



# USB-87P1/2/4/8 Quick Start 1.02

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## Package Checklist

Items	Quantity	Model No.	Description
USB-87Pn	1	USB-87P1	Hardware module: USB-87Pn I/O Unit P1: 1 Slot          P2: 2 Slots P4: 4 Slots        P8: 8 Slots
		USB-87P2	
		USB-87P4	
		USB-87P8	
Cable	1	CA-USB18	USB connector cable
Manual	1	-	Quick Start Manual (this manual)
CD	1	-	Software utility, USB-87Pn User Manual
Screw Driver	1	-	2.4 mm Screw driver (minus style)

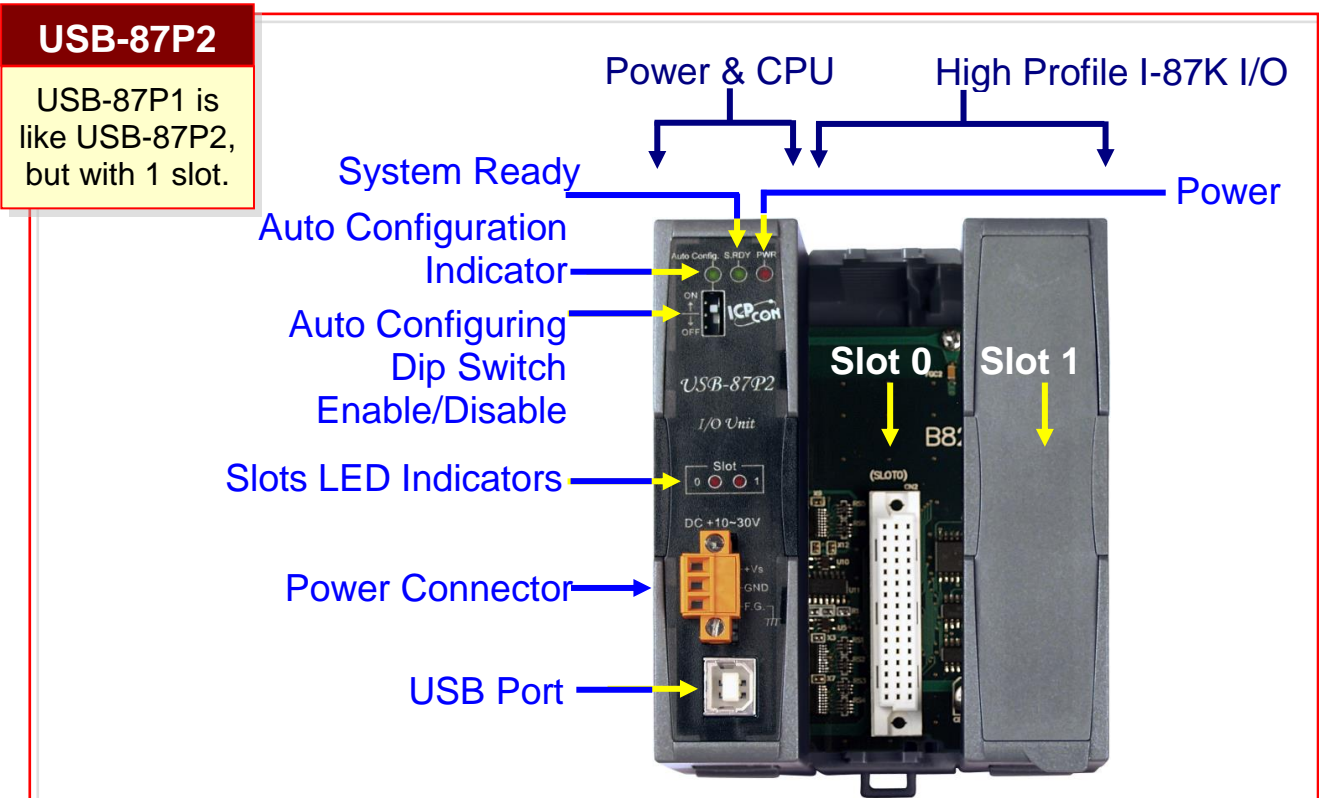
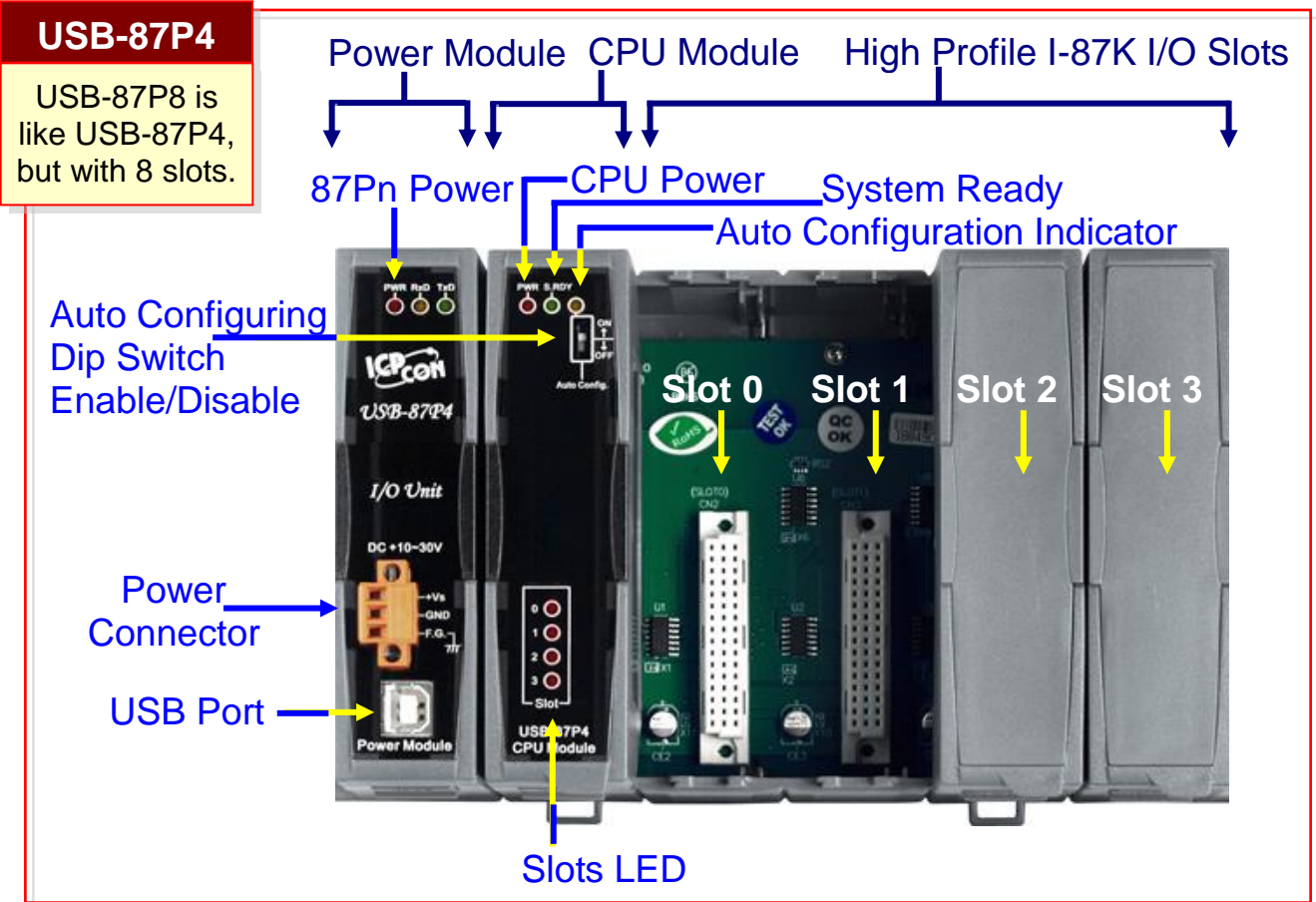
**NOTE:** USB-87Pn is **only for High Profile I-87K I/O** modules, please **DO NOT** use Low Profile I/O modules. For more information, please refer to Chapter 2.2.5 & Appendix B of “USB-87P1/2/4/8 User Manual”.

