

FP-004 User Manual

(Page05 ~ 14) **Part 1.** BA(Fujitsu CPU) Direct Downloading and

Indirect Downloading & White Card Calibration

(Page15 ~ 23) **Part 2.** BA(MicroChip CPU) Direct / Indirect Downloading

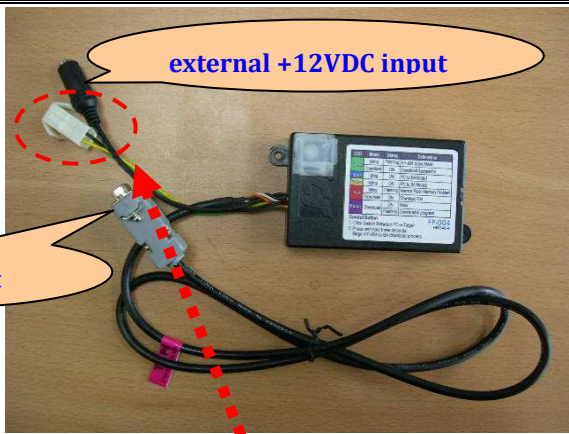
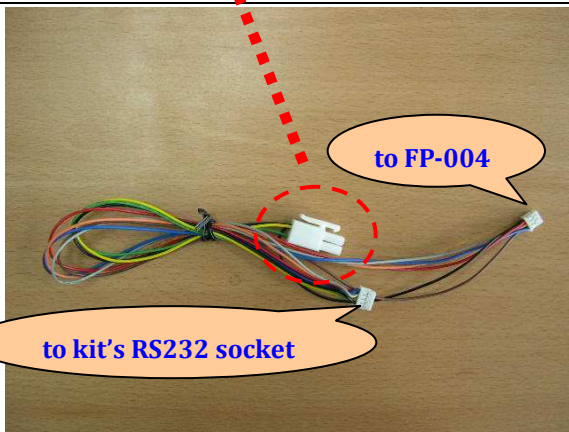
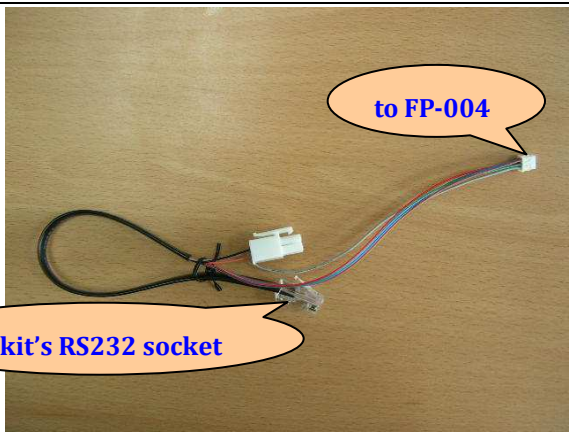
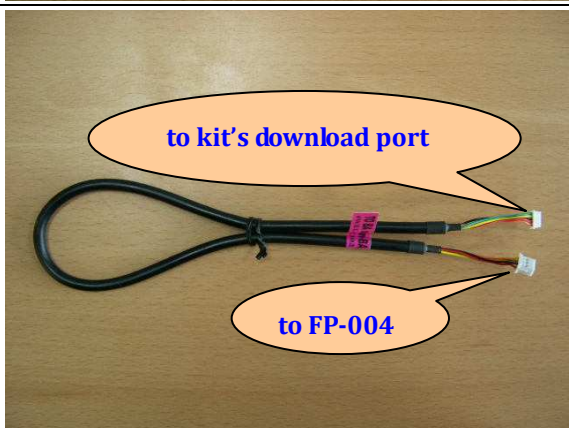
(Page24 ~ 25) **Part 3.** RS232 Interface Data Communication

(Page26 ~ 28) **Part 4.** BA testing on ICT BA test tool

FP-004 User Manual

Step 0. Introductions

- Cables and Functions

Cable No.	Pictures	Function Description
FP-004 main box & WEL-RF303		- WEL-RF303 cable should be always connected to FP-004 for all activities.
WEL-RF402		<p>WEL-RF402 is used to below conditions :</p> <p>Models :</p> <p>BA and non-BA with Fujitsu CPU</p> <p>Functions :</p> <ul style="list-style-type: none"> - Software Downloading - RS232 interface data communication - BA testing on ICT BA test tool <p>NOTE : The red dash line socket should be connected to WEL-RF303 when software downloading.</p>
WEL-RF401		ditto, but WEL-RF401 is used to different models, it depends on the RS323 connector style.
WEL-RF302		<p>WEL-RF402 is used to below conditions :</p> <p>Models :</p> <p>BA and non-BA with MicroChip CPU</p> <p>Functions :</p> <p>Only for Software Downloading</p>

- FP-004 Functions and LED Signals Introduction

1. Software Downloading :

PC ➔ Device	Progresses	IDLE	DOWNLOADING	DOWNLOAD FINISH
	LED color	Green Flashing	Purple ON	Green Flashing
PC ➔ FP-004	Progresses	IDLE	DOWNLOADING	DOWNLOAD FINISH
	LED color	Green Flashing	Purple ON	Green Flashing
FP-004 ➔ Device	Progresses	IDLE	DOWNLOADING	DOWNLOAD FINISH
	LED color	Green Flashing	Purple Flashing	Green Flashing

2. RS232 interface data communication(PC to BA Mode1) :

Steps	operations	LED color
1	Provide +12VDC to FP-004 by +12VDC adaptor(Note)	Green Flashing
2	Press RESET key once	Blue ON
3	Execute RS232 tool on PC	Blue ON
4.	Set DIP switch of BA / non-BA to RS232 interface	Blue ON
5	Turn ON BA / non-BA power and start to test	Blue ON

3. BA testing on ICT BA test tool(PC to BA Mode2) :

Steps	operations	LED color
1	Provide +12VDC to FP-004 by +12VDC adaptor(Note)	Green Flashing
2	Press RESET key twice	Yellow ON
3	Execute BA test tool on PC	Yellow ON
4.	Set DIP switch of BA / non-BA to RS232 interface	Yellow ON
5	Turn ON BA power and start to test	Yellow ON

Note : adaptor specification



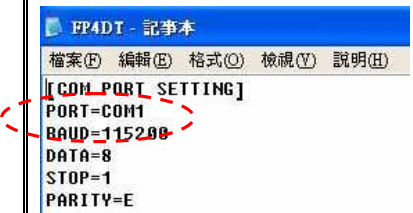
4. Error Messages :

LED Status	definitions
Red Flashing	Internal Flash Memory Problem
Red ON	Download Fail

- PC Tools Introduction

Functions	PC Tools
Software Downloading	FP4DT.exe(Ver. FP4DTS0004#####)
RS232 interface data communication(PC to BA Mode1)	ICT BA Test Tool PMGXXX0B.exe
BA testing on ICT BA test tool(PC to BA Mode2)	Fujitsu CPU ➡ ICT BA Test Tool PMGXXX0B.exe MicroChip CPU ➡ ProductTestTool Version1.62

- PC COM Port Setting Introduction

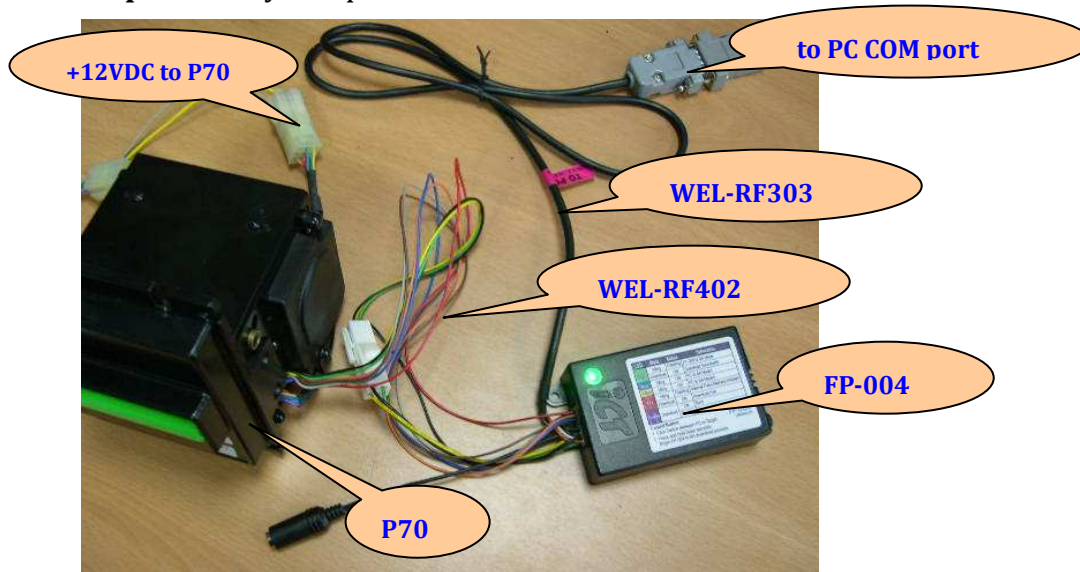
PC Tools	COM Port Setting Methods(COM1 is recommended)
FP4DT.exe(Ver. FP4DTS0004#####)	 <p>by modifying “FP4DT.INI” file</p>
ICT BA Test Tool PMGXXX0B.exe	can be set on executed program directly.
ProductTestTool Version1.62	can be set on executed program directly.

- FP-004 Software Version : FP004S0012#####(DD7D)

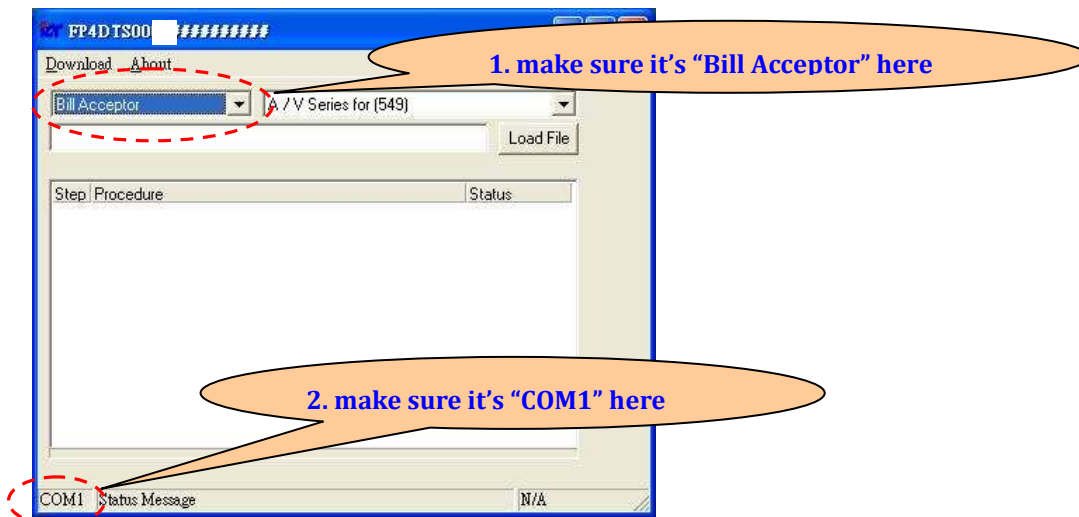
Part 1. BA(Fujitsu CPU) Direct Downloading and Indirect Downloading & White Card Calibration

Section 1. Direct Downloading(use P70 as a demo kit)

Step 1. Facility Setup

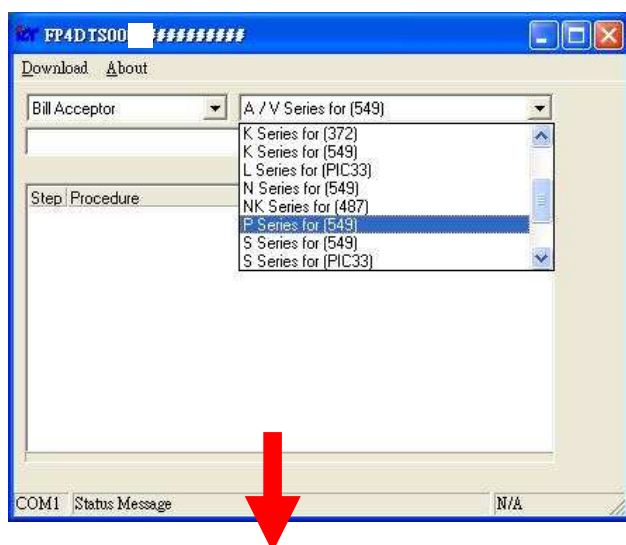


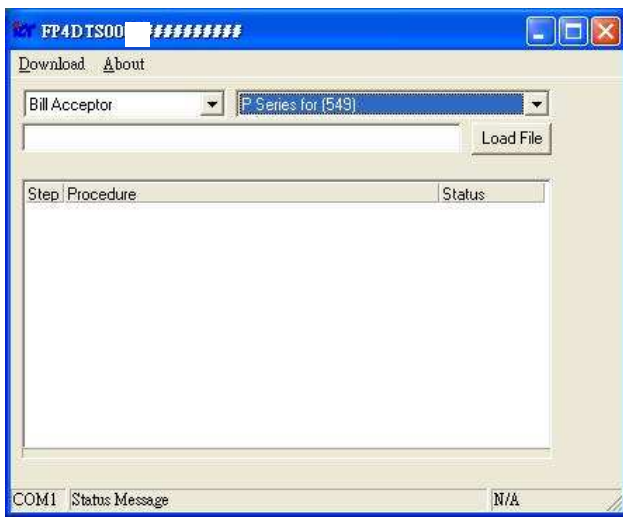
Step 2. execute FP-004 download tool “FP4DT.exe”, the feature is showed as below.



