration

FStudio software is used to set the way locally to access the Internet of FBox and add the devices, etc. FBoxClient is the client application software for FBox, which can be set, check or control FBox remotely, and so on.

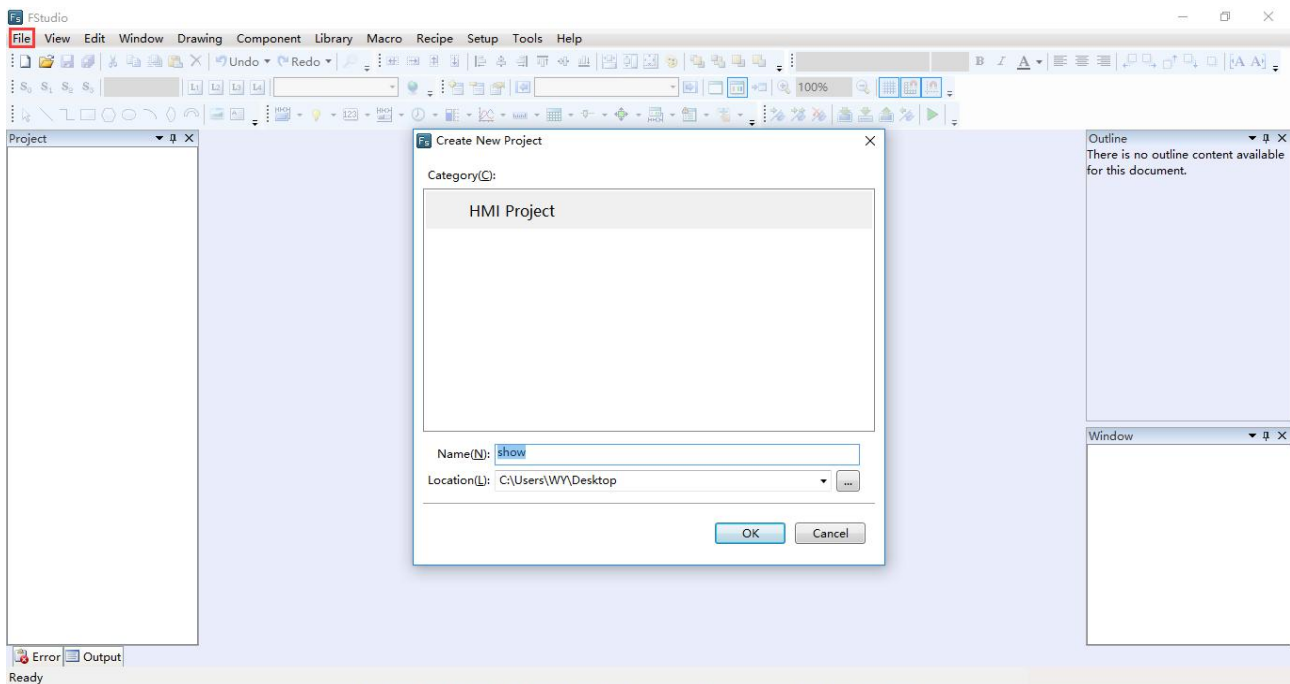
### 2.1 Set the Way to Access the Internet of FBox

The default way to access the Internet of FBox is SIM card Internet access. You can use FStudio software to set the way to access the Internet.

You need open FStudio software as shown in the right figure to configure the FBox before you use it.