## Preparation

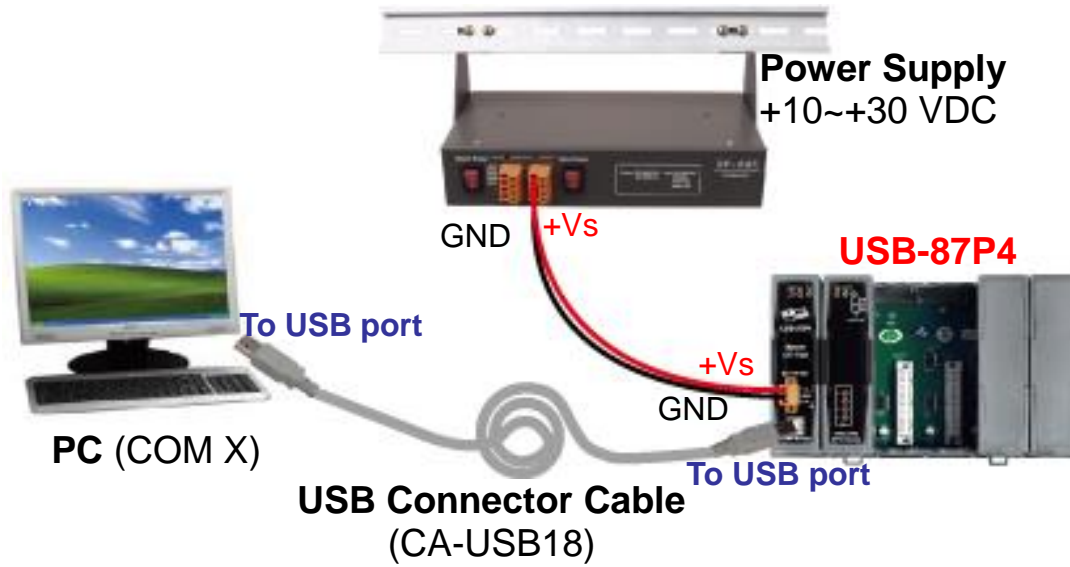
- Power Supply: +10V ~ +30V /DC (Ex: DP-665)  
[http://www.icpdas.com/products/Accessories/power\\_supply/power\\_list.htm](http://www.icpdas.com/products/Accessories/power_supply/power_list.htm)
- Install USB-87Pn DriverInstaller to PC:  
at CD:\NAPDOS\87pn\_io\_unit\USB-87Pn  
or [ftp://ftp.icpdas.com/pub/cd/8000cd/napdos/87pn\\_io\\_unit/USB-87Pn/](ftp://ftp.icpdas.com/pub/cd/8000cd/napdos/87pn_io_unit/USB-87Pn/)
- Install DCON Utility to PC:  
(Version 4.5.2 or above version. Please remove the old version before install the new version) at CD:\Napdos\Driver\DCON\_Utility  
or [ftp://ftp.icpdas.com/pub/cd/8000cd/napdos/driver/dcon\\_utility/](ftp://ftp.icpdas.com/pub/cd/8000cd/napdos/driver/dcon_utility/)