Step 3. select the BA model and software

1. according to your BA to choose proper BA model(P Series) as below



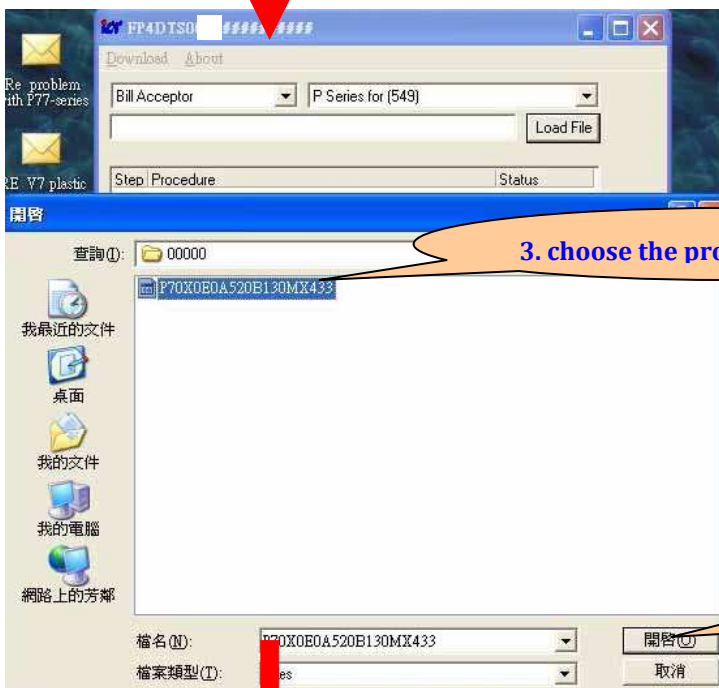


2. choose the proper software you want to download



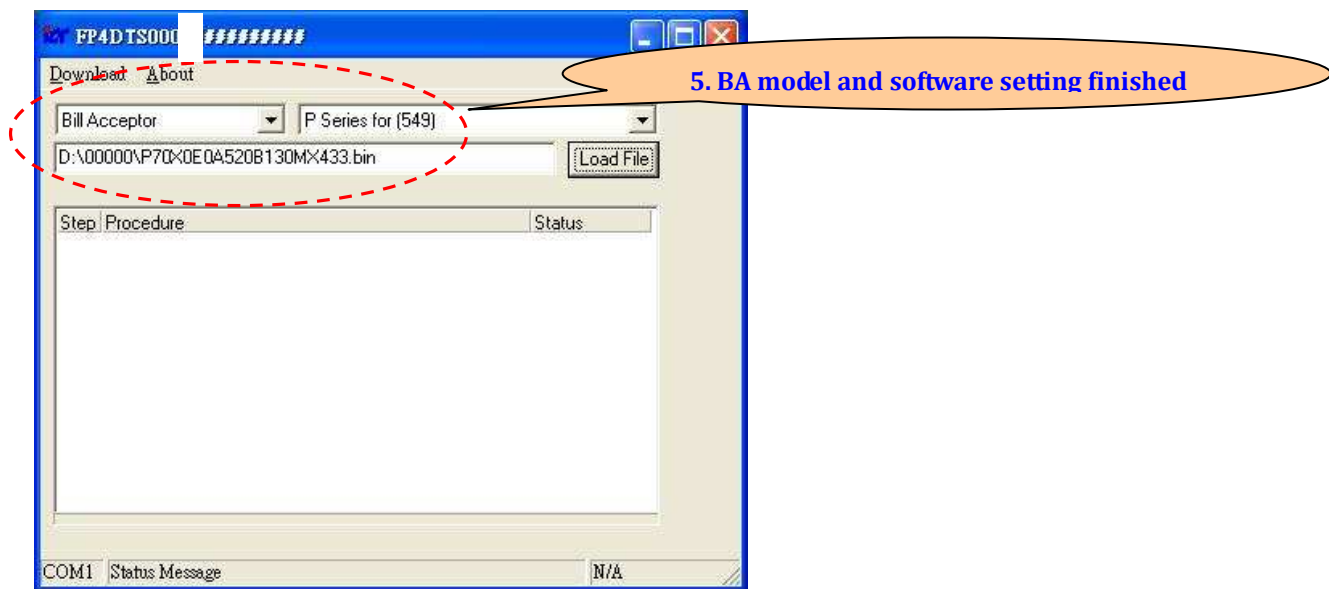
1. click this icon

2. choose the software directory



3. choose the proper software

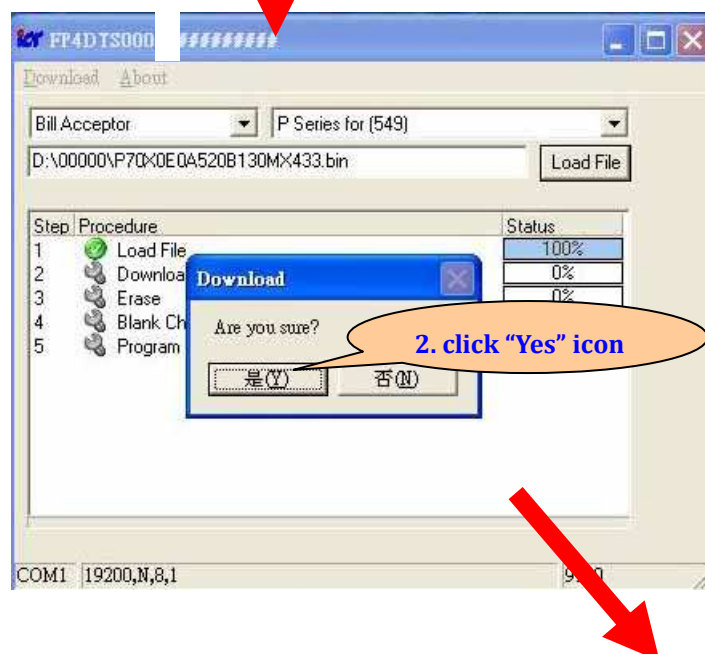
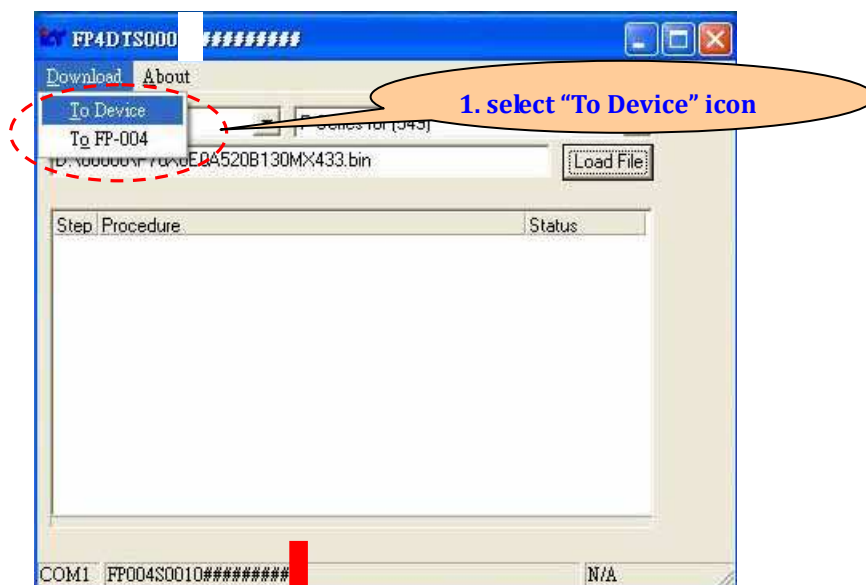
4. click "Open" icon

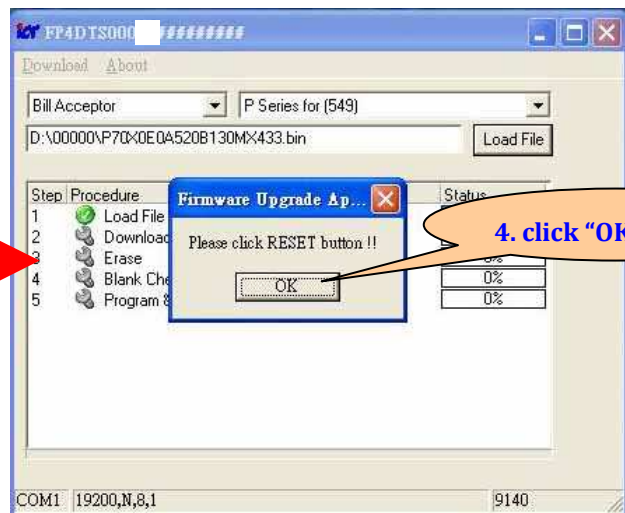


Step 4. turn ON BA power

Step 5. start to download

1. select Direct Download function(PC to Device)





Step 6. during downloading <FP-004 LED status ➡ **Purple** ON>



Step 7. download finished(successful) <FP-004 LED status ➡ **Green** Flashing >



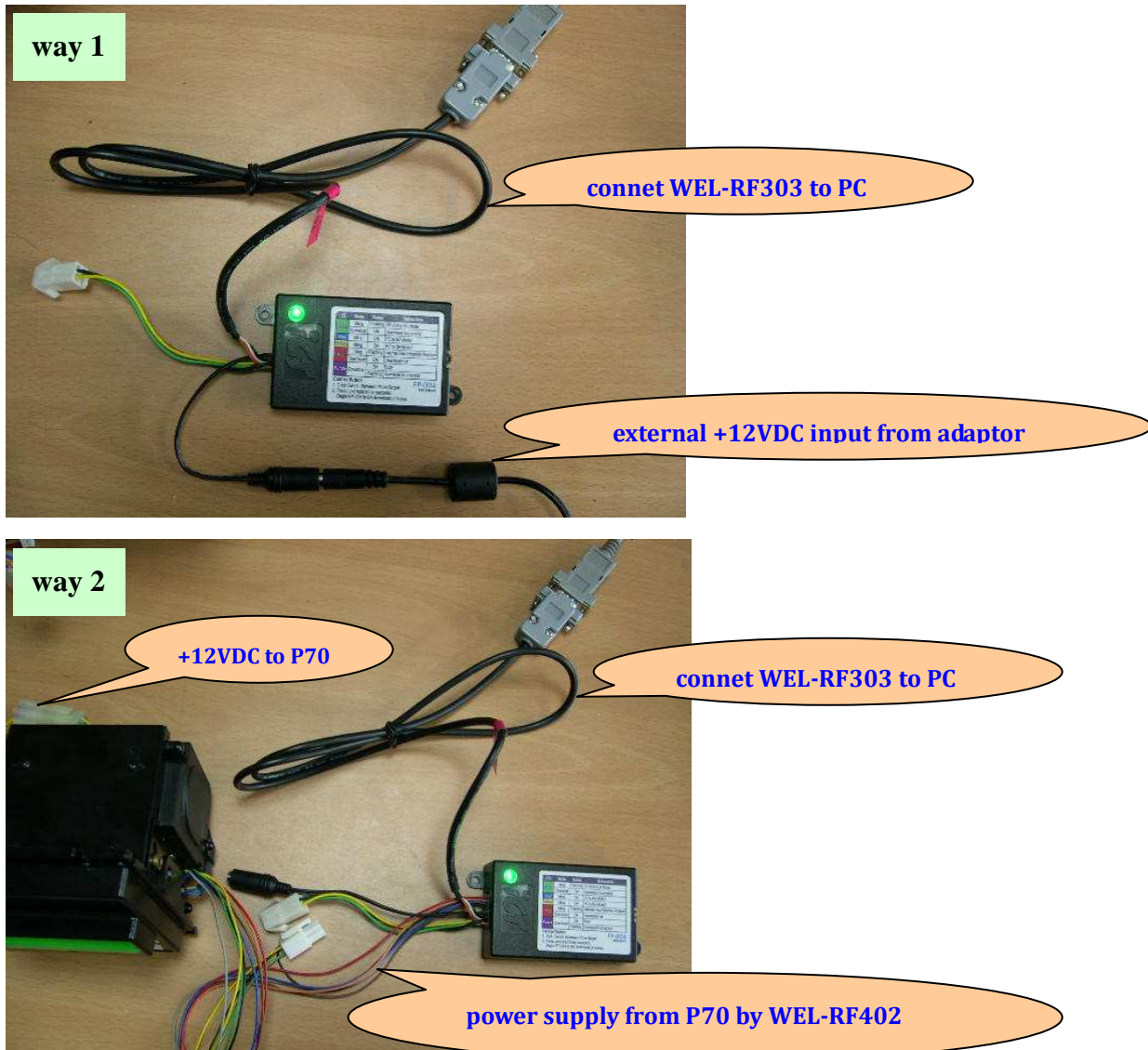
Remark: You will hear the initialized sound from BA after successful downloading.

