# Auto-download tool user Manual

**Vision 5.00.05**

# Content

# 1  Overview

The document introduces the basic functions and the usage of the auto-download tool, including the hardware install, the software install, troubleshooting etc. The Auto-ownload tool is mainly used for the production line. It can be used to download the data to mobile phones including the boot code, the user data etc. Besides, it can erase the data in the flash, such as the user data, the calibration data and the factory data. And we can write a phone SN or a main board SN at the same time when we download the data to our mobile phone. This software is easy to use, and it is very convenient.

# 2  Hardware installation

## 2.1  Hardware requirement

1. PC with PCI slot.
2. MOXA CARD with 8 port Cable, or USB bub with 8 ports. supporting the baud of 921600 bps.
3. The fixture for downloading.
4. DC power supply.

## 2.2  Hardware install

The download tool supports downloading with 8 ports at the same time。 The mode of the connection is shown as the figure 1.
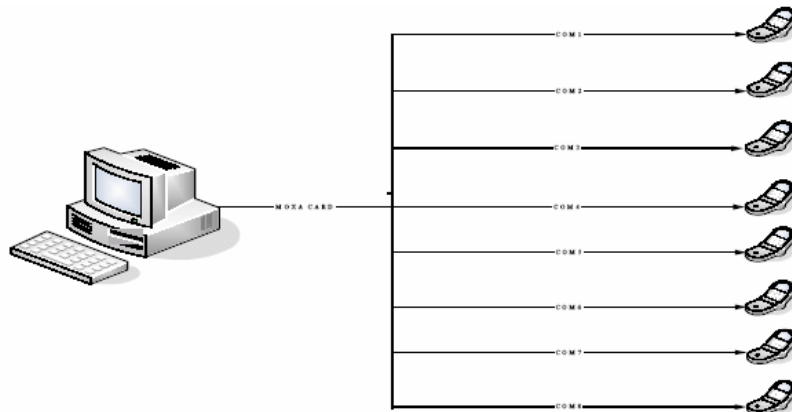


Figure 1

If you use the MOXA CARD to download. Insert the MOXA Card into a free PCI slot, and connect the 1-8 ports cable, Then install the MOXA driver .After those steps completed, you will see in the equipments manager shown as the figure 2. It means that the installation completes successfully. Then change the baud rate of all the MOXA Communication port to 921600 as shown in the figure 3.

If you select USB hub to download, You need only connect the appropriative line to the USB hub, and configure the serial ports mapped from the USB device same as the MOXA card.
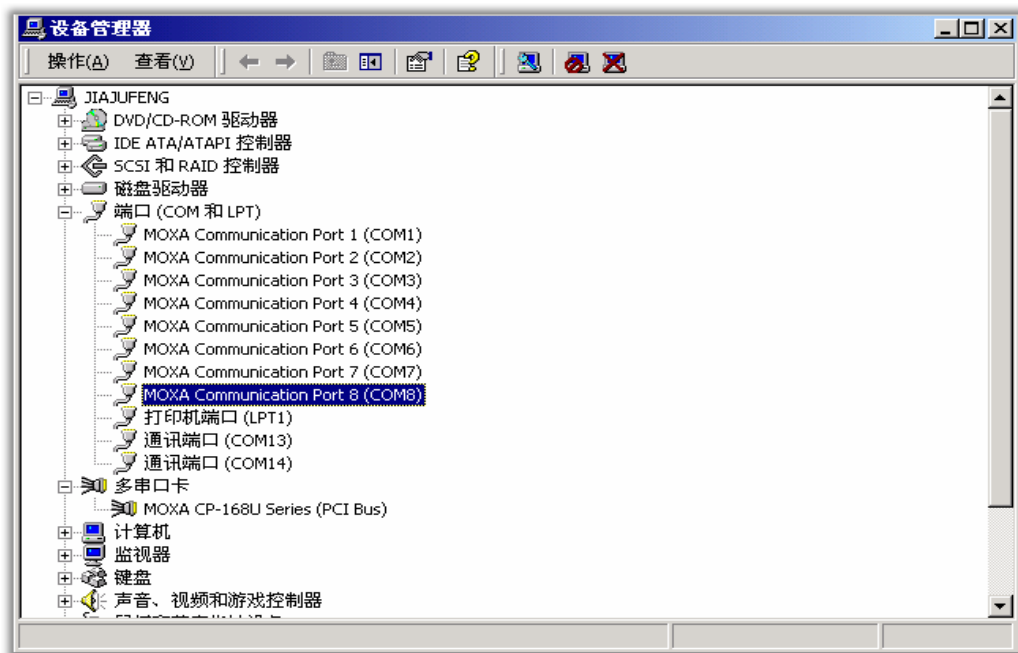
Figure 2