# ➔ Hardware Configuration

## 1. View of the USB-87Pn



## 2. Wire the 87Pn to Power and PC



## 3. Configure CPU Module

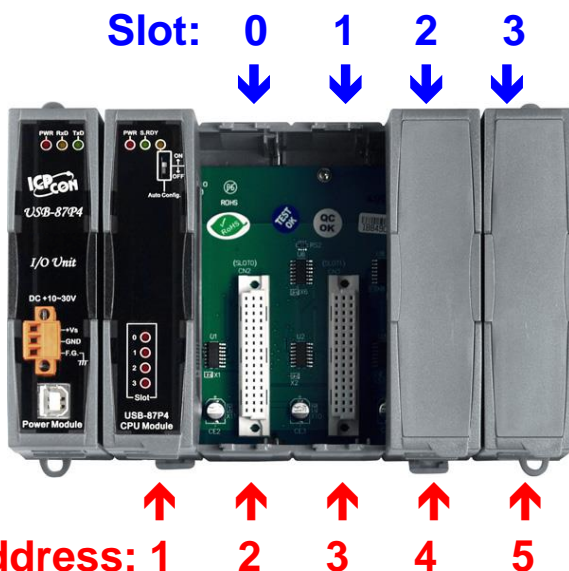
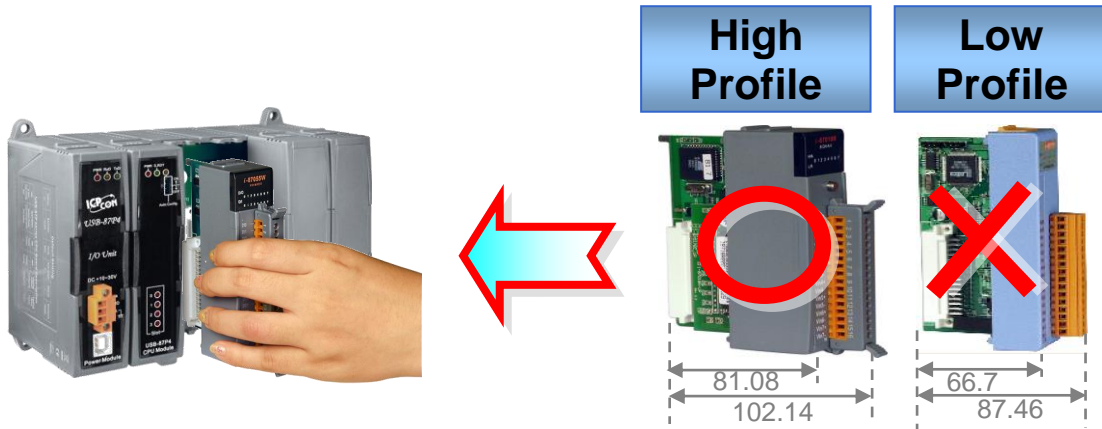


Switch	Label	Setting	Description
Dip Switch	Auto Config.	ON	Enable (Switch to ON)
		OFF	Disable

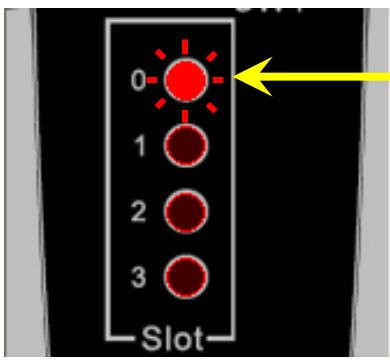
## 4. Plug in the High Profile I/O Modules

Example: Plug in I-87019R to Slot 0.

p.s. I-87019R is an AI (Analog Input) High Profile module



**I-87019R is auto-configured:**  
**Baud Rate: 115200**  
**Checksum: Disable**  
**Net Address: 2**  
**Note: The Net Address of USB-87PN is always 1.**

