➡ Package Checklist

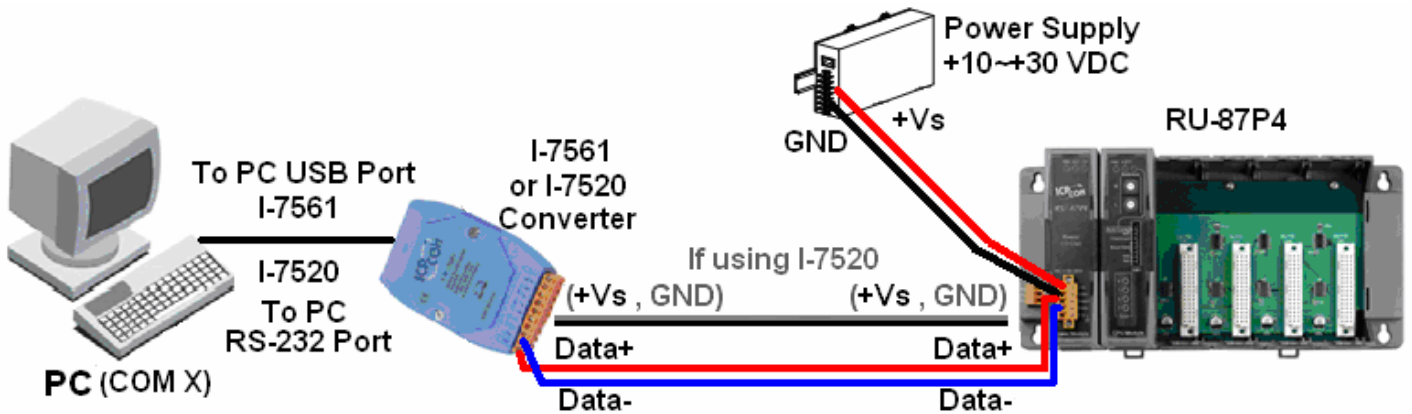| Items	Quantity	Model No.	Description
RU-87Pn	1	RU-87P1	Hardware module:
		RU-87P2	RS-485 Remote I/O Unit
		RU-87P4	P1: 1 slot P2: 2 slots
		RU-87P8	P4: 4 slots P8: 8 slots
Manual	1	-	Quick Start Manual (this manual)
CD	1	-	Software utility, RU-87Pn user manual
Screw Driver	1	-	2.4 mm Screw driver (minus style)

➡ Preparation

- Power Supply: +10V ~ +30V /DC (Ex: DP-665)
  http://www.icpdas.com/products/Accessories/power_supply/power_list.htm

- Converter: RS-232 To RS-485 (Ex: i-7520) or USB to RS-485 (Ex: i-7561)
  CD:\ Napdos\7000\Manual\7520.pdf   or
  http://www.icpdas.com/products/Industrial/communication_module/communication_list.htm

- Install the DCON Utility to PC (Version 4.5.0 or above version)
  CD:\ Napdos\Driver\DCON_Utility   or
  ftp://ftp.icpdas.com/pub/cd/8000cd/napdos/driver/dcon_utility/