Figure 3
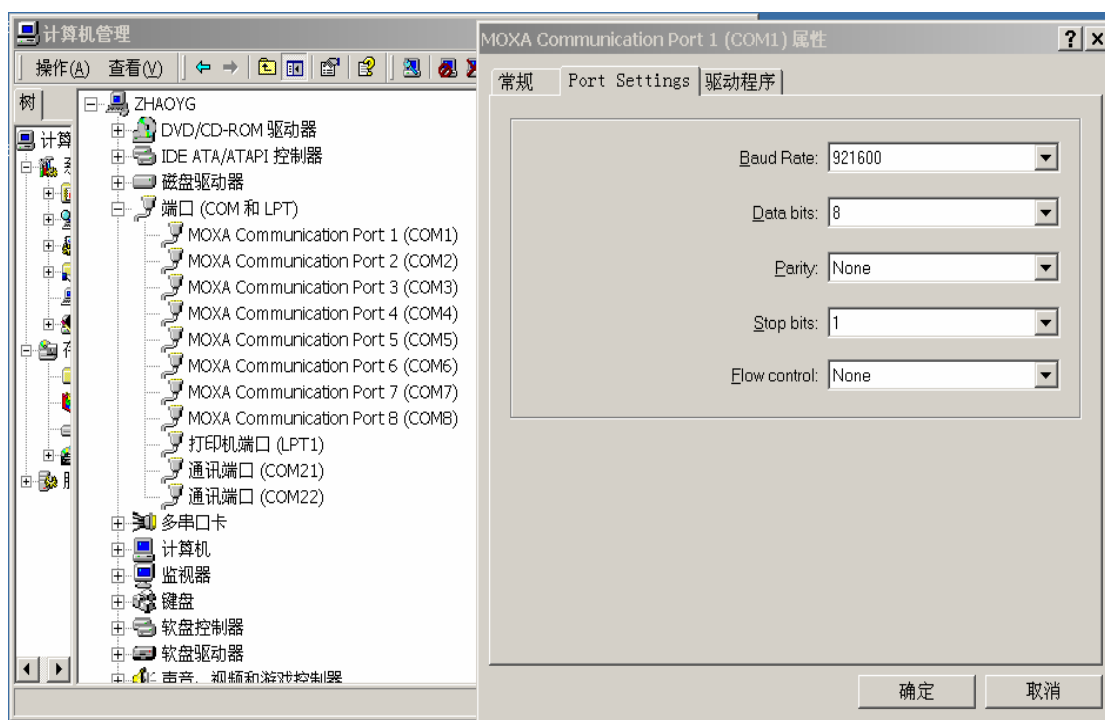
Attention: Before installing the MOXA card driver, you can adjust the COM setup by the equipments manager. In other words, you can set the origin ports into COM21 &COM22 as shown in the figure 3. Thus, after installing the driver of MOXA，the 8 ports of MOXA to be used follow the 1-8 sequence. It is easy to identify. Certainly, the customer can also perform the above steps in case of 16 ports.

# 3 Software installation

## 3.1 Software requirement

Windows 2k , windows 7 or Windows xp；download tool

## 3.2 Software setting

Some crucial setting work is needed before using the download tool, such as port setting, download info setting, flash setting, flag setting.

### 3.2.1 Password setting

After running the program, you can see the "Password setting" item in the    toolbar. Press on that item, and the password setting dialog will pop up. It is shown as figure 4. You can modify the password there. Note that the initial password is 1234.



Figure 4

You can also see the "Download setting" item in the toolbar. Press on it and the log dialog will pop up as shown in Figure 5. Only after inputting the correct password,    you will can see that the download setting dialog will pop up.