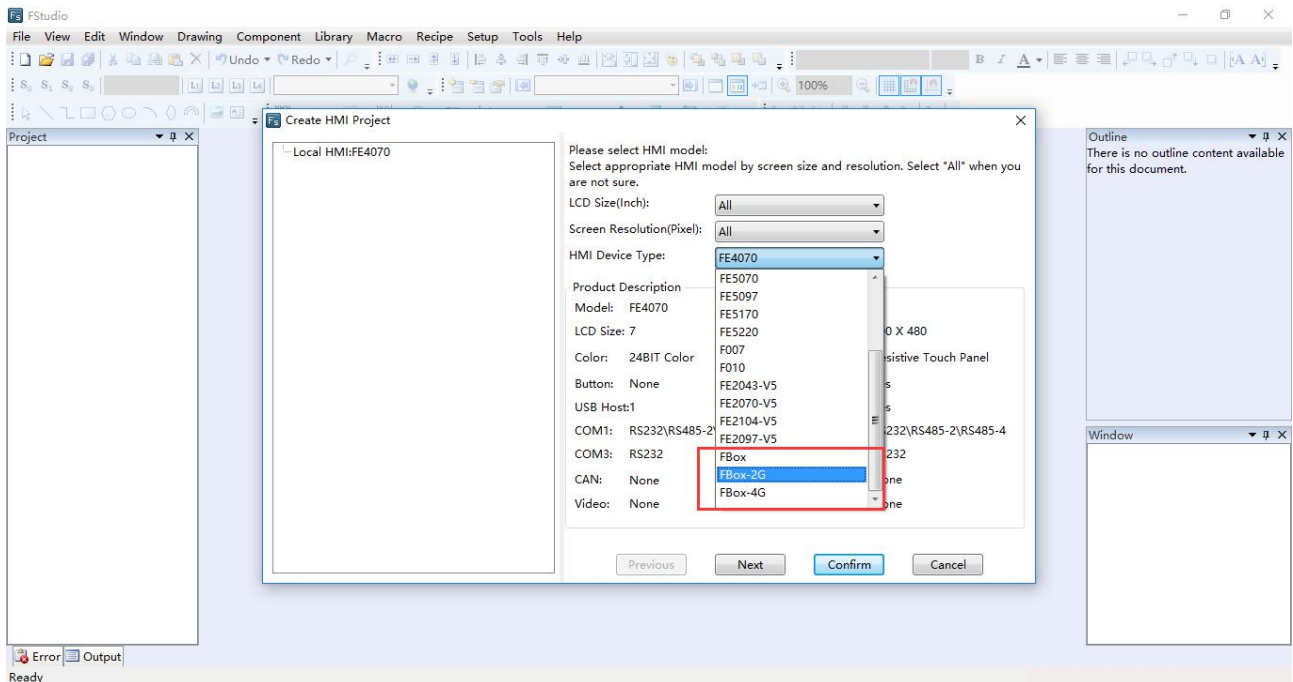


- ① Click “File/Create New Project”, set the project name and the location to save the project, then click “OK”.

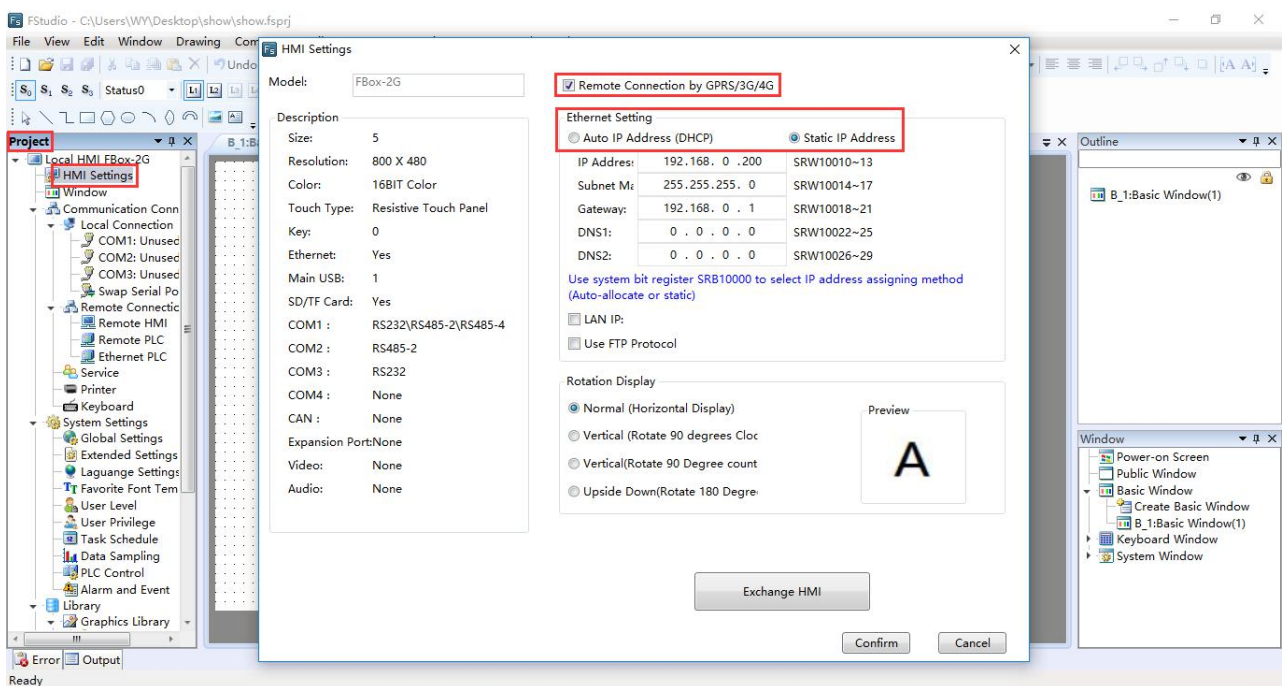


- ② About the “HMI Device Type”, you need select the corresponding FBox model, if you are using FBox-2G, then you should select FBox-2G, click “Confirm” after the selection.