Section 2. Indirect Download(use P70 as a demo kit)

PC → FP-004

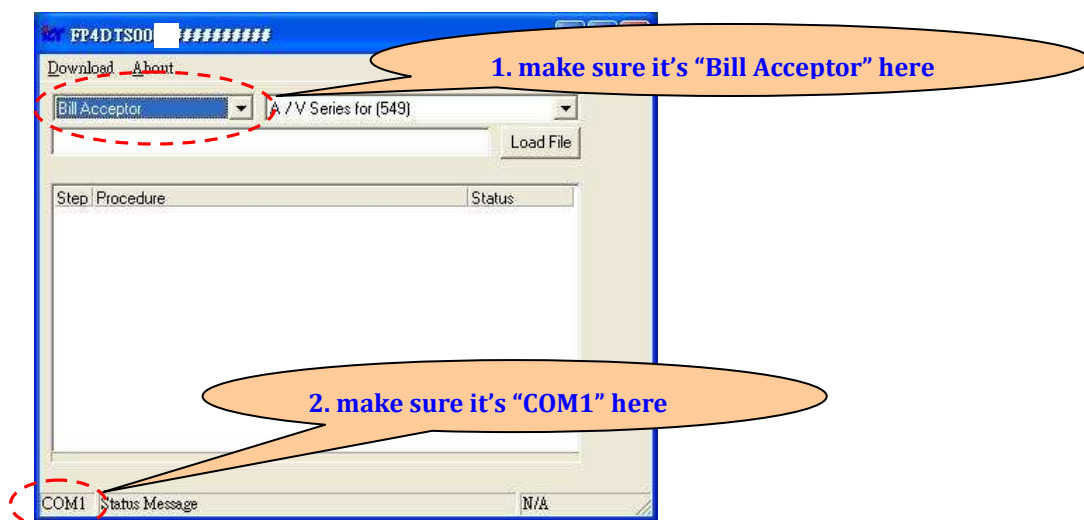
Step 1. Facility Setup

- there are two ways to supply DC voltage to FP-004.



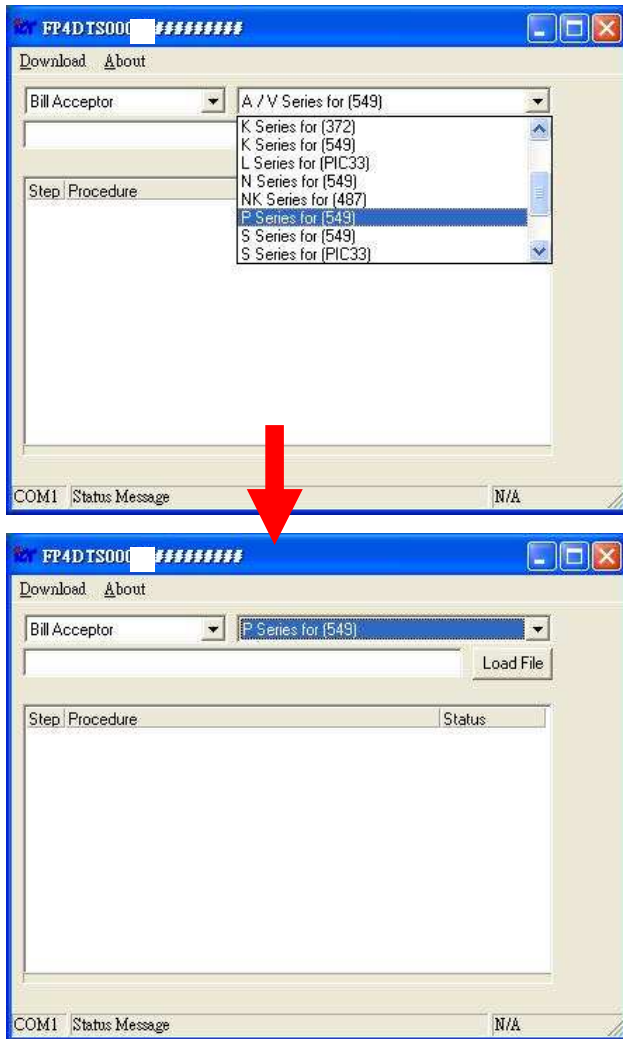
Step 2. turn ON FP-004 power

Step 3. execute FP-004 download tool "FP4DT.exe", the feature is showed as below.

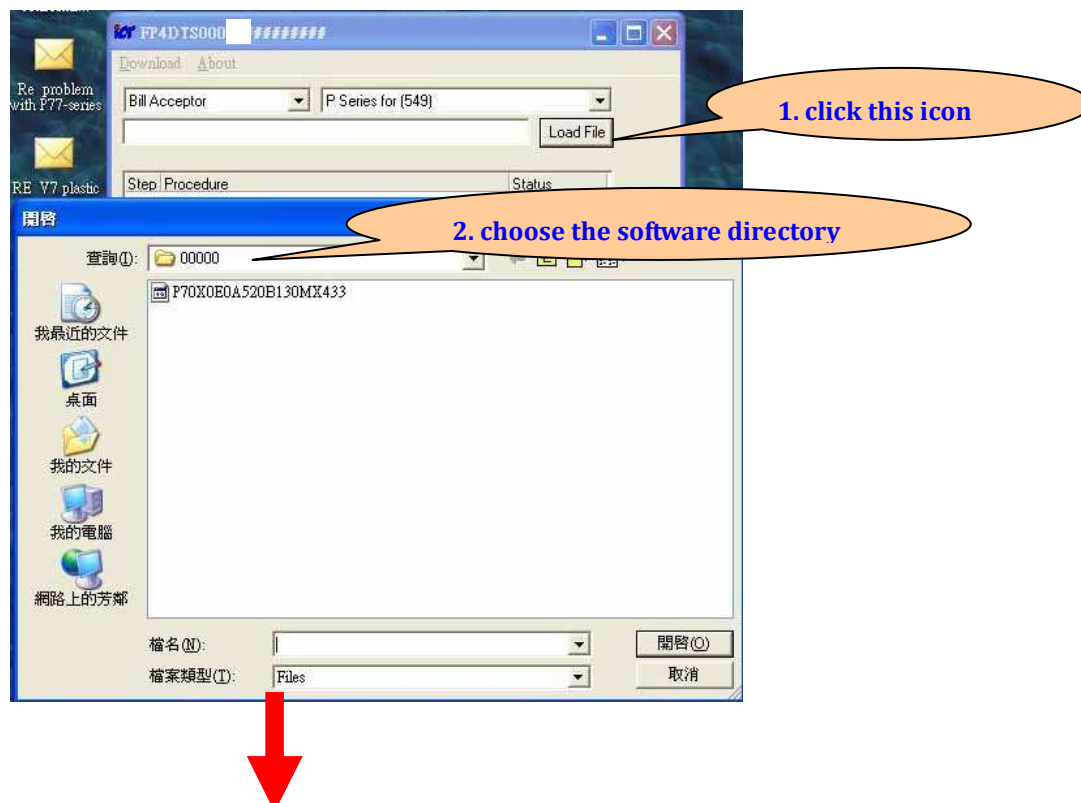


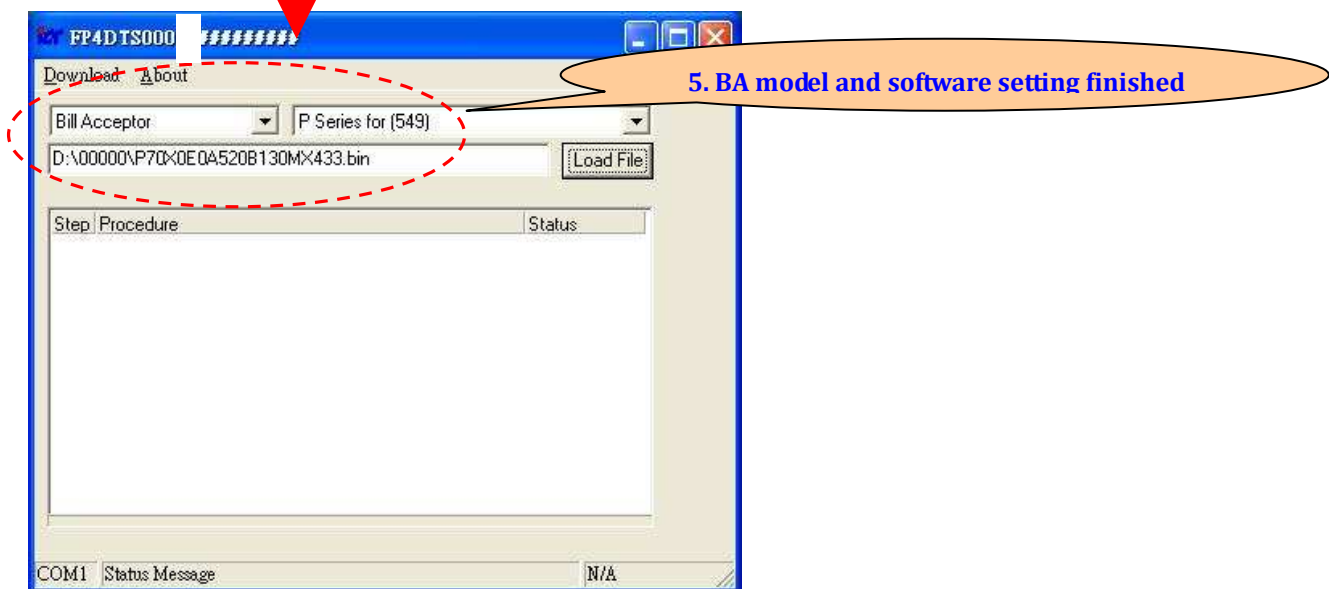
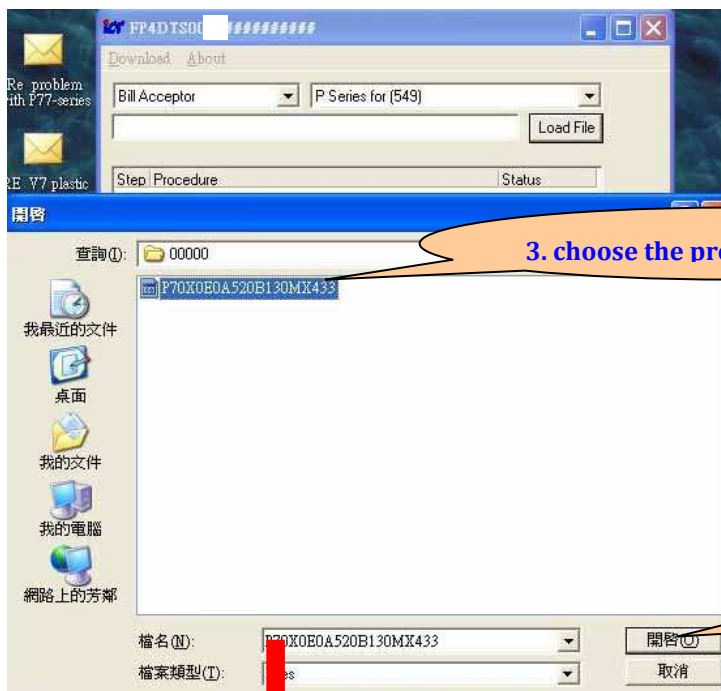
Step 4. select the BA model and software

1. according to your BA to choose proper BA model(P Series) as below



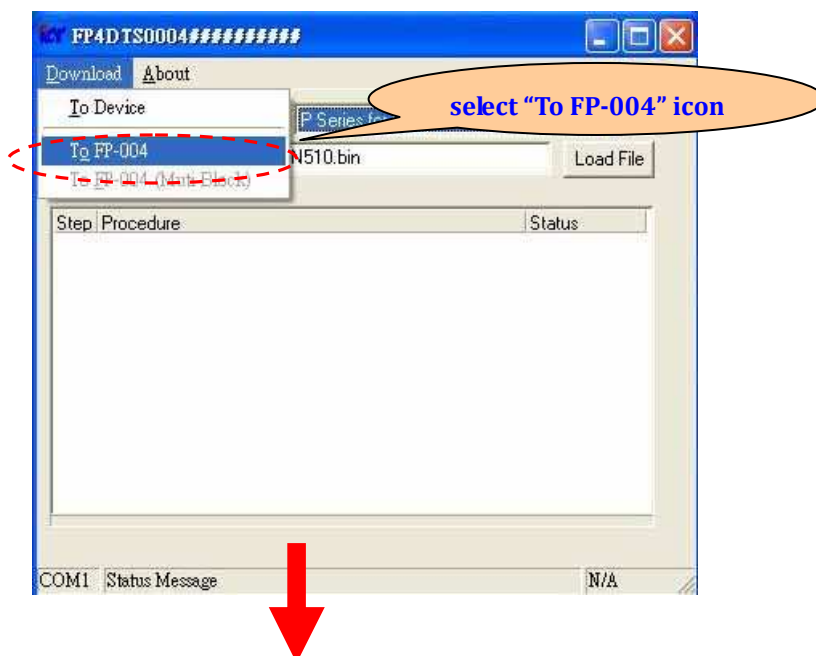
2. choose the proper software you want to download