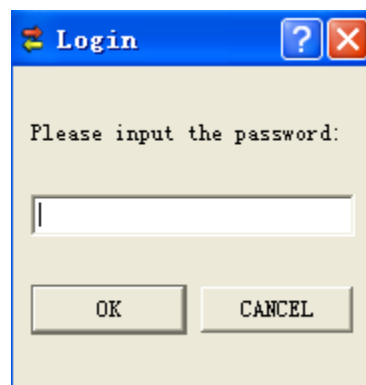Figure 5

## 3.2.2 Port setting

In the the port tab of the download setting, shown as the figure 6, you can set the port index, the COM to be used, the baud rate and the color identifier.
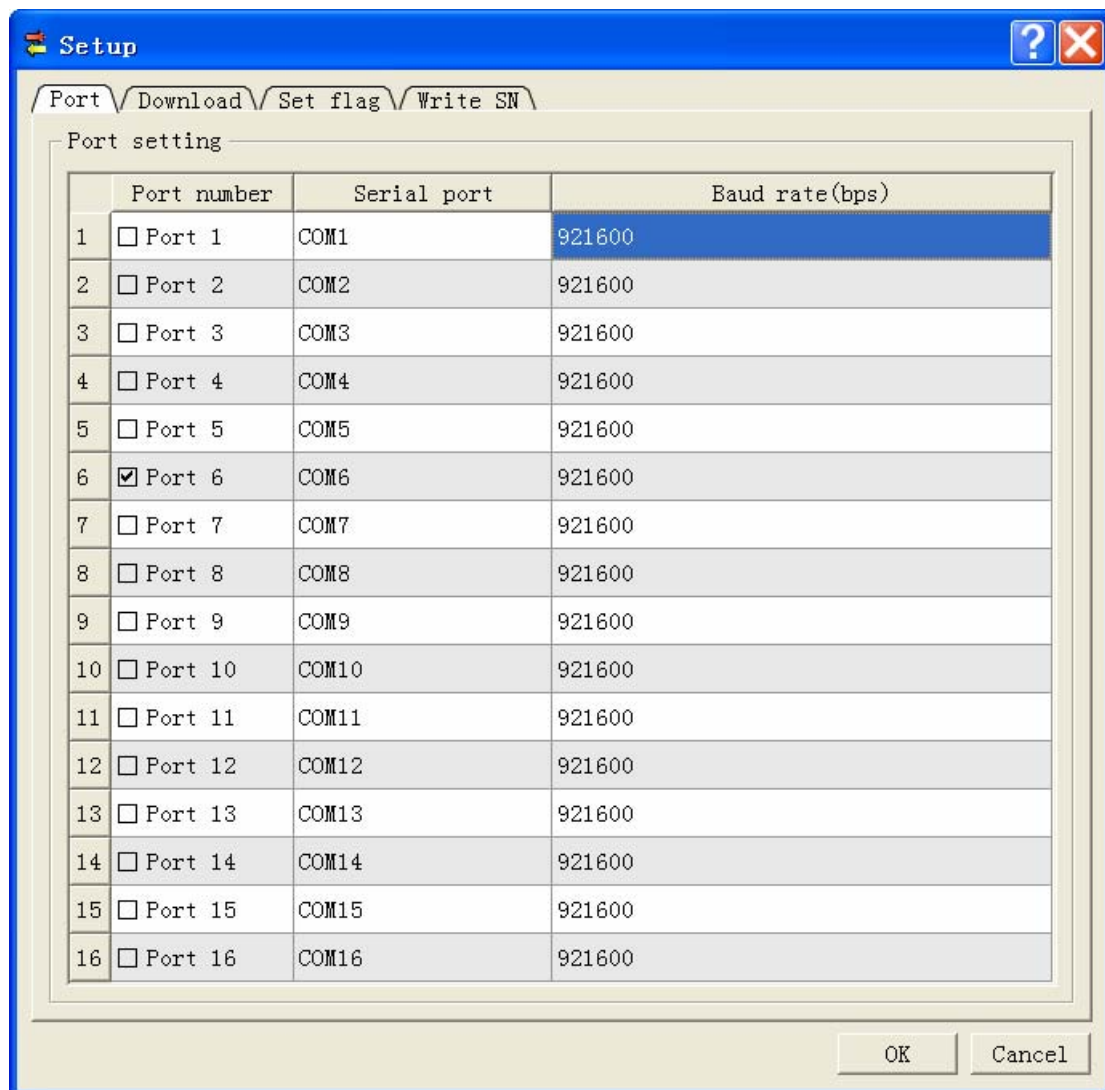


<div align="center">Figure <strong>6</strong></div>

Parameter elucidation:

* **Serial number**： The port which you selected by checking the check boxes is available.

* **Serial port**： Set the serial port according to the figure 2.

* **Baud rate**： The speed of data transfers    suggested 921600.

* **Display color**: Select the color according to the line color of the port to be easily identified.

## 3.2.3 Download info setting

In the "Download files" group, we can set the content of we hope to download, Here we have 3 choices, they are "Lod file", "Upd file" and "Cfp file".

1. If we hope download the program of the phone, we can select the "Program file", and click the "Browse>>" button in the right. Which we can select a folder the *.lod files were stored in. And we must notice that, the files in the selected folder must obey

the rules:
- They must have the extent name "*.lod";
- Their file name must contain the chip type ,like "greenstone","gallite" etc.
- Their file name must contain the flash type ,like "flsh_m36l0r7050u3zs" etc.

2. If we hope update the any sectors data, we can select the "Accessional file", and click the very "Browse>>" button. Which we can select a folder the *.upd files were stored in. We also must obey a rules like below:
- They must have the externt name "*.upd";
- Their file name must contain the chip type ,like "greenstone","gallite" etc.
- Their file name must contain the flash type ,like "flsh_m36l0r7050u3zs" etc.