## FBox Quick Start Instruction

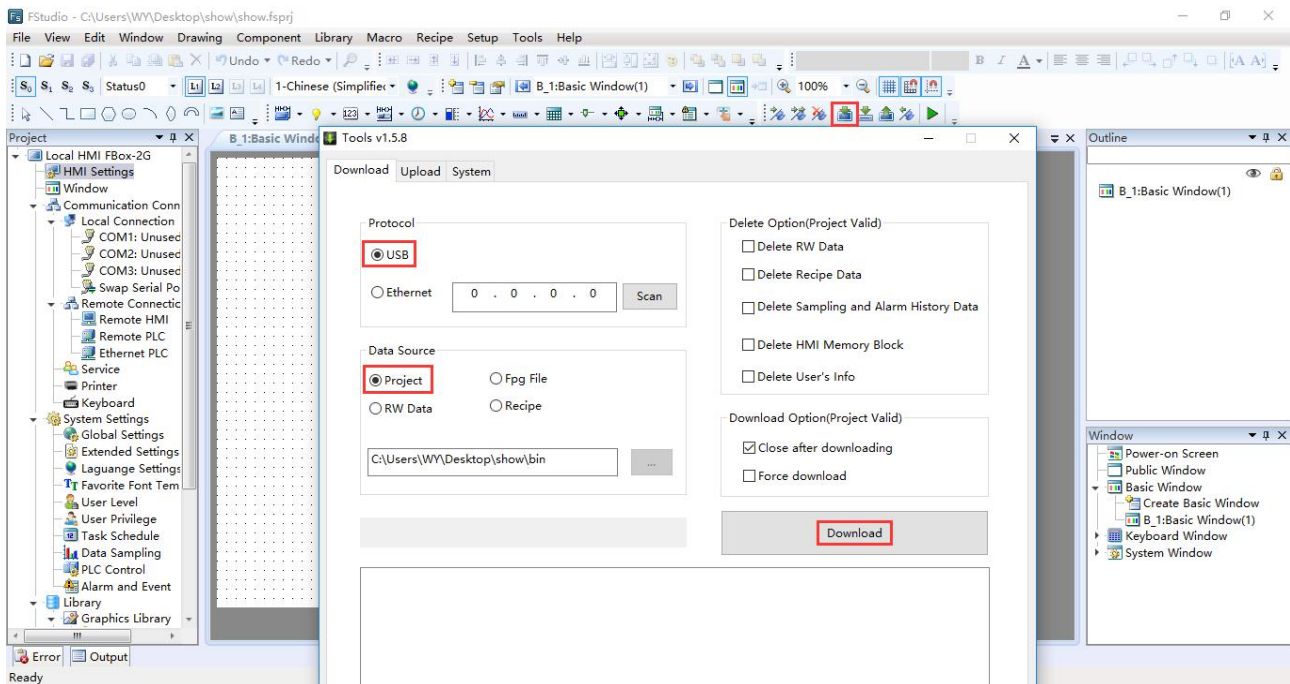


- ③ Move the mouse cursor to the left project window, click "HMI Settings", if you use SIM card to access the Internet, please click "Remote Connection by GPRS/3G/4G" and select "Static IP Address". If you access the Internet through Ethernet, don't click "Remote Connection by GPRS/3G/4G" and select "Auto IP Address (DHCP)". After that please click "Confirm". Here is an example that access the Internet through Ethernet.



- ④ Download project to FBox. Firstly please ensure that the FBox is supplied power normally

and is connected to the Internet correctly, then click “Download” icon, select “USB” in ‘Protocol’ and select “Project” in ‘Data Source’, click “Download”, finally you just wait until the project is downloaded completely.



## II . FBox Power Supply and Connection

### 1. Power Supply

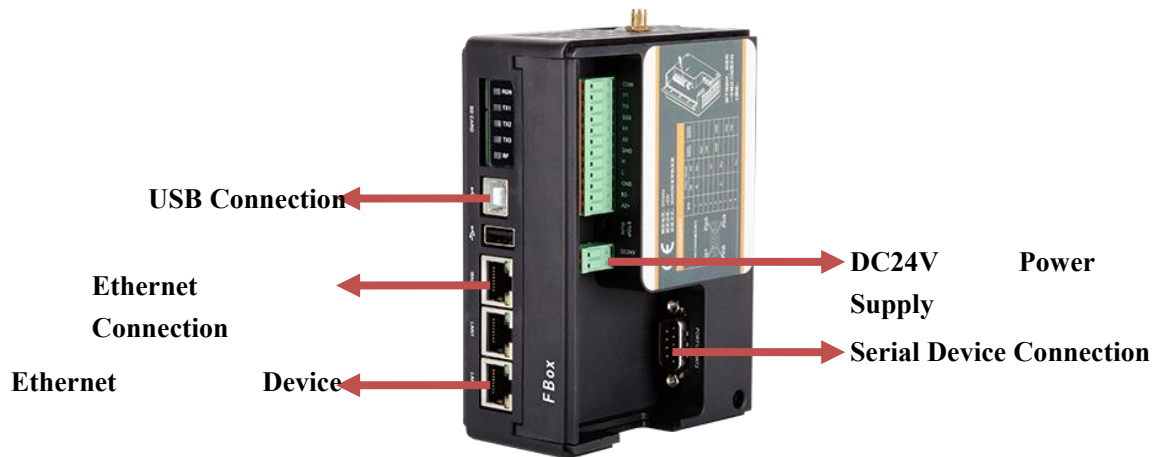
Connect the FBox to the power supply terminal with DC24V. You will see the running lights light up after power on.

### 2. Ethernet connection

Plug the Ethernet cable into FBox WAN port, to ensure that the network can directly connect to the Internet, do not need to verify.