# ⭕ Hardware Configuration

1. View of the RU-87Pn

Power Module   CPU Module   i-87K I/O Slots

87Pn power   CPU power

System ready

Auto Configuration Enable/Disable

Address
Rotary Switch

Slot 0   Slot 1   Slot 2   Slot 3

Configuring
Dip Switch

Frame Ground

Power connector   Slots LED indicators
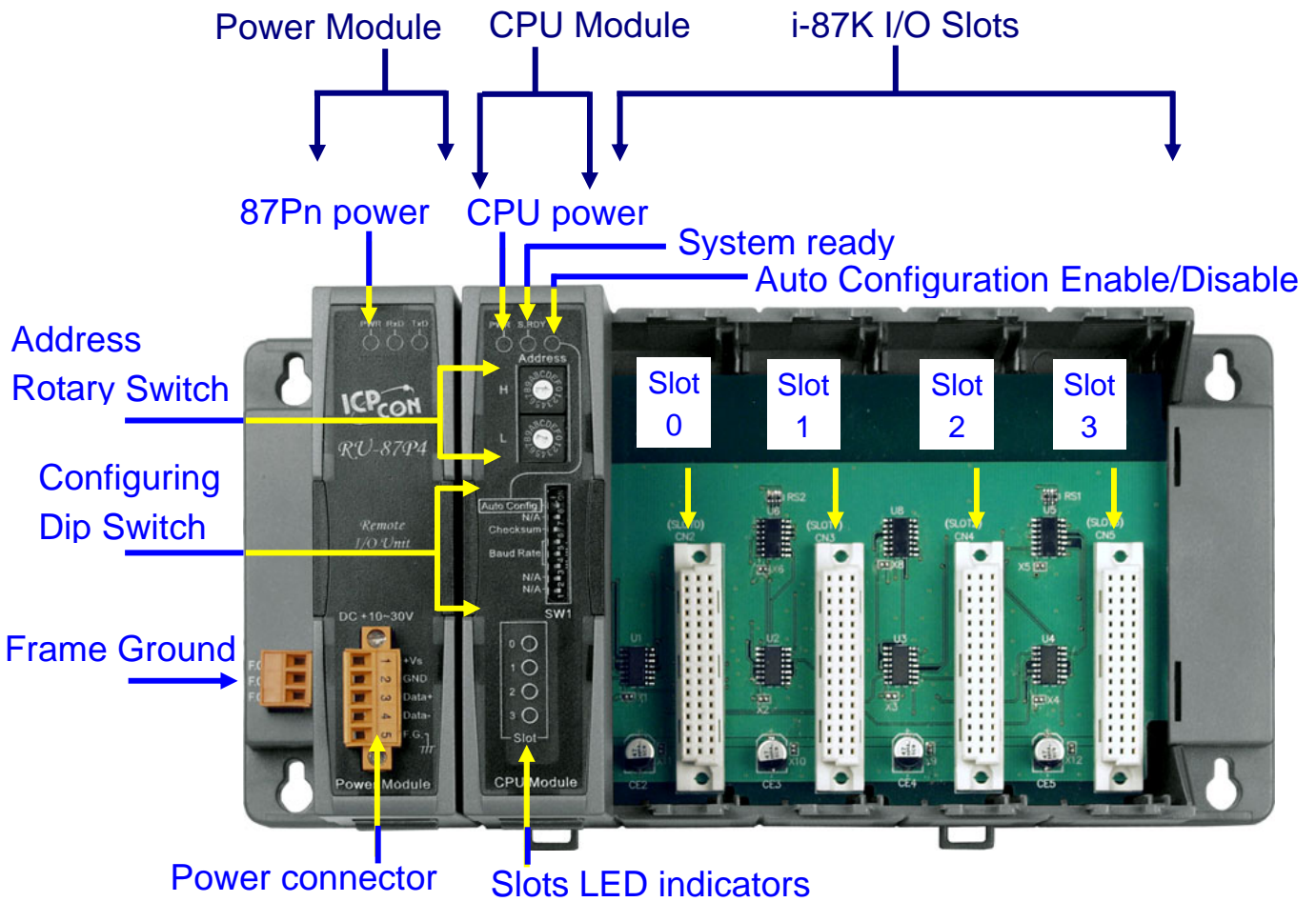
2. Wire the 87Pn to power and PC

Note: If using I-7520, please supply power to I-7520.
(E.g. connect the I-7520 to RU-87Pn as figure).

3. Configure CPU module as following table.

Switch	Label	Setting	Description
Rotary Switch (Address)	H	0	Net address = 1 H: High Byte L: Low Byte
	L	1	
Dip Switch (SW1)	Auto Config.	ON	Enable
	Checksum	OFF	Disable
	Baud Rate	ON, ON, ON	115200

Note: The ON of Dip Switch for 87P1 & 87P2 are switching to the left, for 87P4 & 87P8 are to the right. (P1/P2: ON←) (P4/P8: ON→)