3. If we hope update the calibration data, we can select the "Update calibration parameters", and click the very "Browse>>" button. Which we can select a folder the *.cfp files were stored in. We also must obey a rules like below:
- They must have the externt name "*.cfp";
- Their file name must contain the chip type ,like "greenstone","gallite" etc.
- Their file name must contain the flash type ,like "flsh_m36l0r7050u3zs" etc.
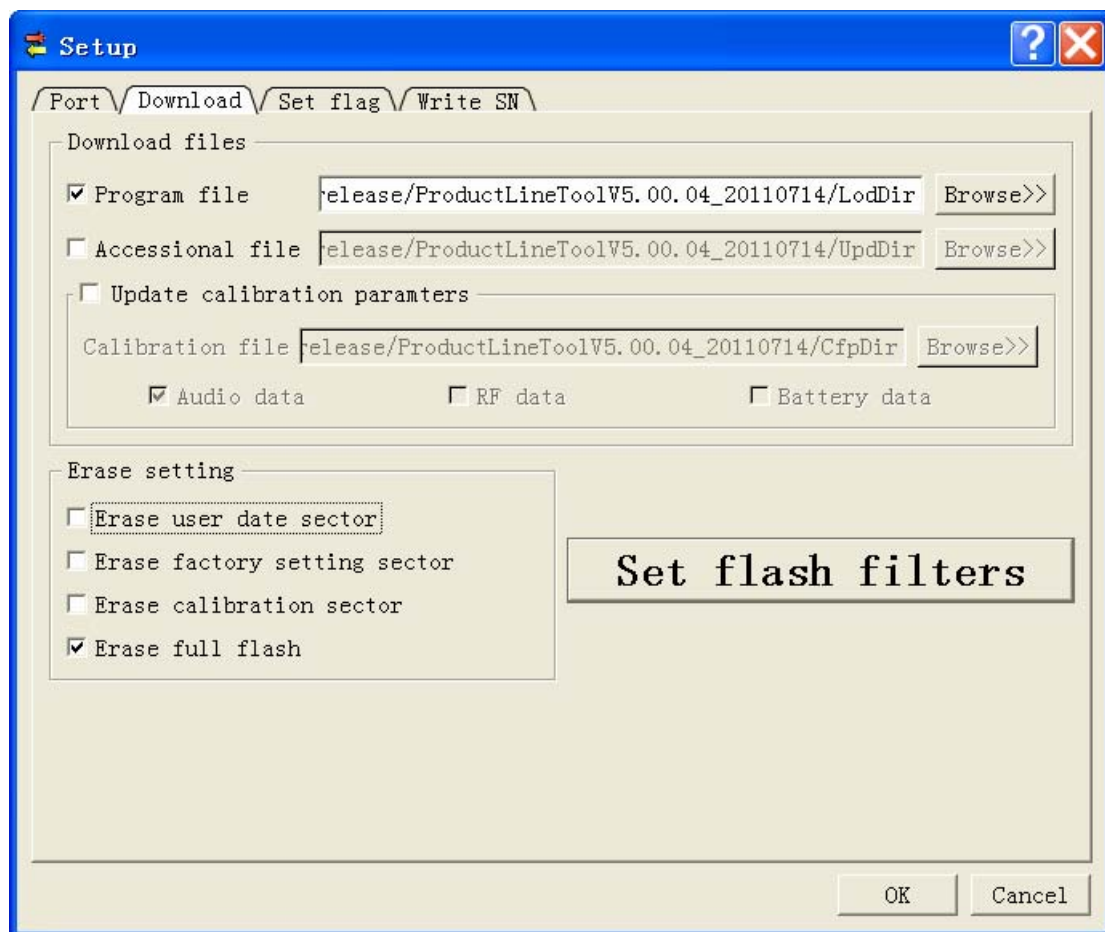


Figure 7

### 3.2.4 Flag setting

In the Set flag tab of the download setting, you can choose the flag option. It's shown as figure 8.
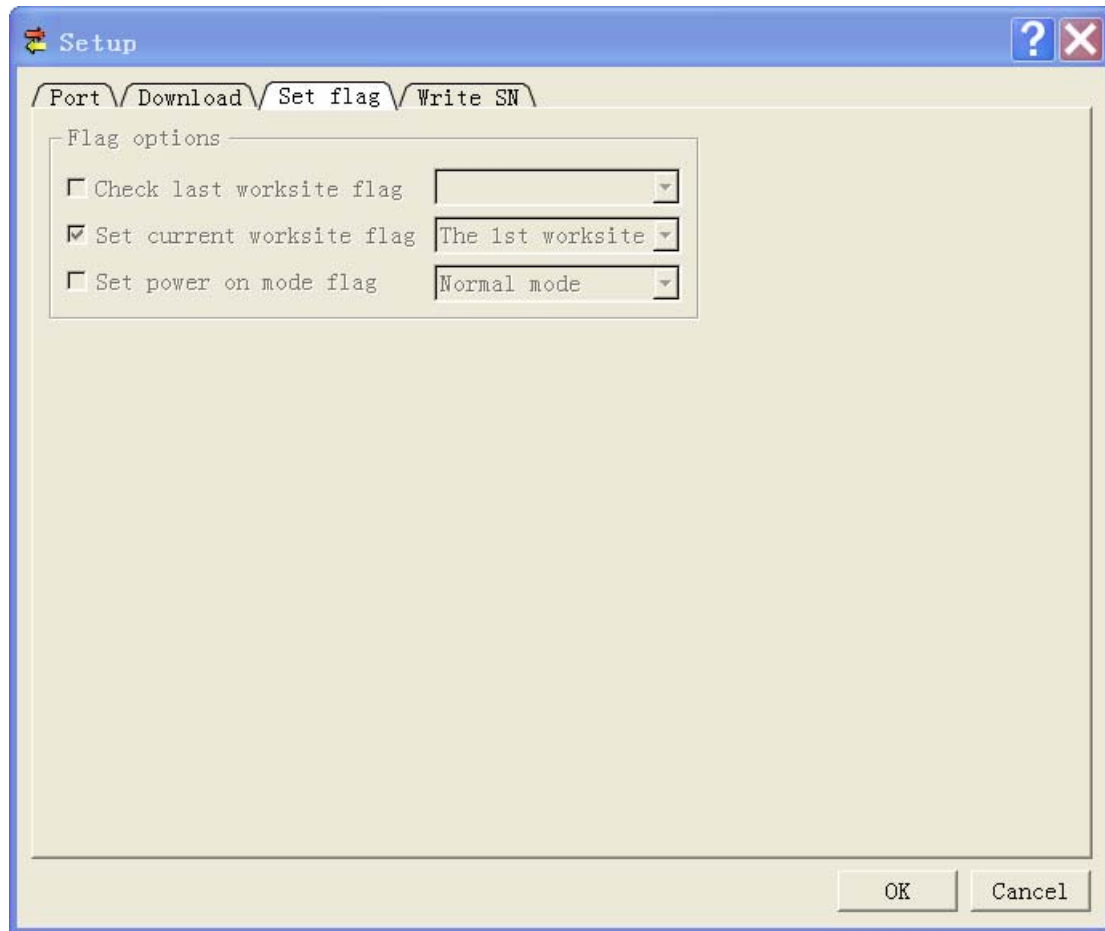