### 3. USB connection with computer

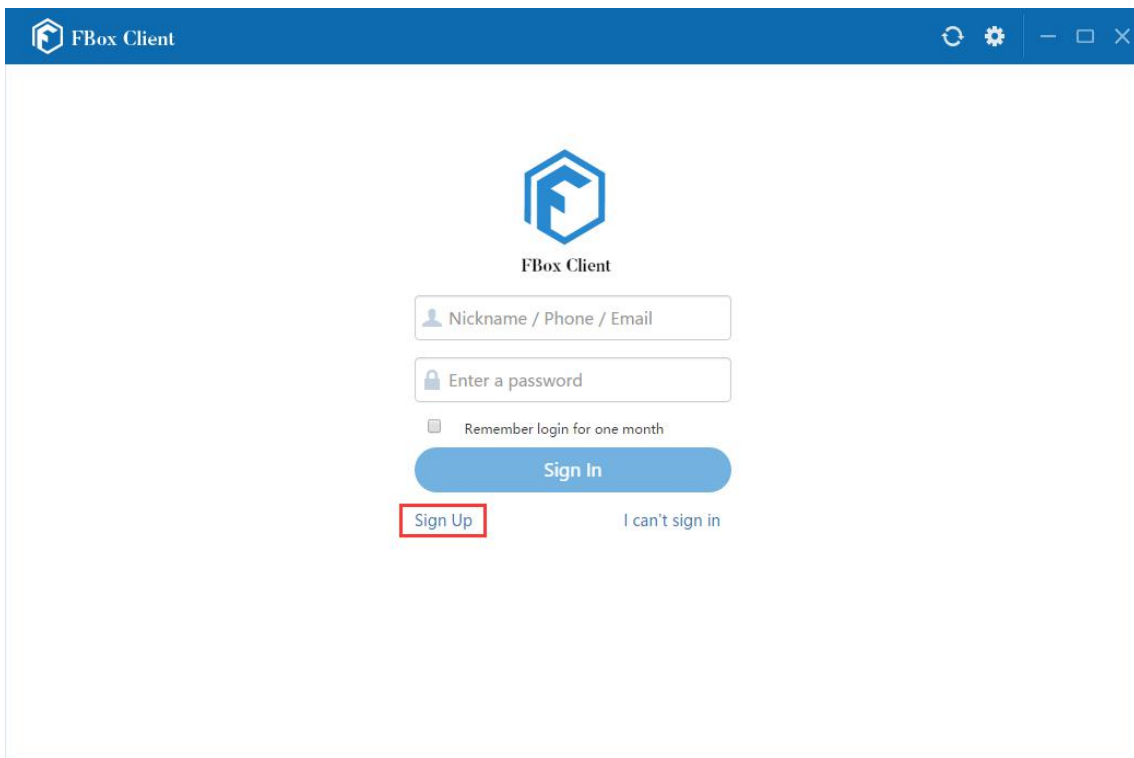
Use a USB cable, plug one end into the FBox USB port, and the other end is inserted into the computer USB port. USB connection with the computer is used for the local configuration of FStudio software. The USB cable can be disconnected after software configuration.



### III. FBox client use


#### 1. Register Account and Login

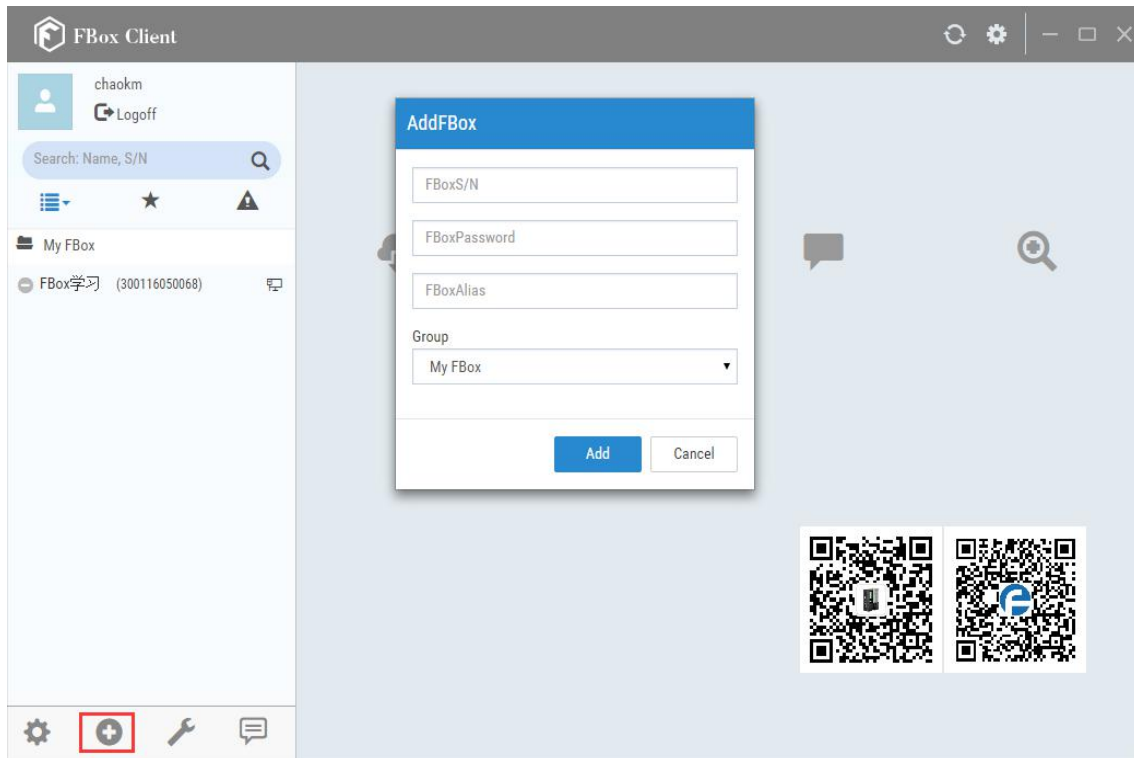
Open FBox Client software, click “Sign Up”, then register an account according to the tips, you can use the phone number or e-mail to register.