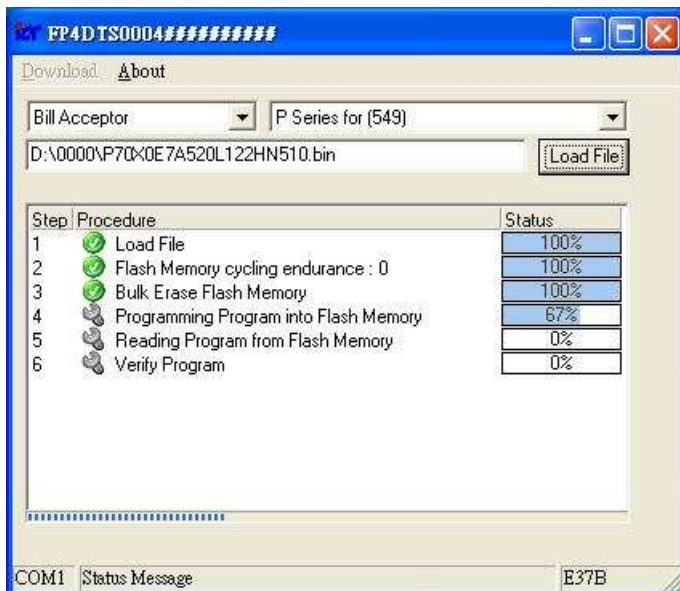


Step 5. start to download

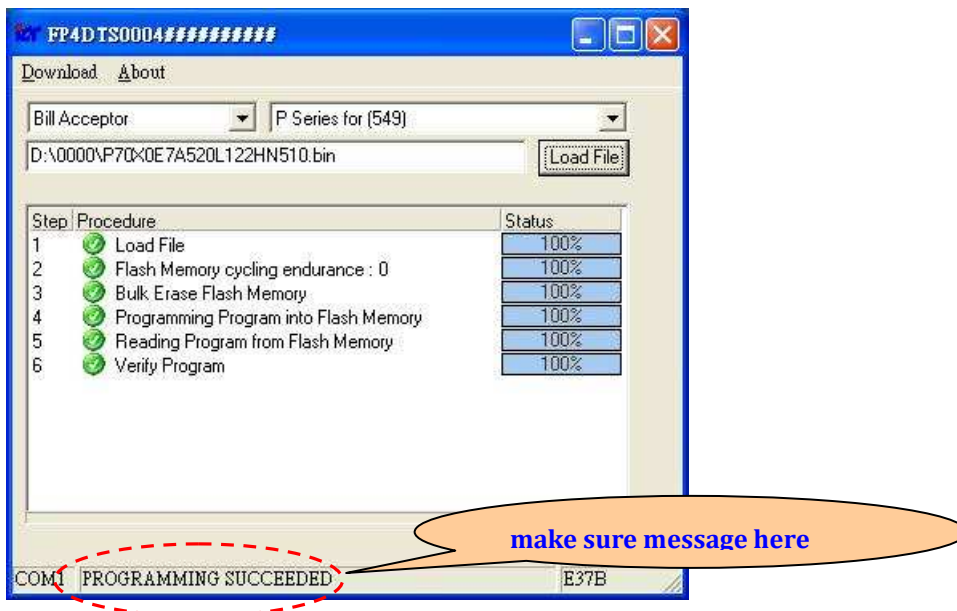
- select download function(PC to FP-004)



Step 6. during downloading <FP-004 LED status ➡ **Purple** ON>

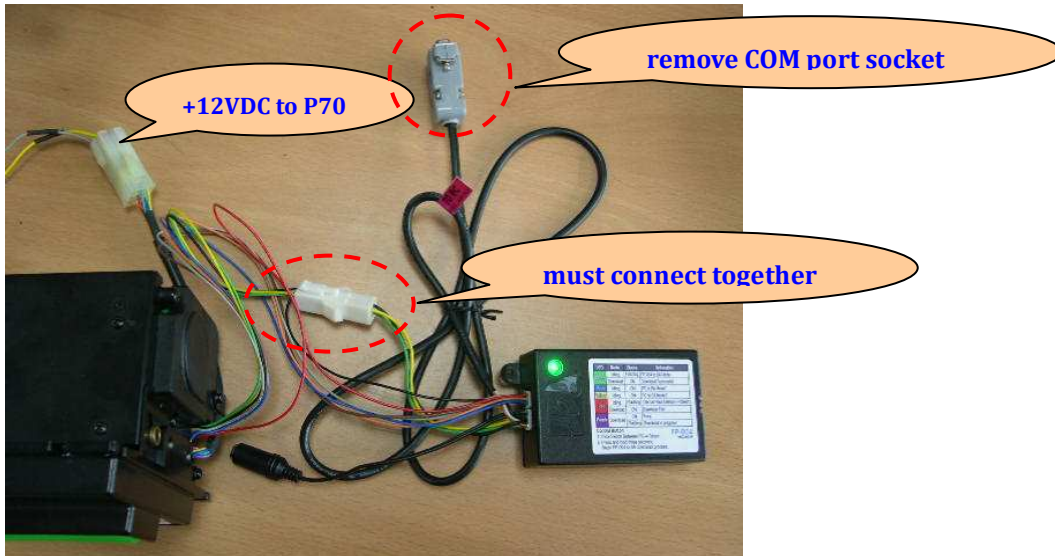


Step 7. download finished(successful) <FP-004 LED status ➡ **Green** Flashing >



FP-004 ➡ Device

Step 1. Facility Setup



Step 2. start to download



Step 3. during downloading <FP-004 LED status ➡ **Purple** Flashing>

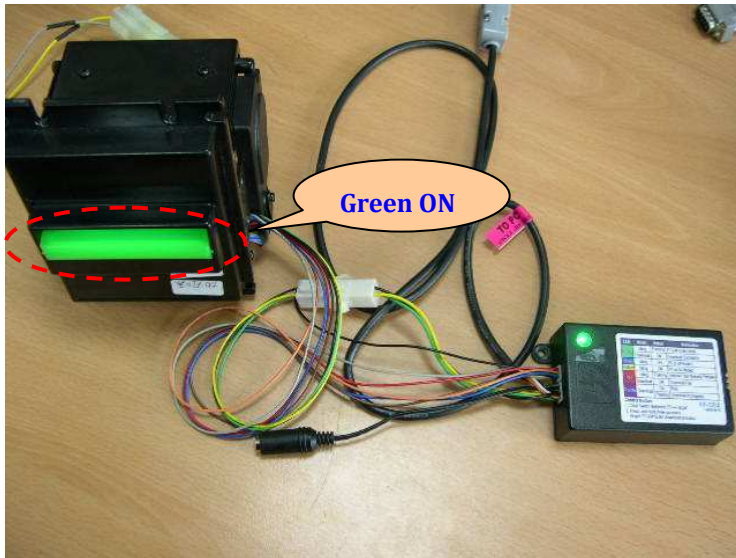
Step 4. download finished(successful) <FP-004 LED status ➡ **Green** Flashing >

Remark:

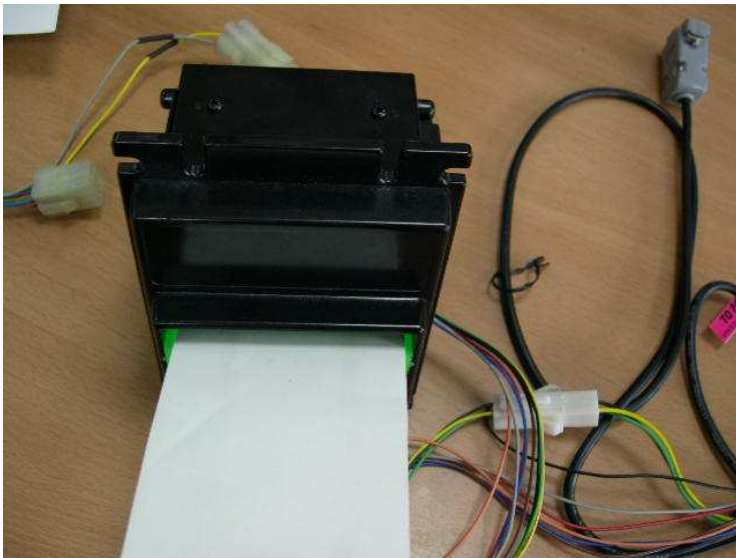
- You will hear the initialized sound from BA after successful downloading.
- Then P70 Panel LED will turn **Green** ON and allow user to directly perform White Card Calibration(see below procedures) once if it's necessary.

White Card Calibration if it's necessary

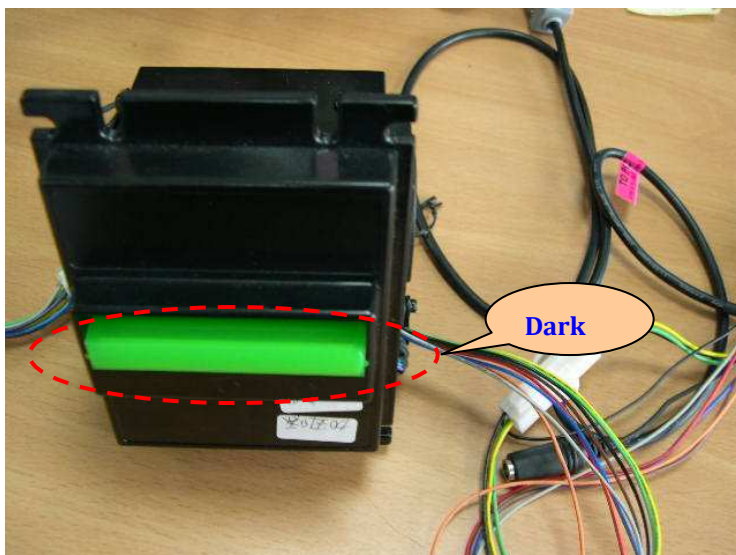
Step 1. P70 Panel LED shows **Green** ON and allow user to directly perform White Card Calibration.



Step 2. slightly put White Card into P70 bill inserting mouth, then A7 will suck White Card a little distance and then auto push White Card out after calibration finishing.



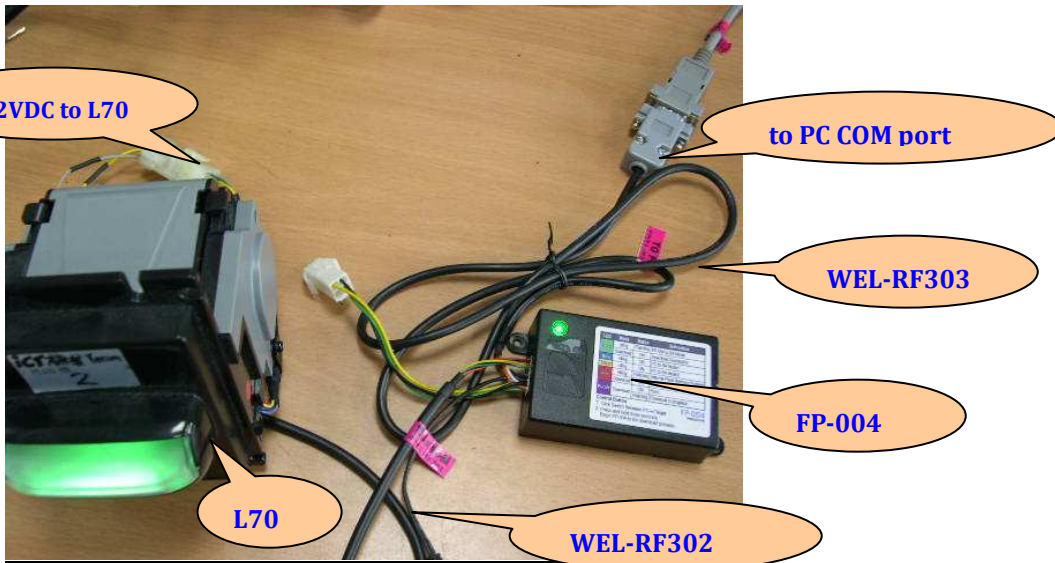
Step 3. P70 Panel LED becomes **Dark**(OFF) after calibration successful.