Figure 8

**Check last worksite flag**: Check the complete flag of the last worksite on the product line. If the last worksite isn't finished, the operation of the current worksite can't begin. This option is always not selected, because it is often the first worksite for downloading.

**Set current worksite flag**: This option is selected if setting the finished flag of the current worksite is needed. And then choose the flag. The downloading is normally the first worksite, so we can select the "The 1st worksite".

**Set power on mode flag**: This option is selected if it needs to set the power on mode at the current worksite.

### 3.2.5 SN setting

In the write SN tab of the download setting, you can choose the related option of downloading SN. It's shown as figure 9.
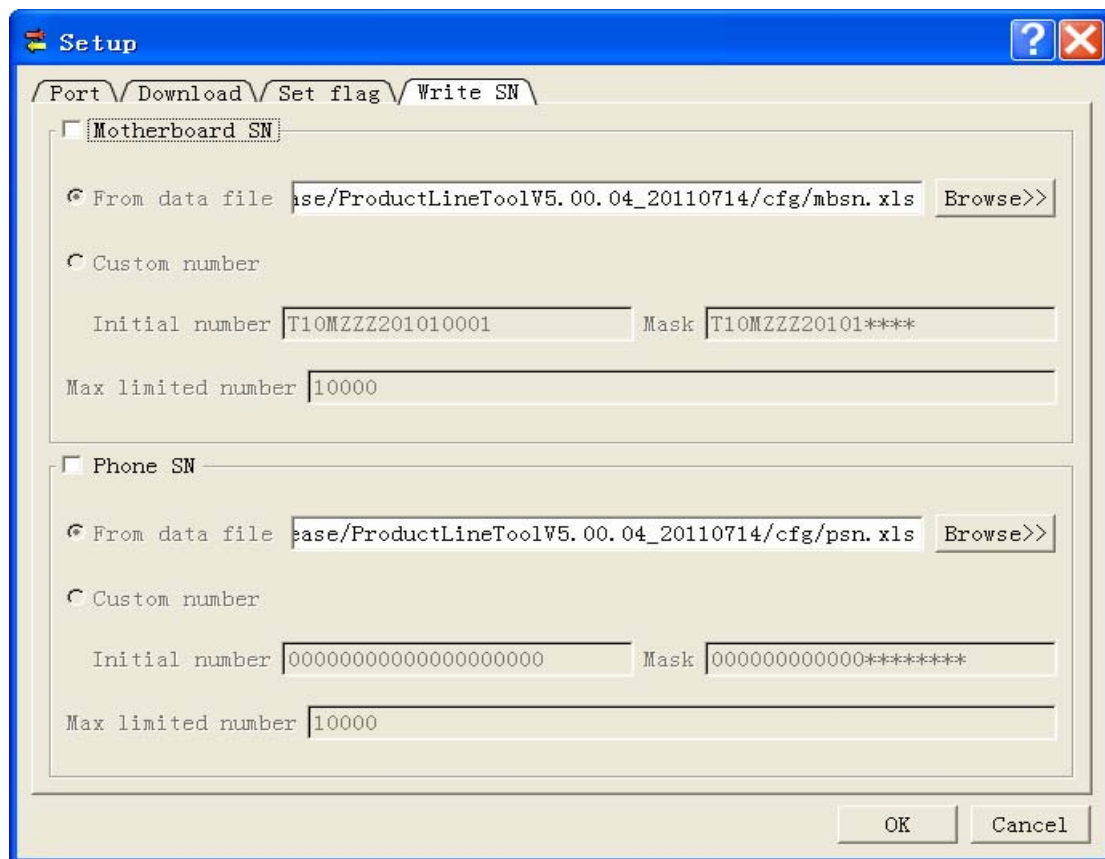
Figure 9

Choose the Motherboard SN checkbox to set the related setting about MBSN:
- From data file is chosen to input the MBSN from a Excel file in which there must be a table called "MBSN" and the MBSN numbers are listed in the first column.
- If Custom number is chosen, you have to input the initial MBSN in the Initial number and designate the position to be generated automatically in the mask.
- Initial number and mask must match, and * represents the position to be generated automatically and these characters must be digital numbers from 0 to 9. Another thing, If we hope the MBSN contain the date in a given position, we can set the given position of the Initial number and mask to be "##%%", Then "##%%" will be replaced by the month and day value when we write the MBSN to the mobile phone.
- Max limited number is used for From data file and Custom number. It means that you can't add any MBSN when the total number of MBSN were created reached the limit number.