Return to the login page and sign in after the registration.

## 2. Add FBox

After logging the account, click the  icon in the lower-left corner to add FBox, you can check the serial number and password on the tag of the FBox, the FBox alias you can define as you like. Click ‘Add’ after finishing entering the information above (Each FBox has a unique serial number and password, if the FBox has been bound, other people cannot bind it again, unless the owner deletes the FBox.)



## 3. FBox online and add devices

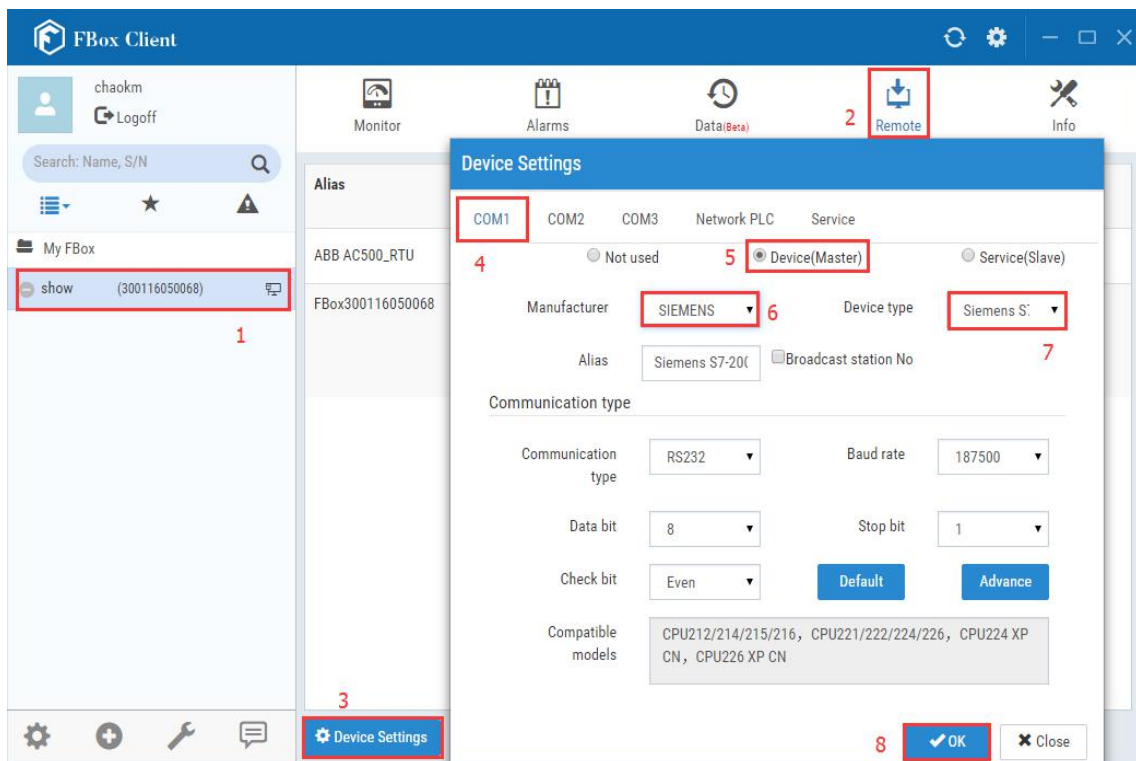
After finishing adding the FBox you will see the added FBox entry in the left list,  means the FBox is online.  means the FBox is offline, then you need to check the Internet connection and networking setting of the FBox.

### Example:

Next we add a Simens S7-200 PLC device.

As shown below, click ‘Remote - Device Settings - COM1’, then connect the device, select the manufacturer: SIEMENS, device type: Siemens S7-200, set the communication type according to the connection type actually used, finally click ‘OK’. At this moment FBox Client will upload the device setting information to the Flexem server, and then send the information to FBox through the server, then the FBox will automatically reboot, you just need wait the FBox to be online again then the operation of adding devices is finished.