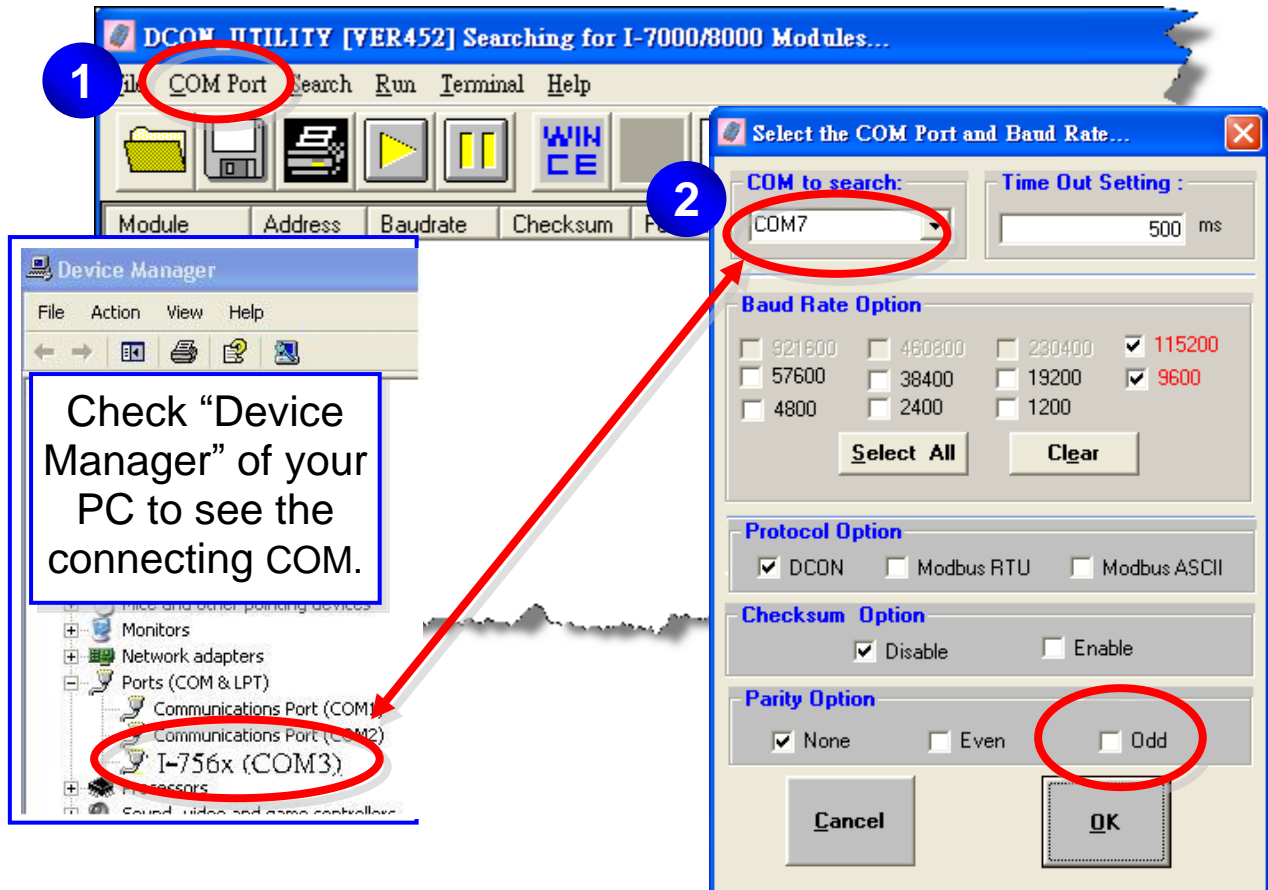


- After plugged in, the slot indicator is flashing per 100 ms.
- When software configuration is completed, the LED becomes off.
- If configuration is failed, the LED is always on.

# ➔ Software Configuration

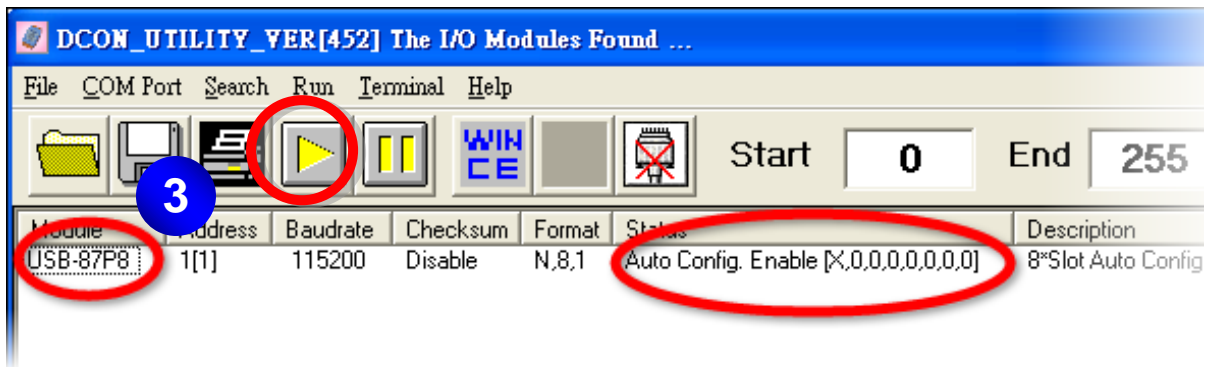
## 1. Run DCON Utility to Search the USB-87Pn (Ex: USB-87P8)