Choose the Phone SN checkbox to set the related setting about PSN:
- From data file is chosen to input the PSN from a Excel file in which there must be a table called PSN and the PSN numbers are listed in the first column.
- If Custom number is chosen, you have to input the initial PSN in the Initial number and designate the position to be generated automatically in the mask.
- Attention: Initial number and mask must match and * represents the position to be generated automatically, and these characters must be digital numbers from 0 to 9.
- Max limited number is used for data file mode and Custom mode. It means that you can't add any PSN when the total number of PSN were created reached the limit number.

# 4 Run the download tool

## 4.1 Run the download tool

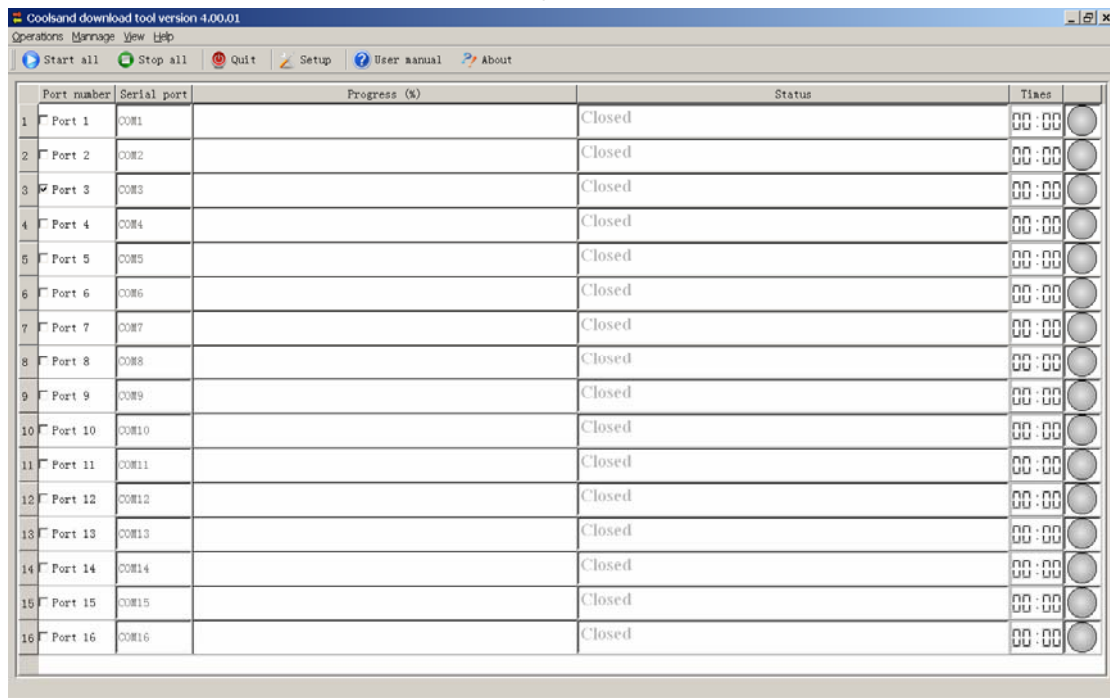Click the icon to run download tool shown as figure 10.



Figure 10

## 4.2 Start downloading

Start all ports to download by clicking the corresponding item on the toolbar. And then all ports prepare to start the download process. Start single port by clicking the button at the back of each port. The progressbar is changed from hoar into white now, shown as the figure 11.
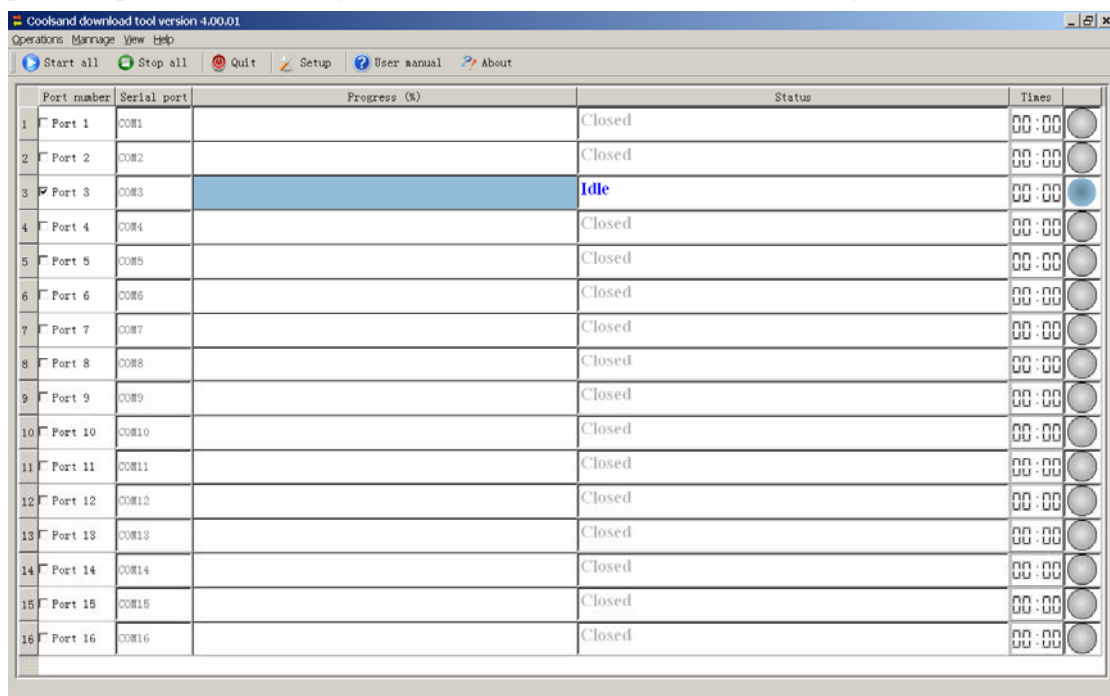