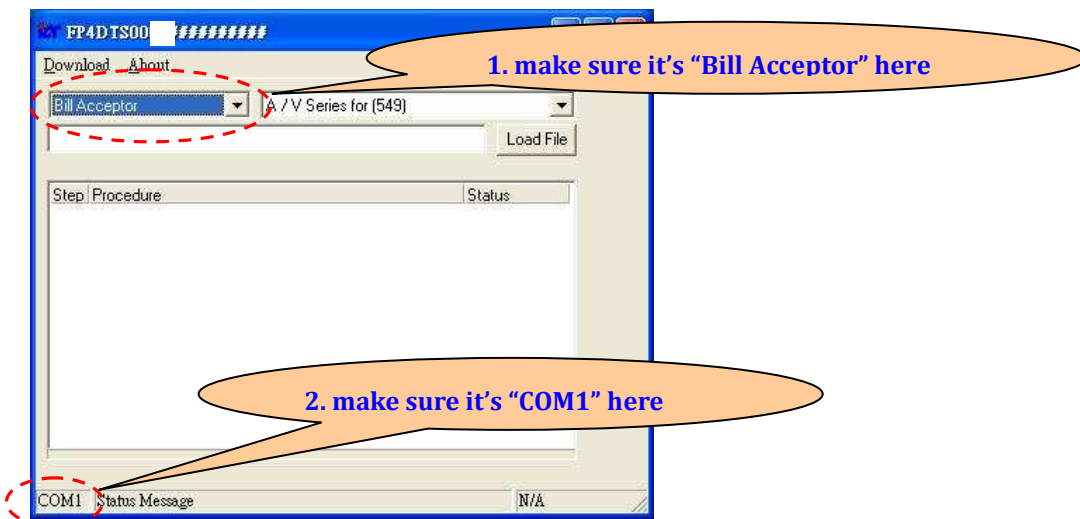
Part 2. BA(MicroChip CPU) Direct / Indirect Downloading

Section 1. Direct Downloading(use L70 as a demo kit)

Step 1. Facility Setup

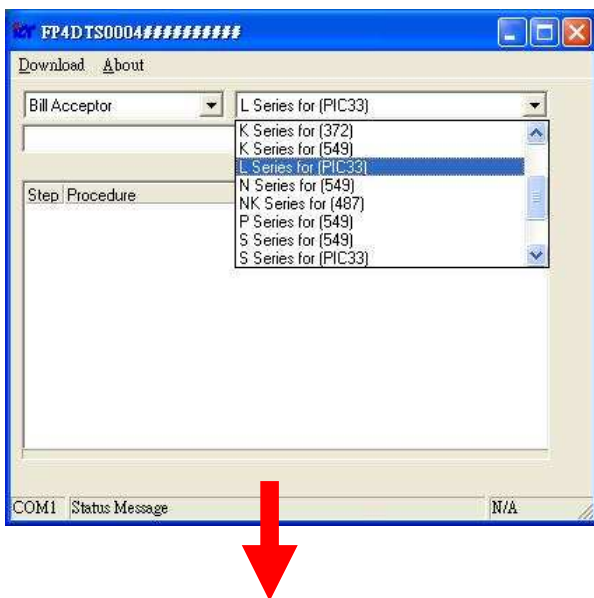


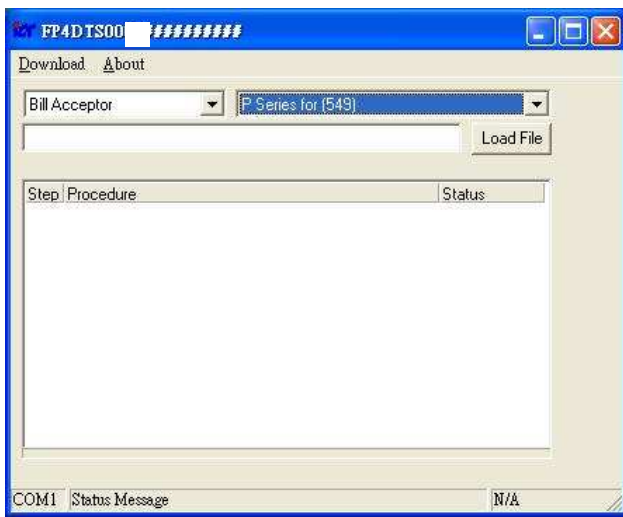
Step 2. execute FP-004 download tool “FP4DT.exe”, the feature is showed as below.



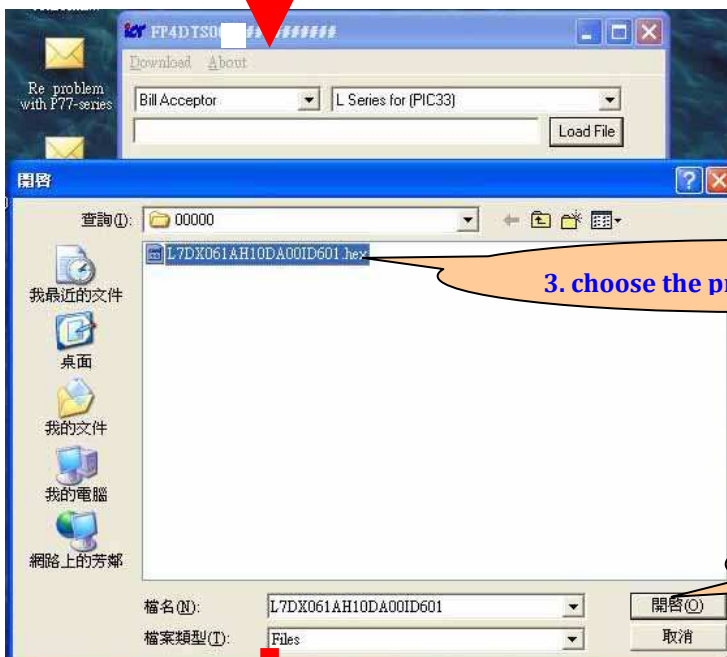
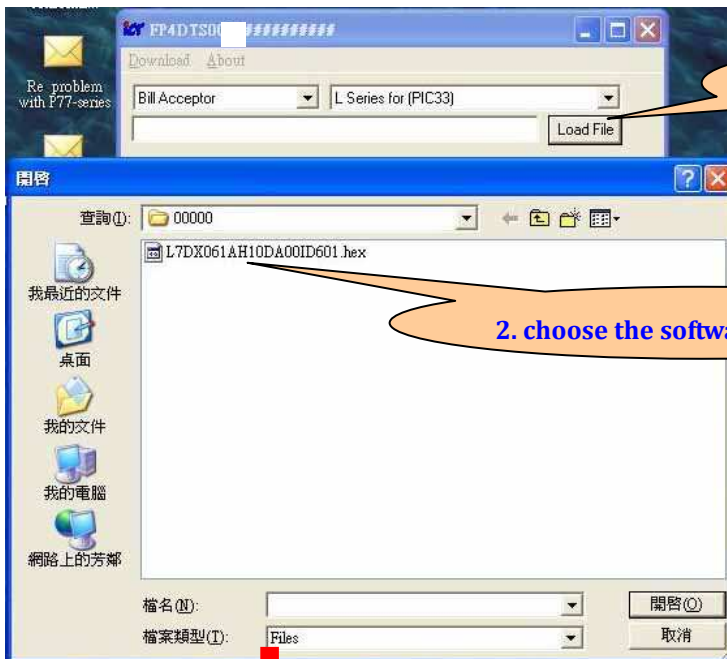
Step 3. select the BA model and software

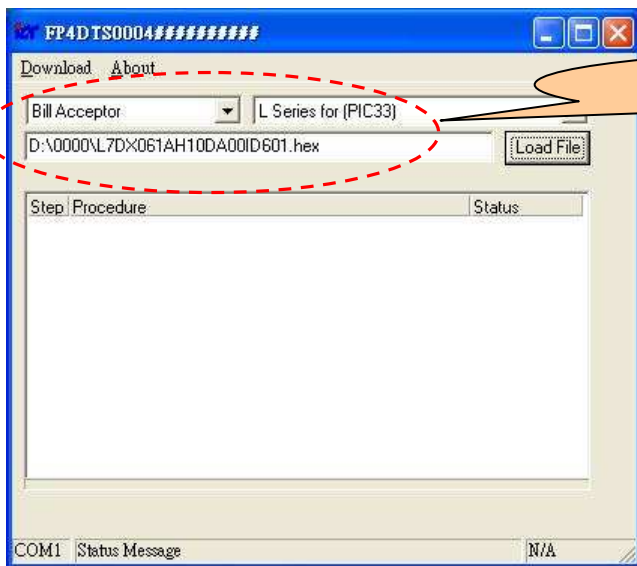
1. according to your BA to choose proper BA model(L Series) as below





2. choose the proper software you want to download



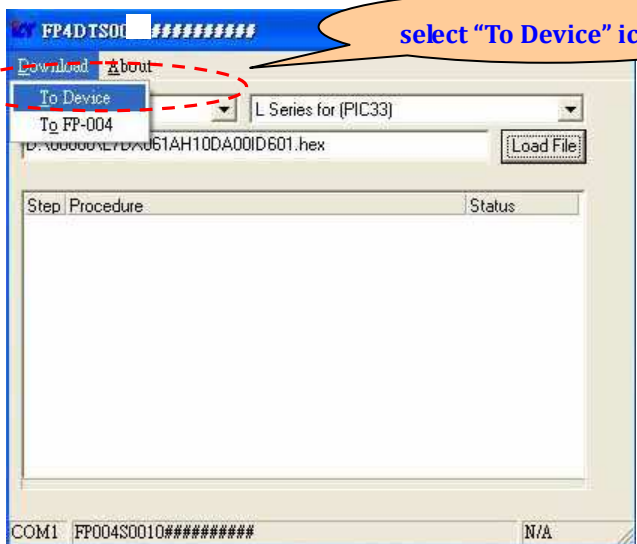


5. BA model and software setting finished

Step 4. turn ON BA power

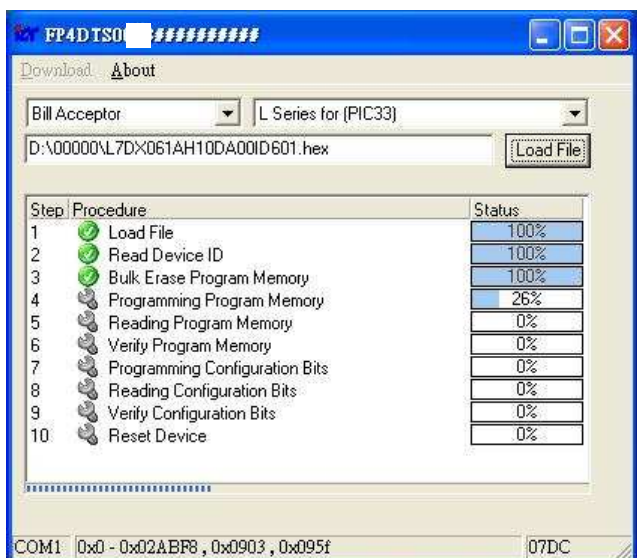
Step 5. start to download

1. select Direct Download function(PC to Device)

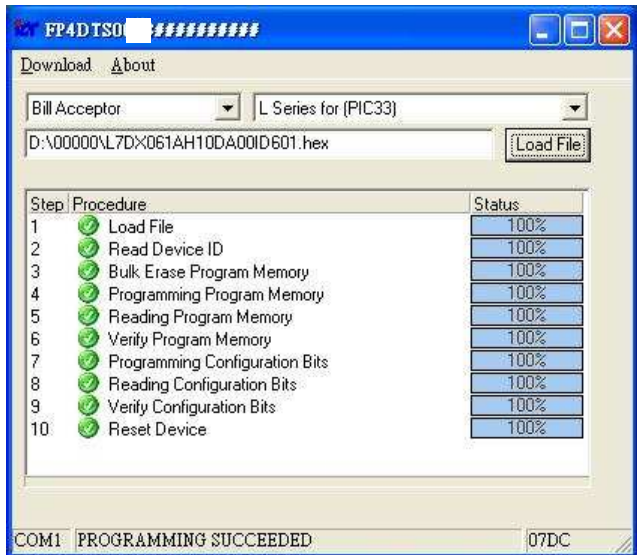


select "To Device" icon

Step 6. during downloading <FP-004 LED status ➡ Purple ON>



Step 7. download finished(successful) <FP-004 LED status ➡ **Green** Flashing >



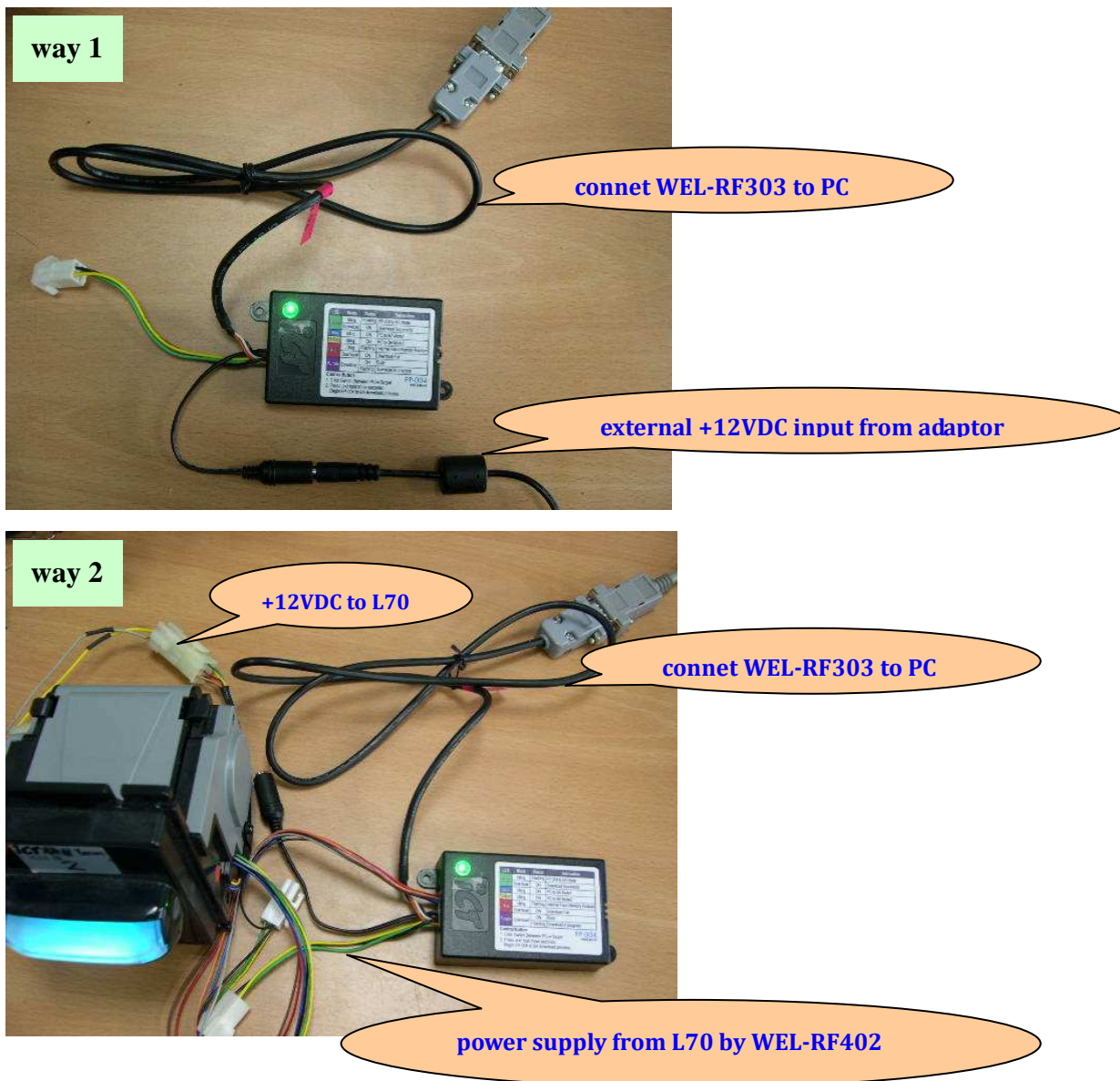
Remark: You will hear the initialized sound from BA after successful downloading.