The connection figure between FBox and PLC




#### 4. Add Monitoring point

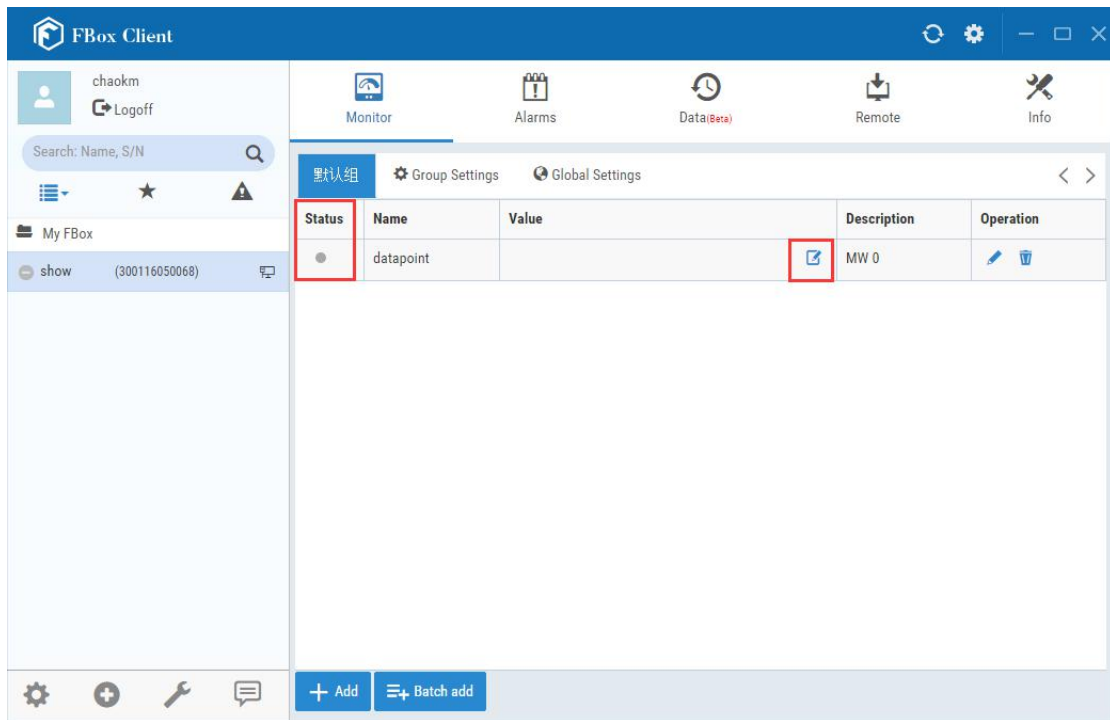
As shown, click “Monitor” and “Add”, you can define the name of the monitoring point, select the device (device source of the data points), set the station number (set according to the PLC connection), select the data type (such as Bit or 16-Bit Unsigned ) and address type (register type that data points are stored in PLC memory), set the address (for example

address ‘MW0’, the data type select "MW" and write "0" to the address), about other settings please set according to the tips, finally click ‘OK’ after finishing setting.

Add data monitor item

Name	<input style="width: 90%;" type="text" value="datapoint"/>		
Device	<input style="width: 100%;" type="text" value="ABB AC50"/>	Station No.	<input style="width: 100%;" type="text" value="2"/>
Data type	<input style="width: 100%;" type="text" value="16-Bit UnS"/>	Address type	<input style="width: 100%;" type="text" value="MW"/>
Integer digits	<input style="width: 100%;" type="text" value="4"/>	Fraction digits	<input style="width: 100%;" type="text" value="0"/>
Address	<input style="width: 100%;" type="text" value="0"/>		
Format	DDDDD(0~99999)		Unit <input style="width: 100%;" type="text"/>
RW Settings	<input type="radio"/> Readonly <input checked="" type="radio"/> Read/write <input type="radio"/> Write Only		
Traffic saving	<input type="checkbox"/> Check data change every 2 sec(s). The interval can be changed in global settings.		
Dead zone	<input style="width: 100%;" type="text" value="0"/>	When data is fluctuating in $\pm 0$ range, data is not transferred to save traffic.	
Description	<input style="width: 90%;" type="text" value="MW 0"/>		
<input style="background-color: #0070C0; color: white; padding: 5px 15px; border: none;" type="button" value="✓ OK"/> <input style="border: 1px solid gray; padding: 5px 15px; border-radius: 3px 3px 0 0;" type="button" value="✗ Cancel"/>			