Figure 11

8

## 4.3 Connect to the cellular phone

Plug a cellular phone to the port, and then the port will find that the port connects the mobile successfully. The corresponding progressbar changes to aqua which means that it detects the phone successfully, shown as the figure 12.
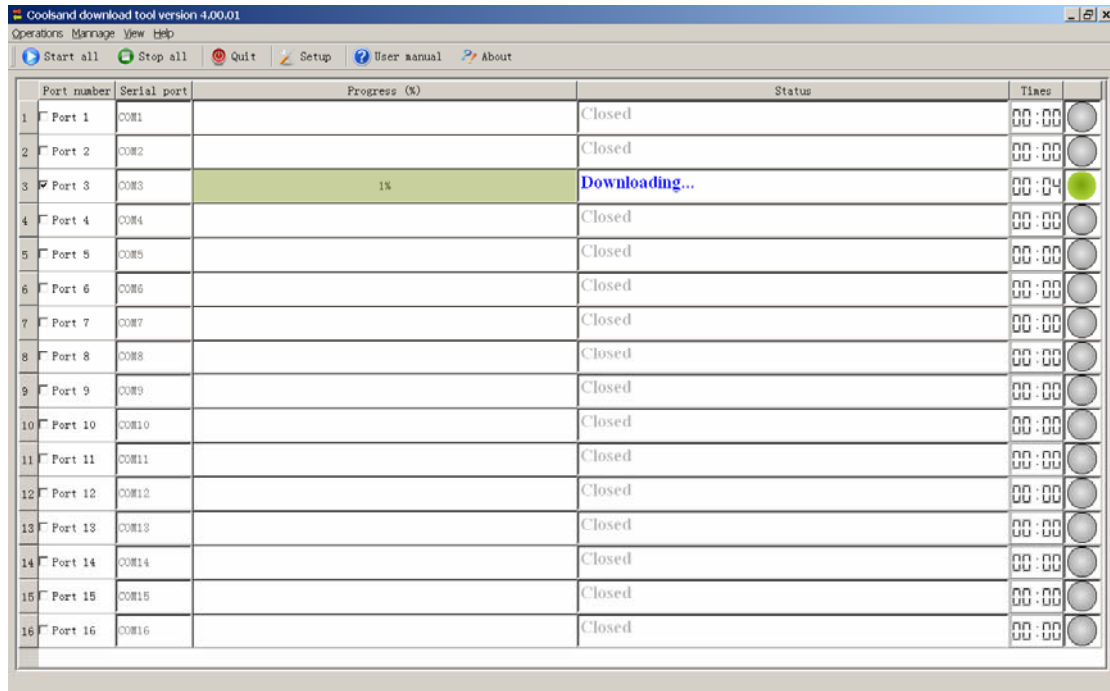