Section 2. Indirect Download(use L70 as a demo kit)

PC → FP-004

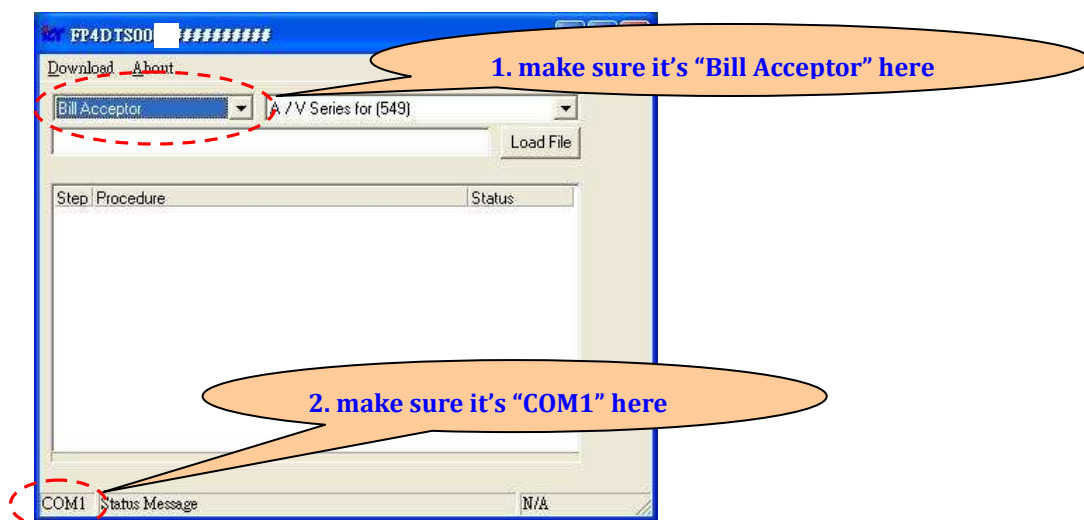
Step 1. Facility Setup

- there are two ways to supply DC voltage to FP-004.



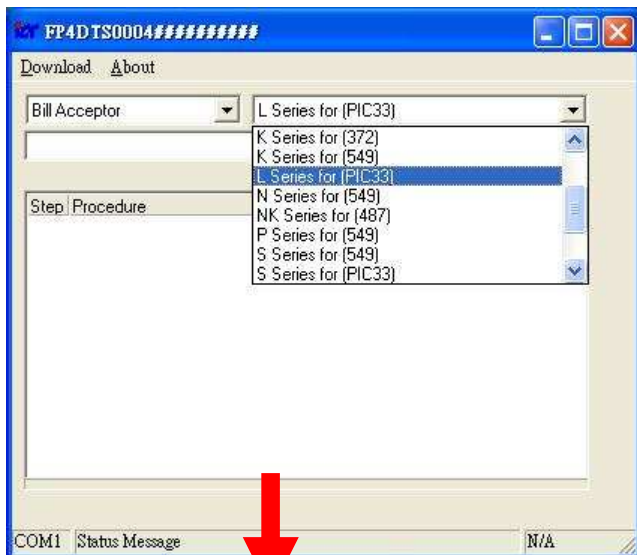
Step 2. turn ON FP-004 power

Step 3. execute FP-004 download tool “FP4DT.exe”, the feature is showed as below.

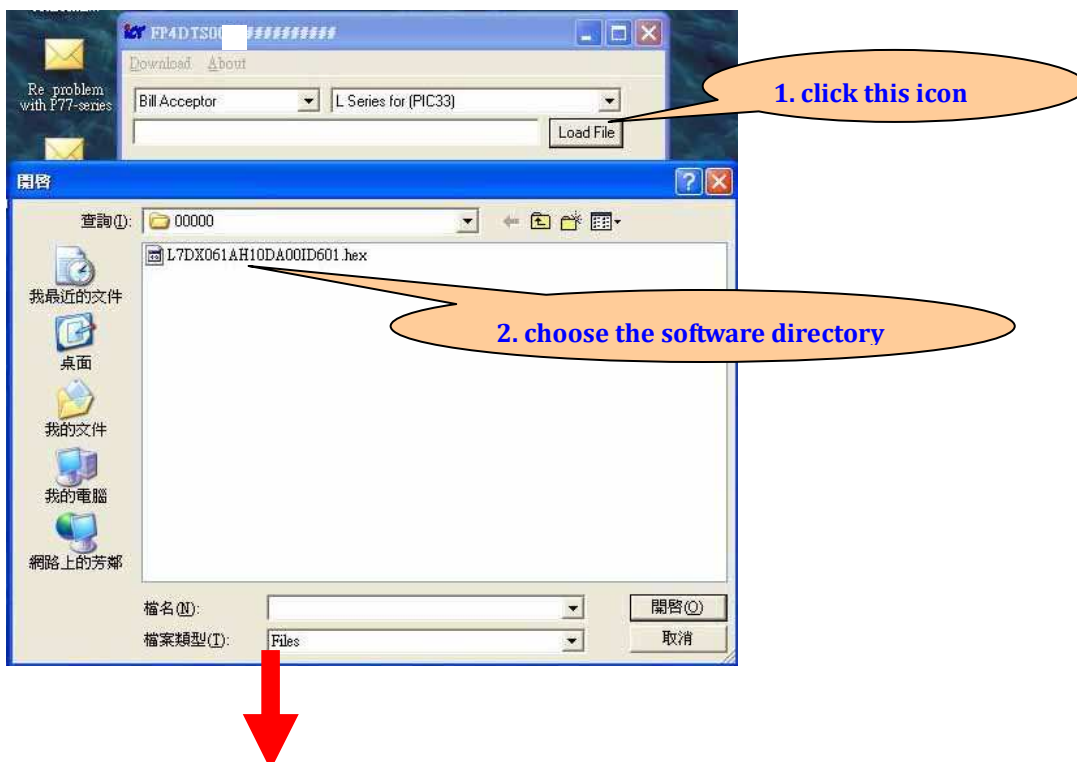


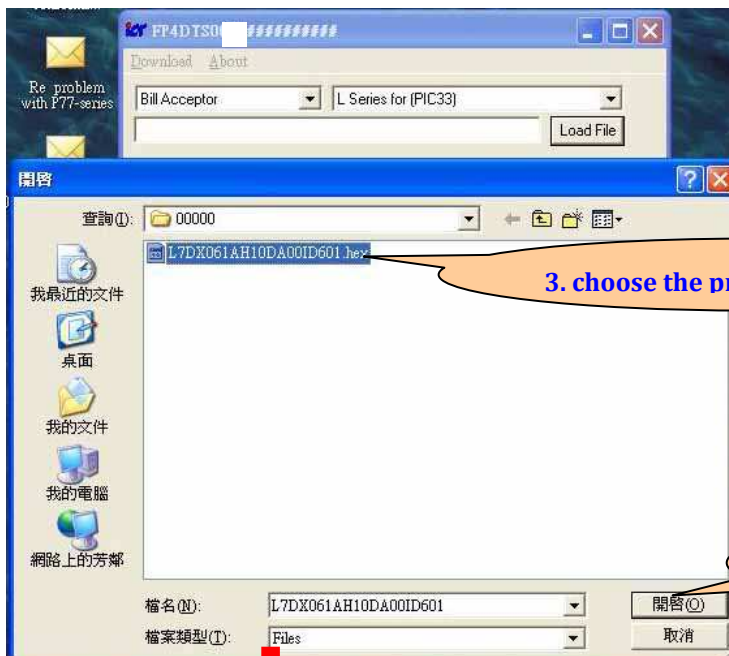
Step 4. select the BA model and software

1. according to your BA to choose proper BA model(L Series) as below



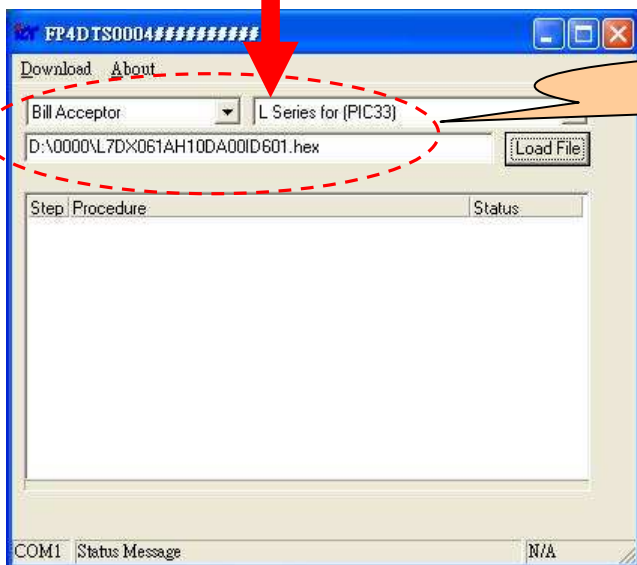
2. choose the proper software you want to download





3. choose the proper software

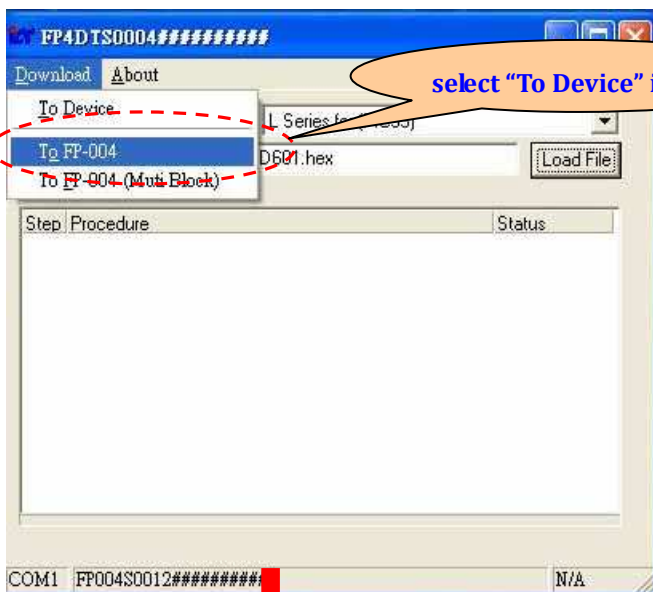
4. click "Open" icon



5. BA model and software setting finished

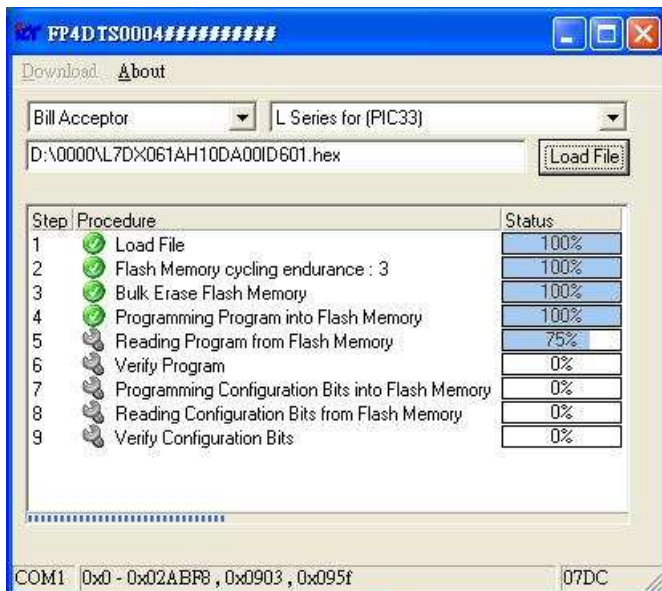
Step 5. start to download

- select download function(PC to FP-004)