RU-87P1 / RU-87P2   RU-87P4 / RU-87P8
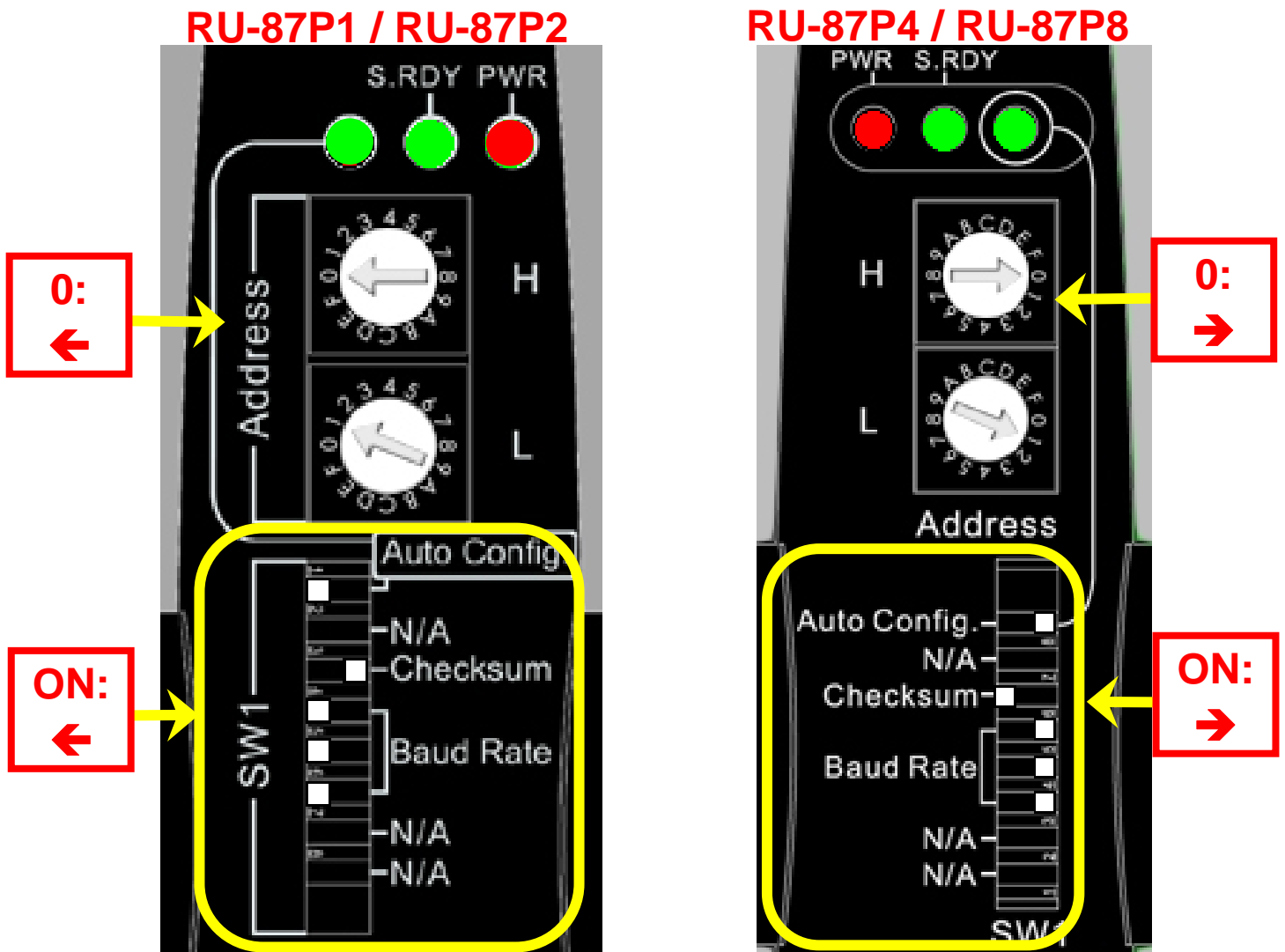
Use Rotary Switch and Dip Switch to configure the parameters for 87Pn CPU module.
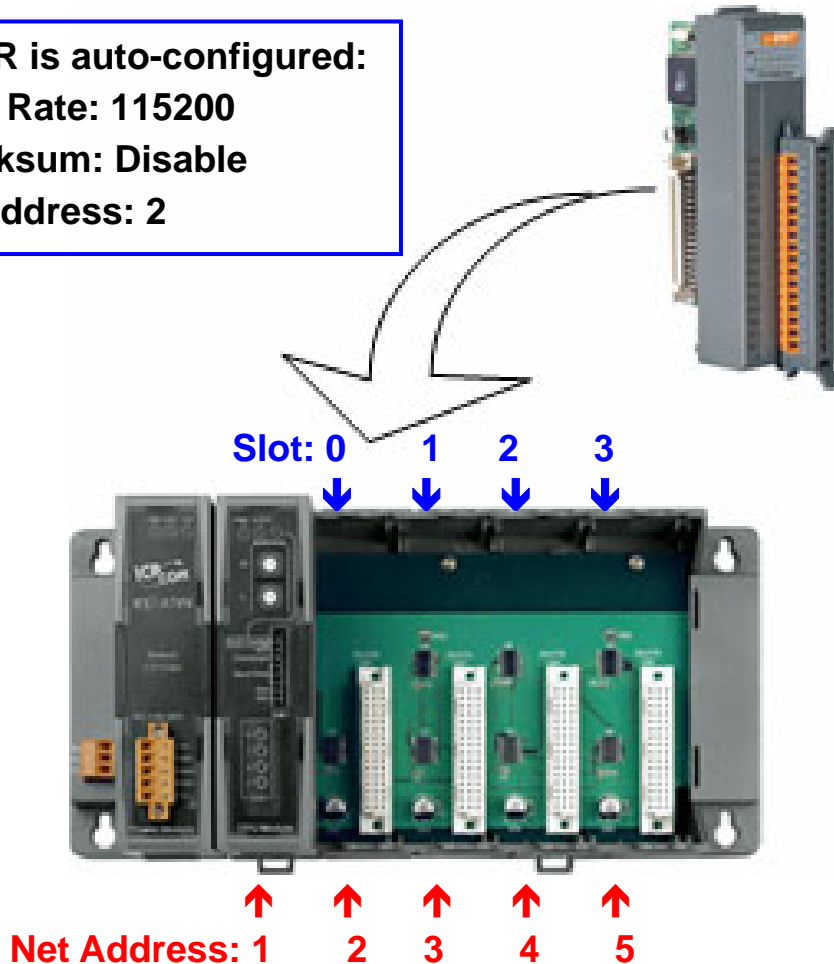
4. Plug in the I/O modules