**Note:** Please finish the “Preparation” (See P.1) before Software Configuration.

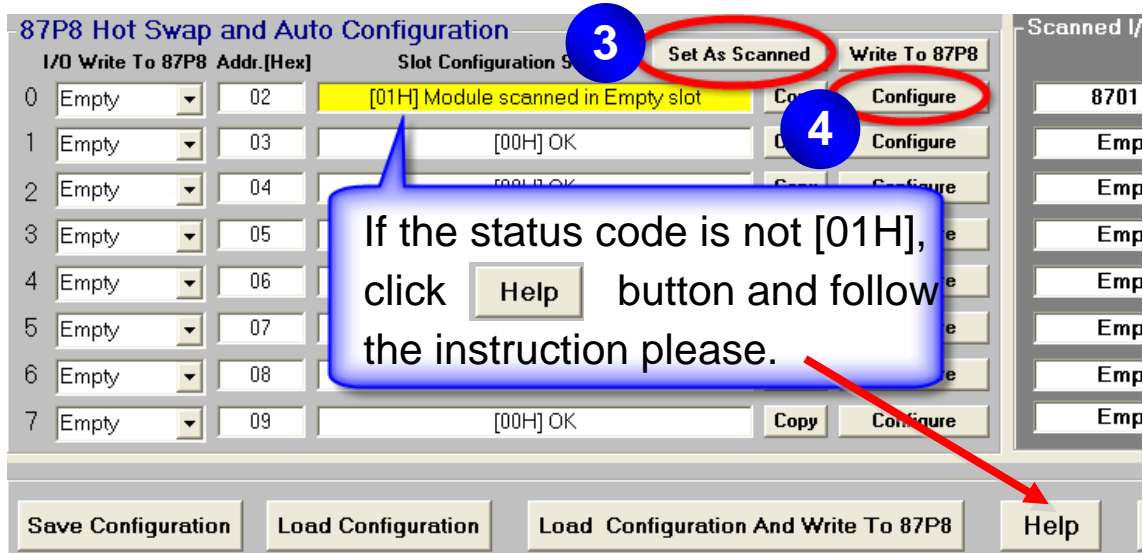
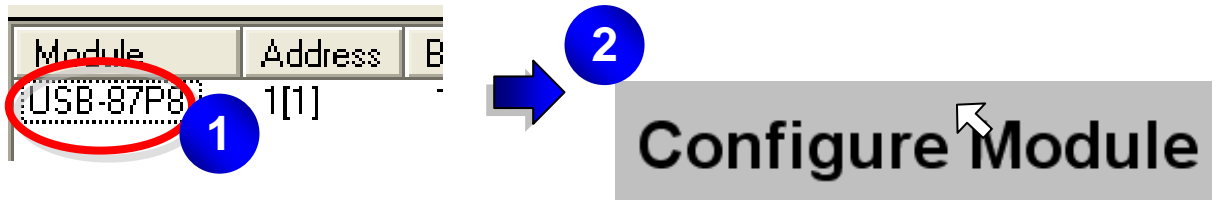


The old version of USB-87Pn with old USB chip, it needs to install old USB driver, and Device Manager will show as below:

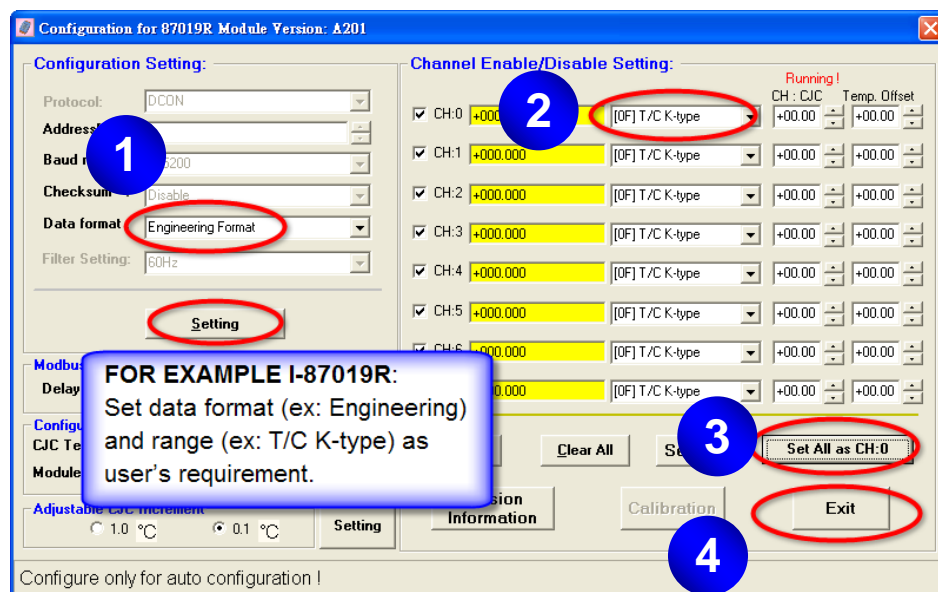




## 2. Click “USB-87Pn” to Setup Slots

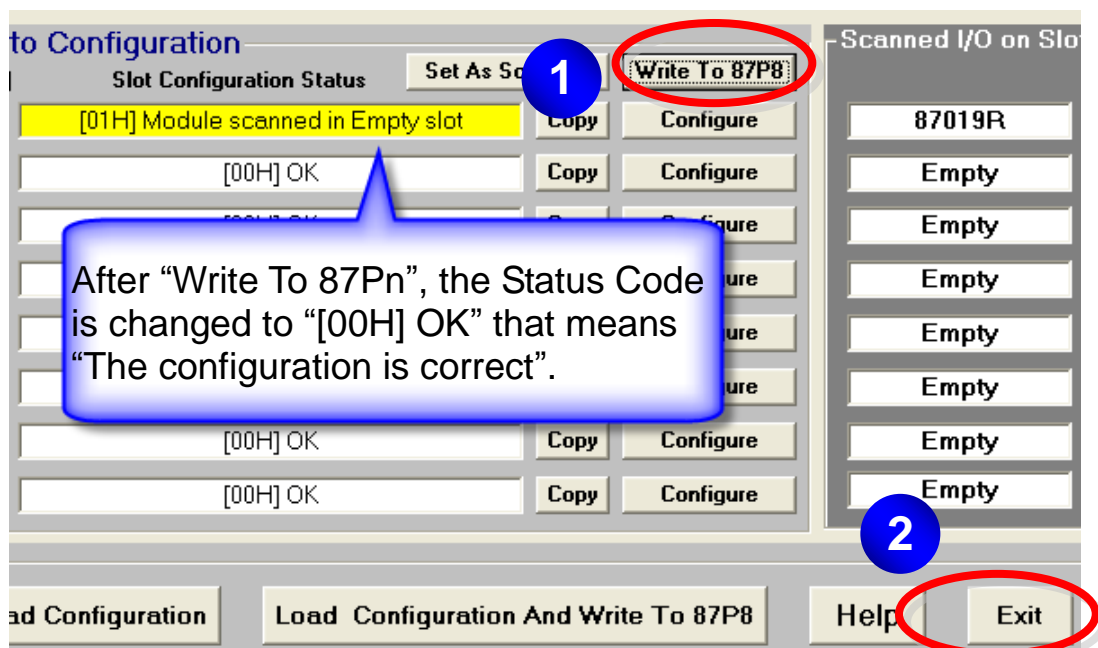


## 3. Configure the 87K I/O Module

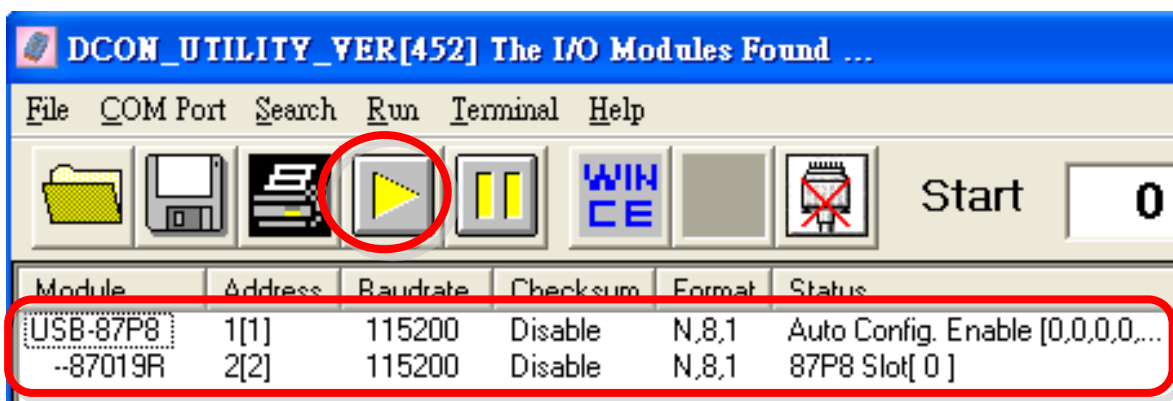




#### 4. Click “Write To 87Pn” Button



#### 5. Click “Start Search” Button



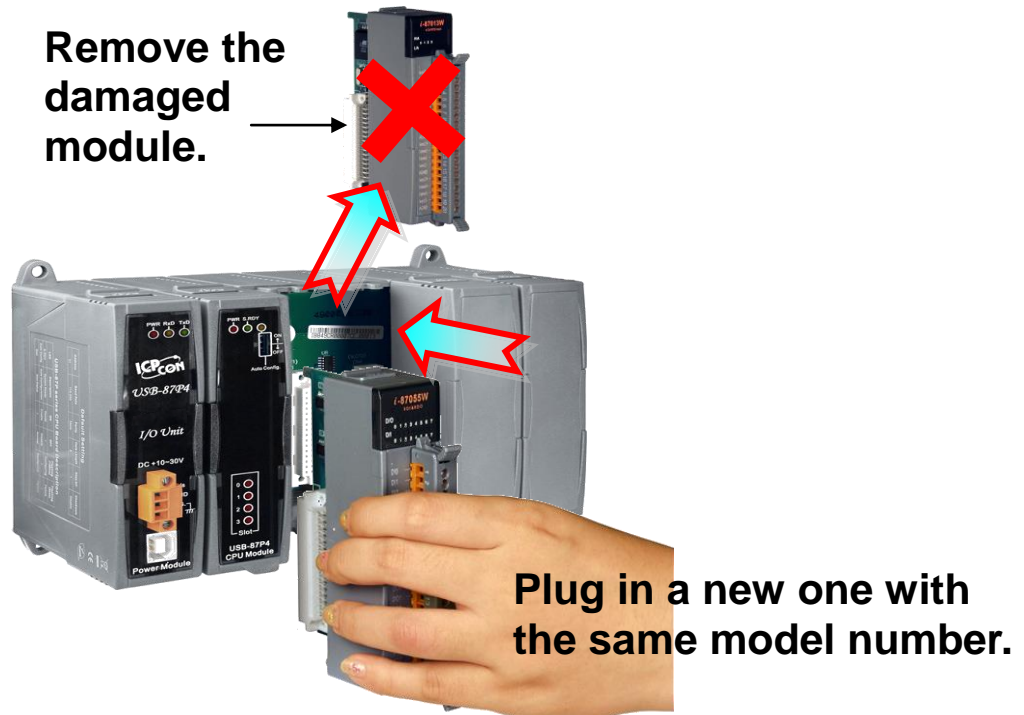
“[0,0,0,0...]” of “Status” means “The I/O configuration of each slot is correct”. Each plugged I/O module will be listed under the USB-87Pn. User can click the name of I/O module to watch its configuration.

#### Note:

For **changing** the configuration of 87K I/O module, please repeat from the **STEP 2** of the **Software Configuration**.

## Change the Hardware I/O Module

Doesn't need to configure I/O module again!



**Easy! Convenient!**

## Technical Support

- 1.** USB-87P1/2/4/8 User Manual  
CD:\NAPDOS\87Pn\_io\_unit\USB-87Pn or  
[ftp://ftp.icpdas.com/pub/cd/8000cd/napdos/87pn\\_io\\_unit/usb-87pn/](ftp://ftp.icpdas.com/pub/cd/8000cd/napdos/87pn_io_unit/usb-87pn/)
- 2.** DCON Utility User Manual  
CD:\Napdos\Driver\DCON\_Utility\Manual or  
[ftp://ftp.icpdas.com/pub/cd/8000cd/napdos/driver/dcon\\_utility/manual/](ftp://ftp.icpdas.com/pub/cd/8000cd/napdos/driver/dcon_utility/manual/)
- 3.** I-87K high profile series I/O modules selection guide  
[http://www.icpdas.com/products/PAC/i-8000/8000\\_IO\\_modules.htm](http://www.icpdas.com/products/PAC/i-8000/8000_IO_modules.htm)
- 4.** Our service email account : [service@icpdas.com](mailto:service@icpdas.com)
- 5.** Our website : [www.icpdas.com](http://www.icpdas.com)