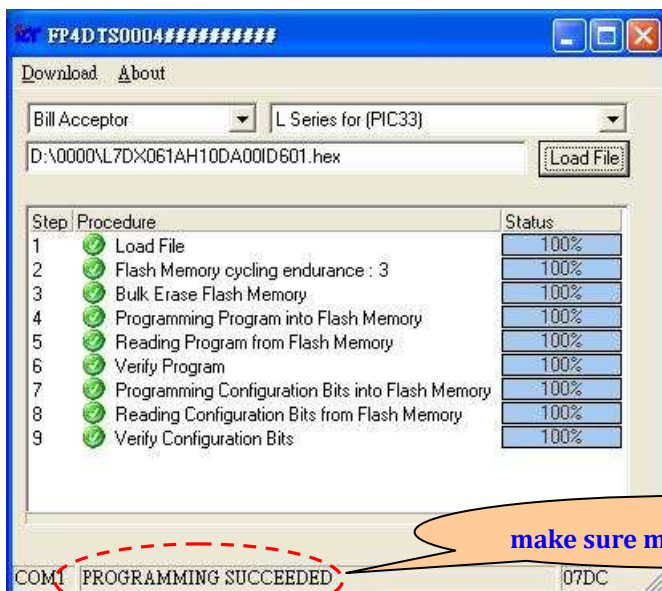


select "To Device" icon

Step 6. during downloading <FP-004 LED status ➡ **Purple** ON>

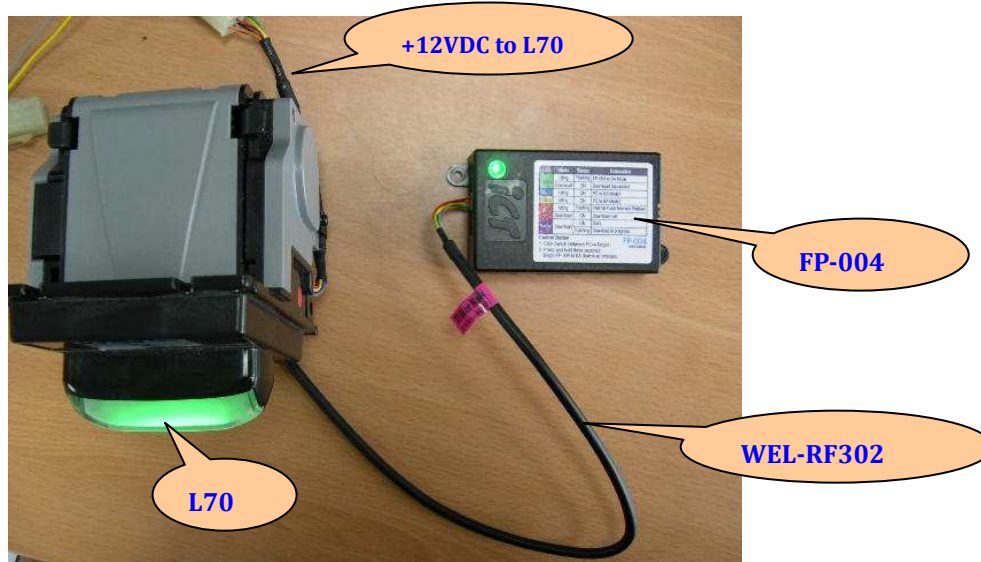


Step 7. download finished(successful) <FP-004 LED status ➡ **Green** Flashing >

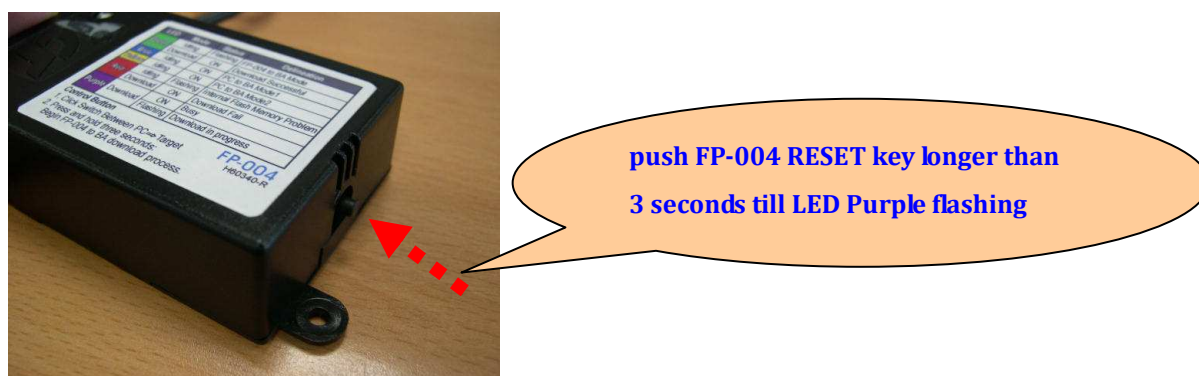


FP-004 ➡ Device

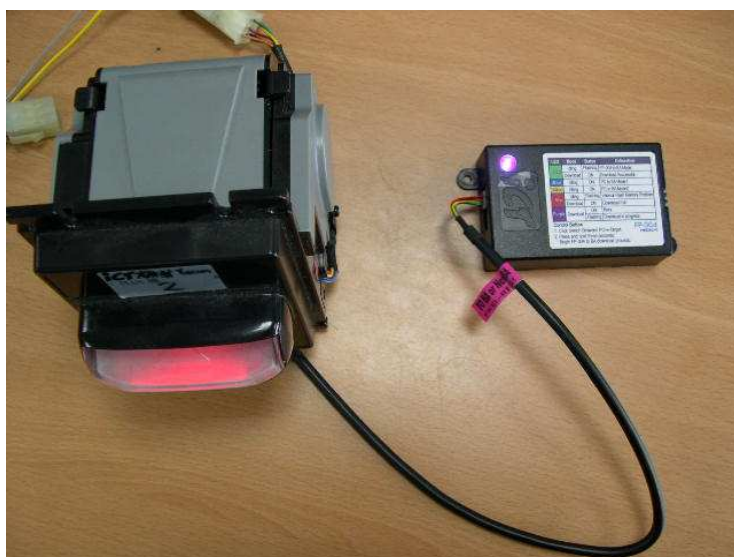
Step 1. Facility Setup



Step 2. start to download



Step 3. during downloading <FP-004 LED status ➡ Purple Flashing>



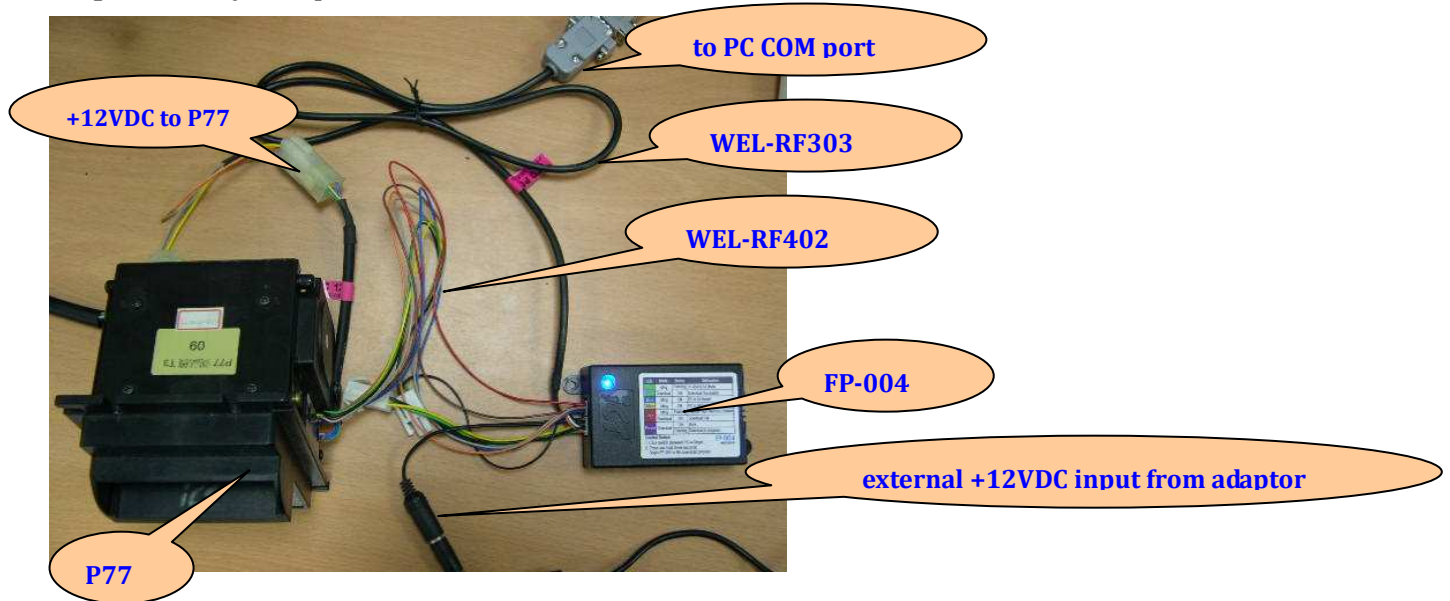
Step 4. download finished(successful) <FP-004 LED status ➡ Green Flashing >

Remark: You will hear the initialized sound from BA after successful downloading.

Part 3. RS232 Interface Data Communication(PC to Ba Mode1)

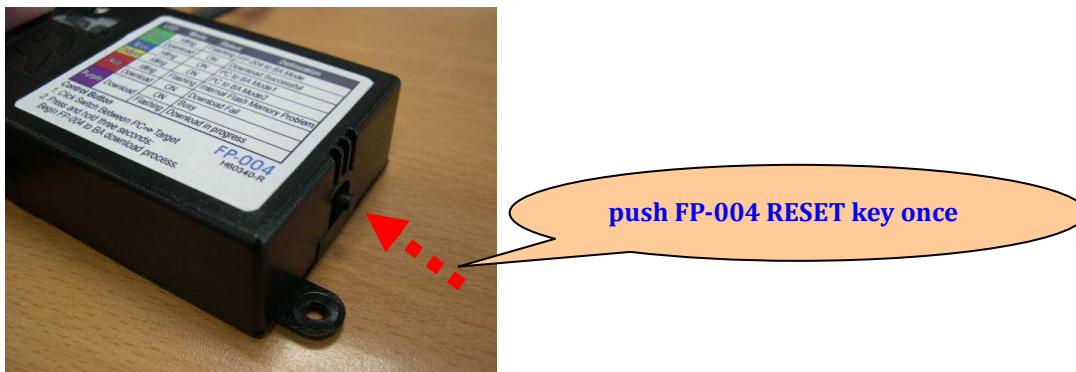
(use P77 as a demo kit)

Step 1. Facility Setup

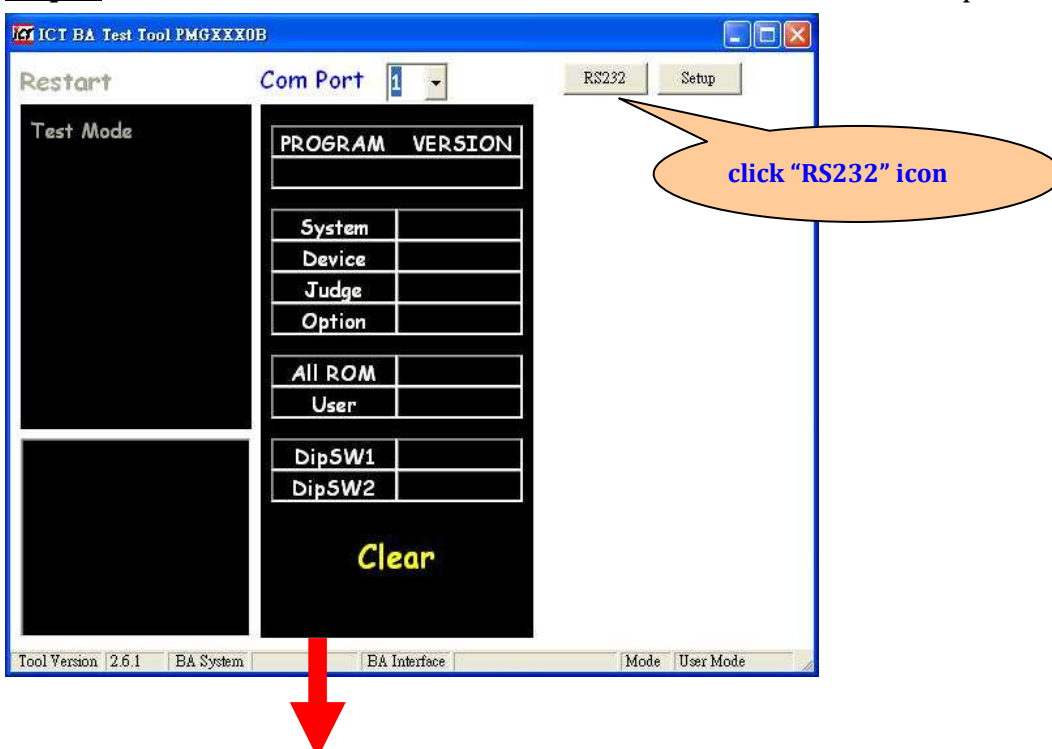


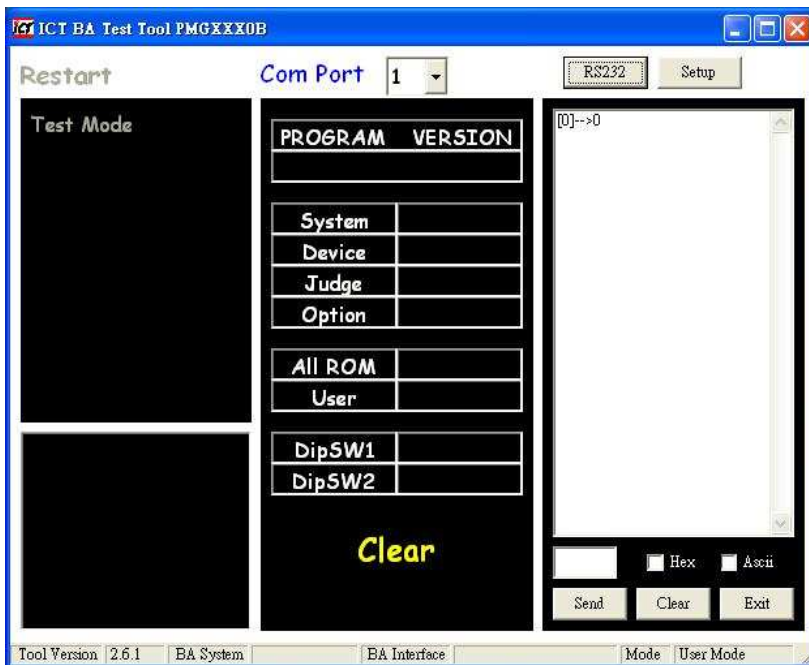
Step 2. Plug-in +12VDC adaptor to FP-004 <FP-004 LED status ➔ **Green** Flashing >