Figure 12

## 4.4 Download the lod file

After detecting the mobile successfully, the program begins to download the lod file. A processbar is shown to display the percentage of the download progress from 1% to 100% while the status will change from "Downloading" to "Finished". The progress is shown in the figure 13 and 14
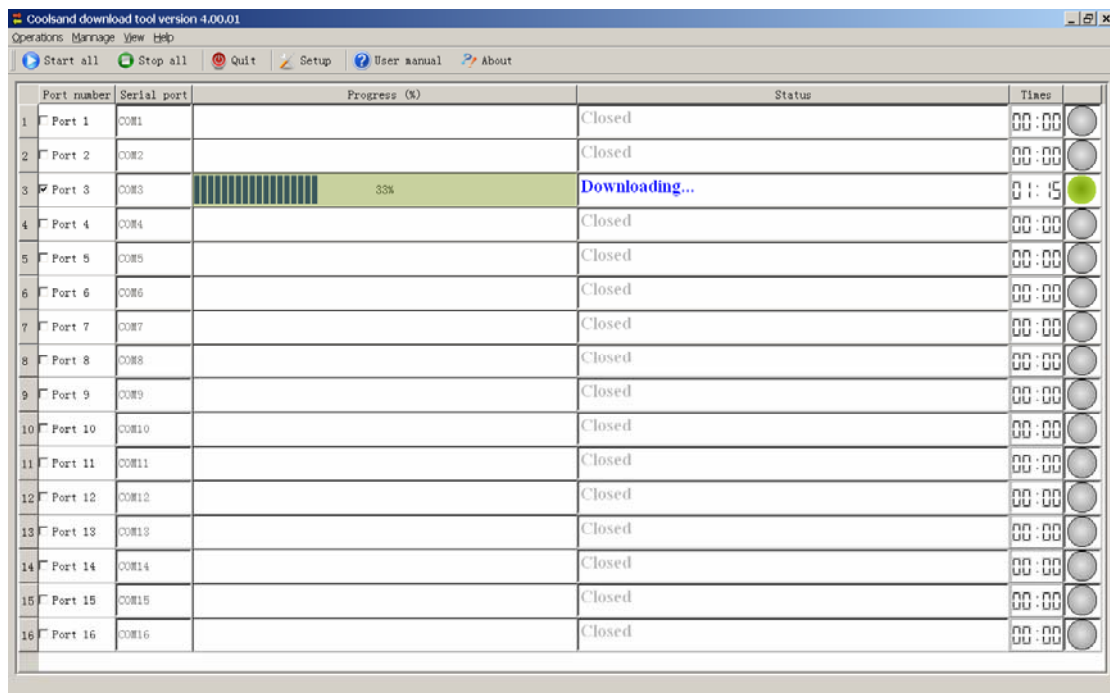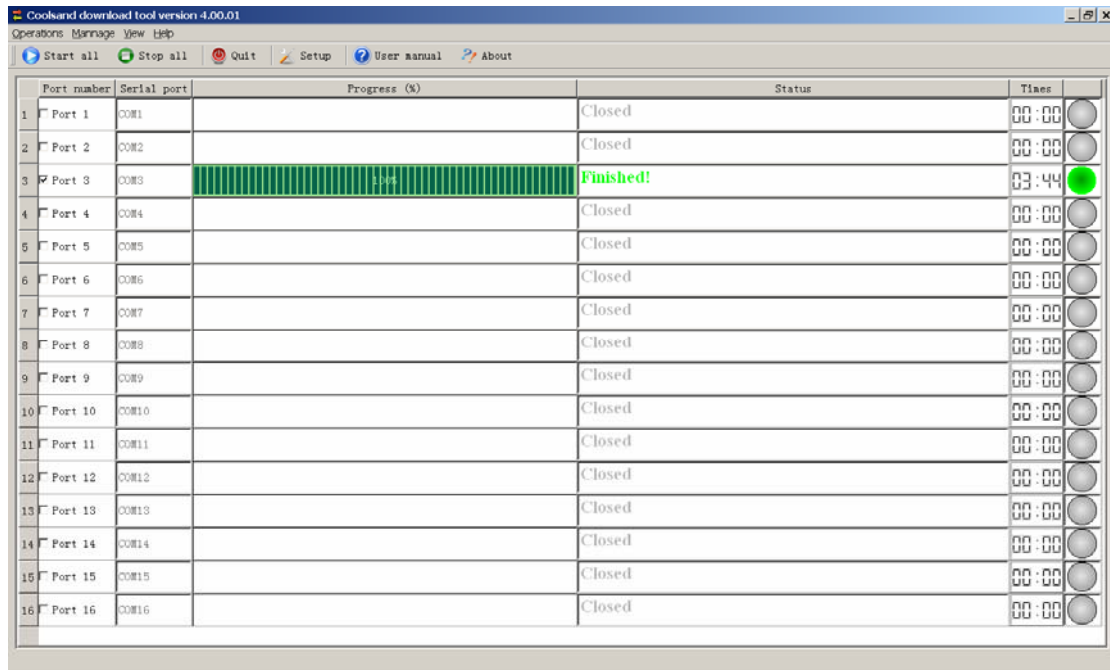


Figure 13

Figure 14

## 4.5 Start or stop the download process solely

If you hope to start or stop one port solely, you can right-click the mouse on the very row of the port, then you can find a popup menu like the below figure, In which there are 2 menu items "Start" and "stop". Click them you can start or stop the very port solely.
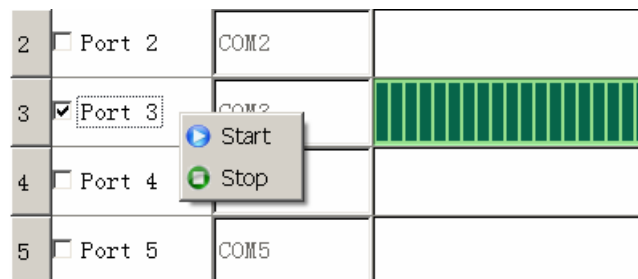


Figure 16

## 4.6 Unplug the cellular phone

Unplug the cellular phone; waiting for the idle state (white) appearance, then put another cellular phone to the fixture.

Pay attention to:

1. The operator must wait unitl the former mobile has finished and the finish state is shown, and then he can unplug the phone.
2. The operator can plug a new phone only when the port is idle again (The progress bar turns to white) after unplugging the former one.
3. The tool will display the count of both successful and failed downloading. However, if press the button "Stop", the count will be cleared to zero.

# 5 Troubleshooting

In the process of downloading, thanks to the hardware error or the operating error, the process may quit or stop occasionally. The user can use the eight groups of buttons(Start/Stop) to do the following steps:
1. Click the stop button of the port that encounter the error and stop downloading.
2. Unplug out the unfinished mobile.
3. Click the start button to restart the download process.
4. Plug the mobile in the fixture, start downloading.
5. If the above steps take no effect, please restart the Windows.