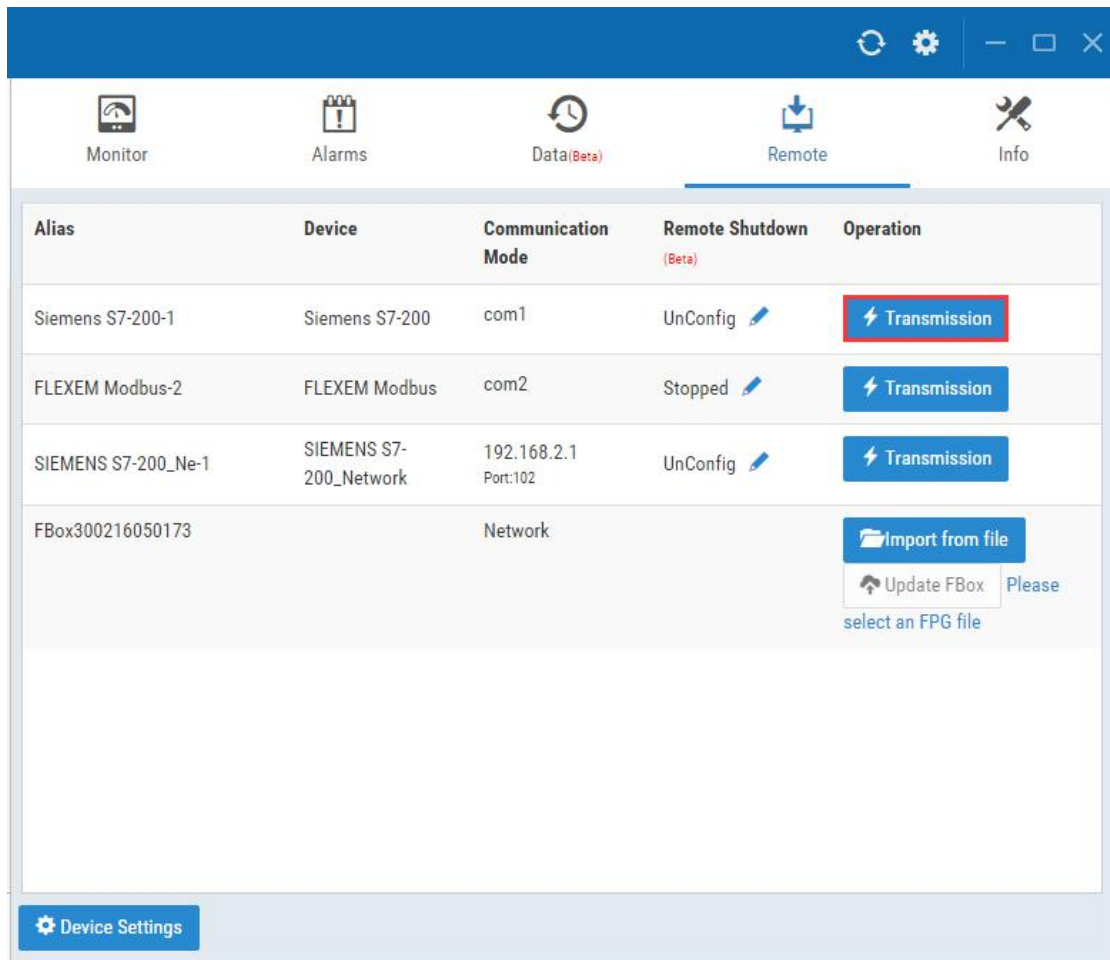
After finishing adding, you can see the added item information in the data monitoring page, if the status indicator is green, it means the communication is successfully connected. Click the  icon then you can write the value of address MW0. Other monitoring points adding is the same.



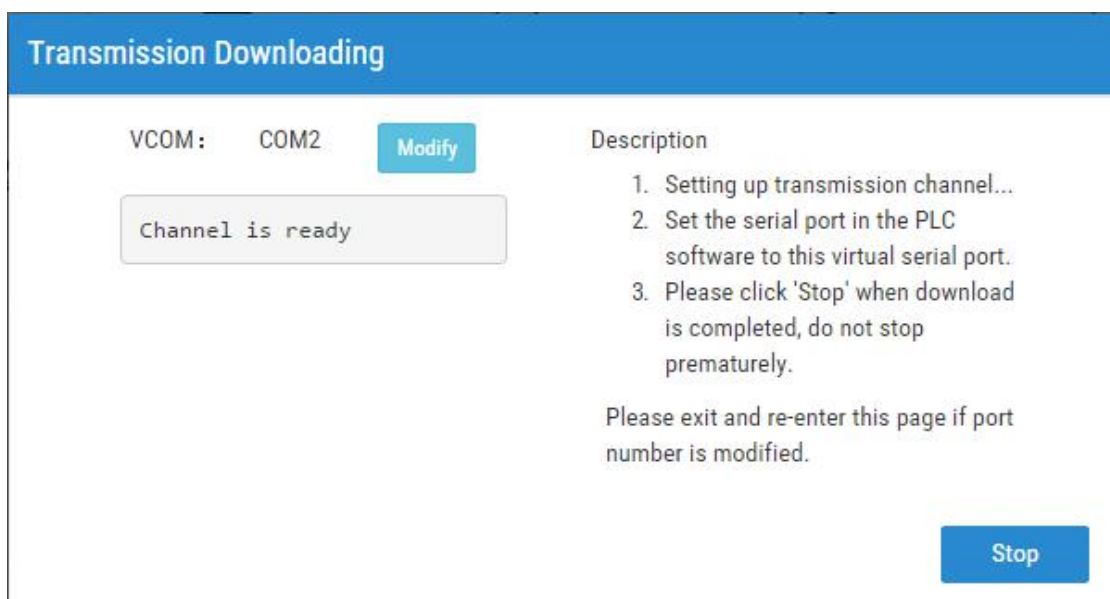
If you found the status indicator is red after adding a item, that means the device is not connected or the connection failed. Right now you need check the communication connection between FBox and PLC is correct or not. Including checking the selection of communication cable is right or not, the communication parameters setting is right or not, in the previous section, and you can open the device settings to check the settings and set communication parameters through the path(Remote/Device Setting) introduced previously.

## 5. Transmission

If you need modify the PLC program remotely, you can use the transmission function. As shown in the following figure, click the ‘Transmission’ button in the remote page, then wait to establish the transmission channel.



When you see “Channel is ready”, you can open the PLC software to upload or download the program, the PLC communication port you need select the virtual serial port created in transmission process, as shown in the following figure, the communication serial port is COM2.



Some users may need click “install” to install virtual serial port when they use the transmission function for the first time. As shown, click “Install” to install the driver, the software will automatically pop up the tool to install virtual serial port.