Step 3. Press FP-004 RESET key once <FP-004 LED status ➔ **Blue** ON >



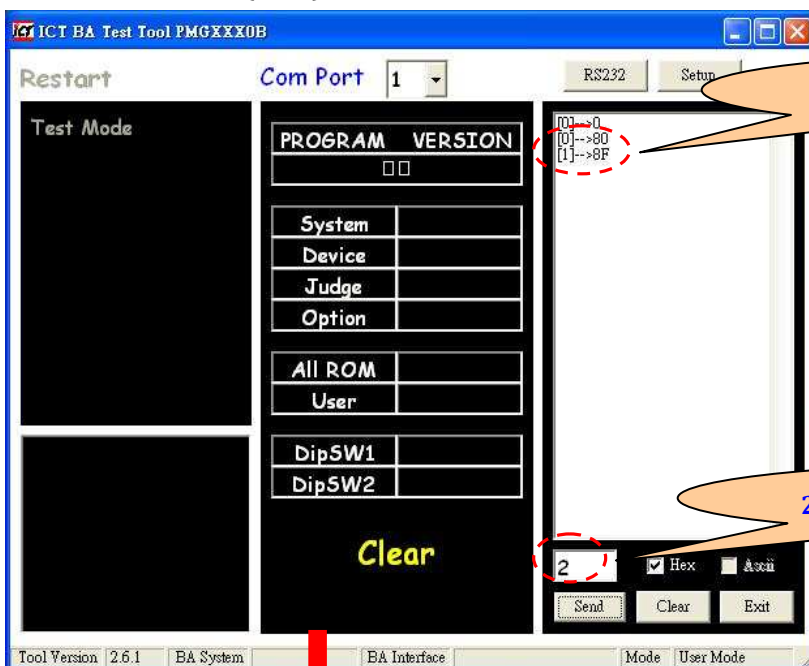
Step 4. execute "ICT BA Test Tool PMGXXX0B.exe" and follow below steps.





Step 5. set P77 DIP switch to RS232 interface and turn ON P77 power

Step 6. P77 will auto send the 80h & 8Fh(power supply ON code) to PC(VMC) and PC(VMC) should send 02h(ACK) to P77 within 2 seconds for active RS232 interface.



1. power supply ON code to VMC

2. VMC send ACK to P77 within 2 seconds



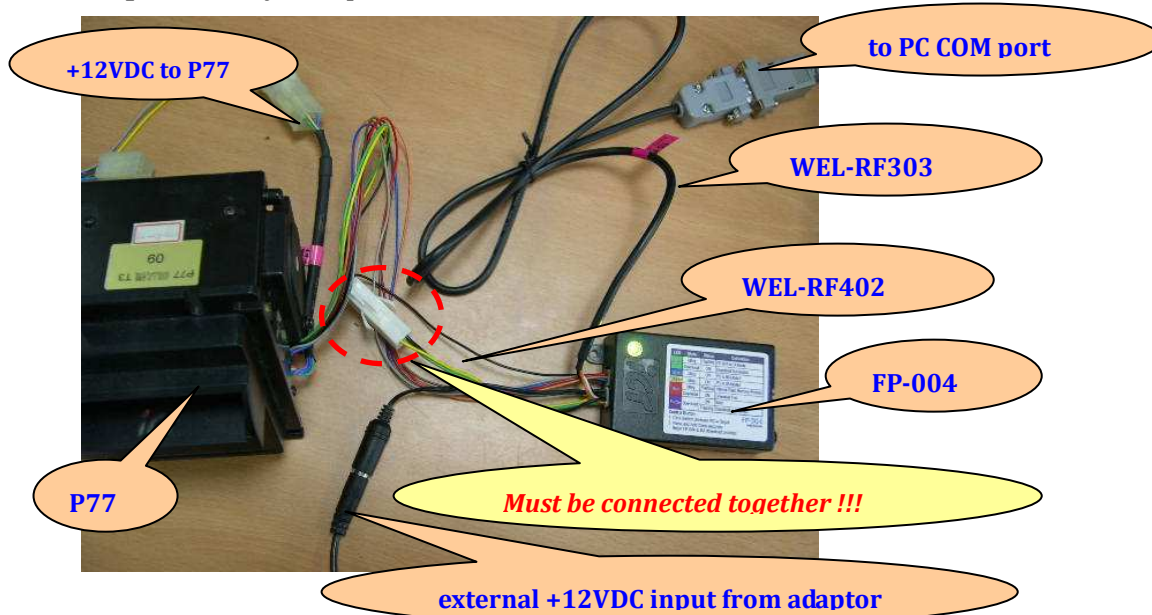
3. make sure P77 panel LED shows multi-color and it means RS232 active

Step 7. start P77 RS232 bill accepting test

Part 4. BA testing on ICT BA test tool (PC to Ba Mode2)

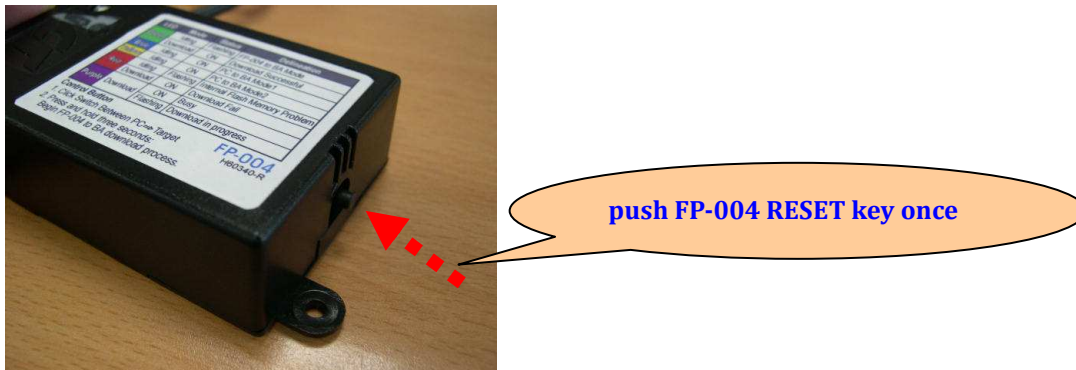
(use P77 as a demo kit)

Step 1. Facility Setup



Step 2. Plug-in +12VDC adaptor to FP-004 <FP-004 LED status ➡ **Green** Flashing >

Step 3. Press FP-004 RESET key twice <FP-004 LED status ➡ **Yellow** ON >

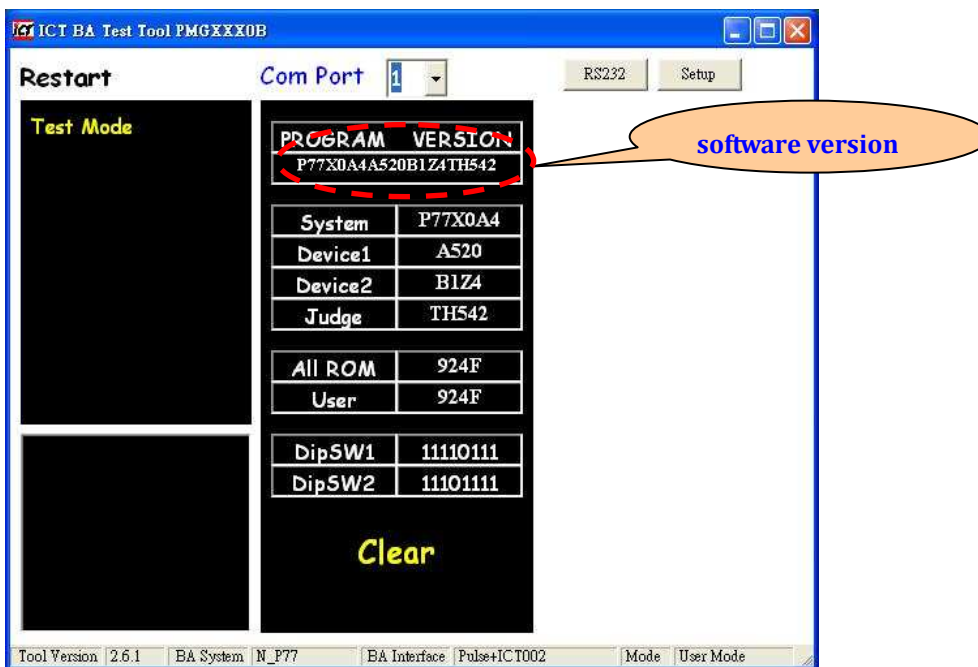


Step 4. execute "ICT BA Test Tool PMGXXX0B.exe" and follow below steps.

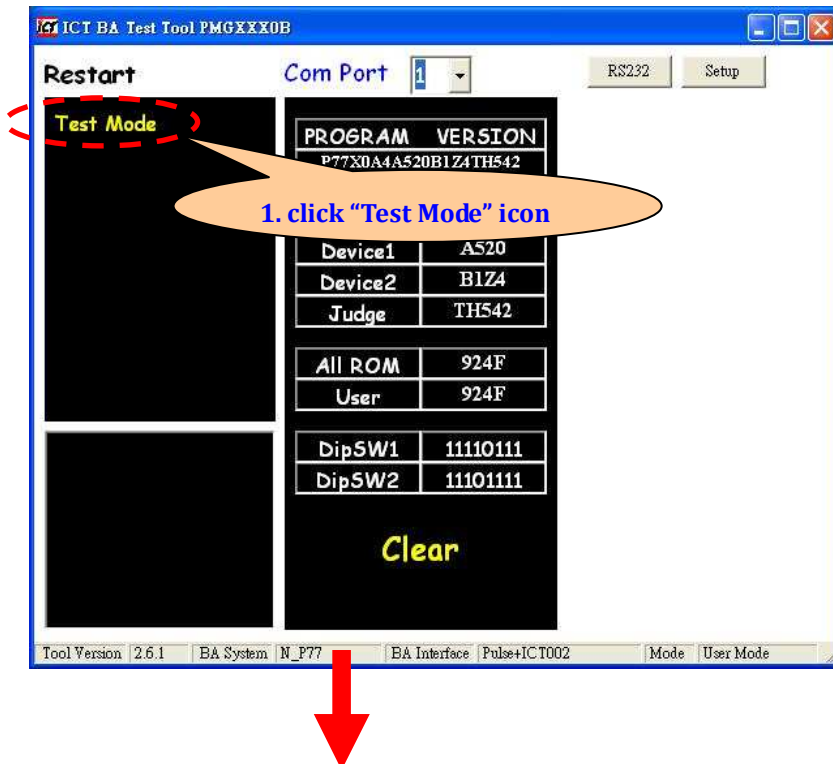


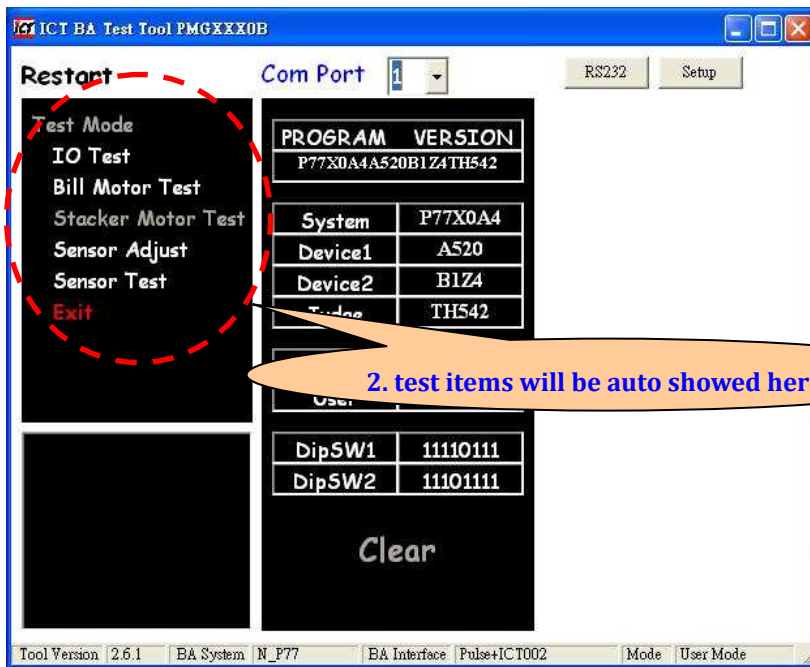
Step 5. turn ON P77 power

Step 6. the P77 software version will be auto showed on the tool



Step 7. click "Test Mode" icon to start testing





Step 8. start P77 performance testing