**Transmission Downloading**

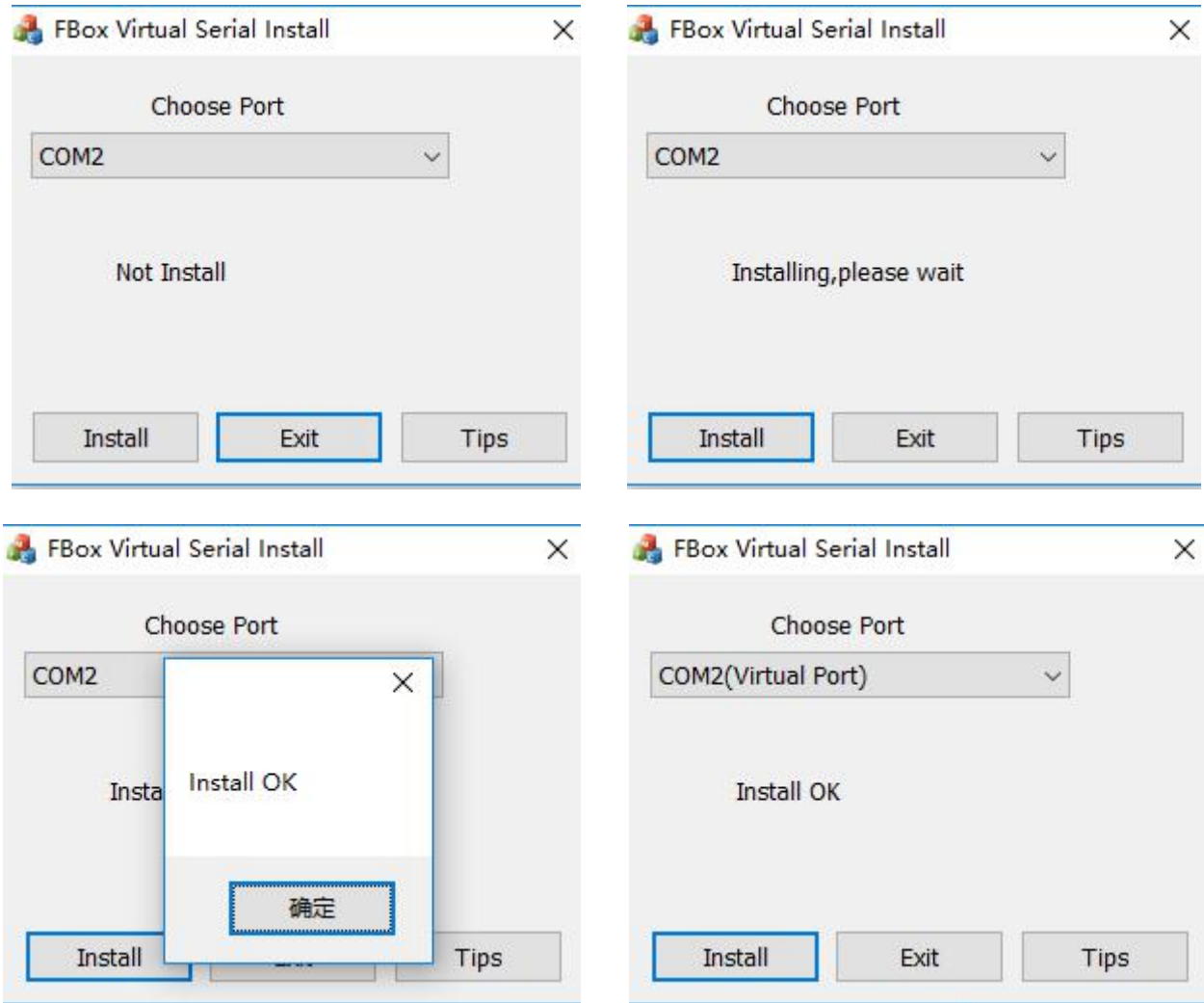
VCOM:

**Description**

1. Setting up transmission channel...
2. Set the serial port in the PLC software to this virtual serial port.
3. Please click 'Stop' when download is completed, do not stop prematurely.

Please exit and re-enter this page when driver installation is finished.

Select the serial number to install the virtual serial port, click “OK”, wait for the automatic installation of the serial port. It may take a few minutes.



After the installation is finished, click ‘‘OK’’.  
 You can click ‘Exit’ when you see ‘Install OK’.

Right now you need restart the FBox Client software, after restarting the software, enter the transmission page then you can see ‘channel is ready’, now you can begin to transmit. Please do not click ‘Stop’ in the process of the transmission, so as to avoid the program error.

Note: some computers which have installed the virtual serial port driver cannot automatically open the installation tool of the virtual serial port, you can manually install it. The specific path is (C:\Program Files (x86)\FBox\FBoxClient 1.0\drivers), select the corresponding system driver to install, It may require that the computer firewall should be shut down, and then run setup as an administrator.

drivers	2015/11/27 20:14	文件夹	
VComTools_w7x64.exe	2015/9/18 15:32	应用程序	116 KB
VComTools_w7x86.exe	2015/9/18 15:32	应用程序	110 KB
VComTools_xp32.exe	2015/9/18 15:32	应用程序	36 KB

After the PLC program is downloaded completely, you need to click ‘’Stop’’ to stop the transmission, then the FBox will disconnect the transmission channel and reboot.

Note: if you open the transmission channel but you don't download or upload data, after a long time the transmission channel may be disconnected. So please open the transmission channel just when you need modify the PLC program.

For more detailed settings , please refer to the FBox manual.