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

Slot: 0   1   2   3

Net Address: 1   2   3   4   5
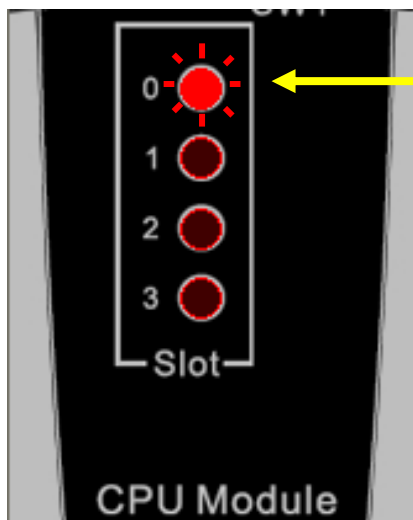
■ After plugged in, the slot indicator is flashing per 100 ms.

■ When 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 RU-87Pn

You can check your PC's "Device Manager" to know which COM is connecting.
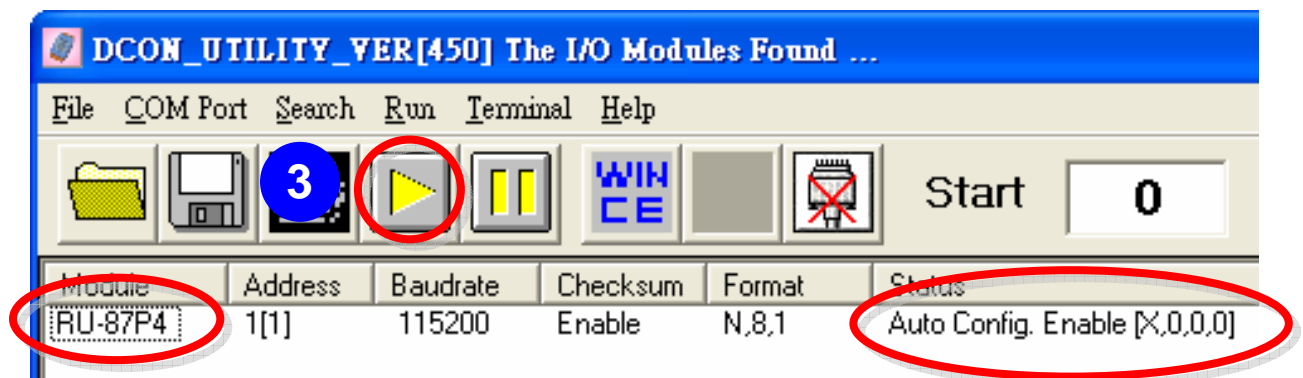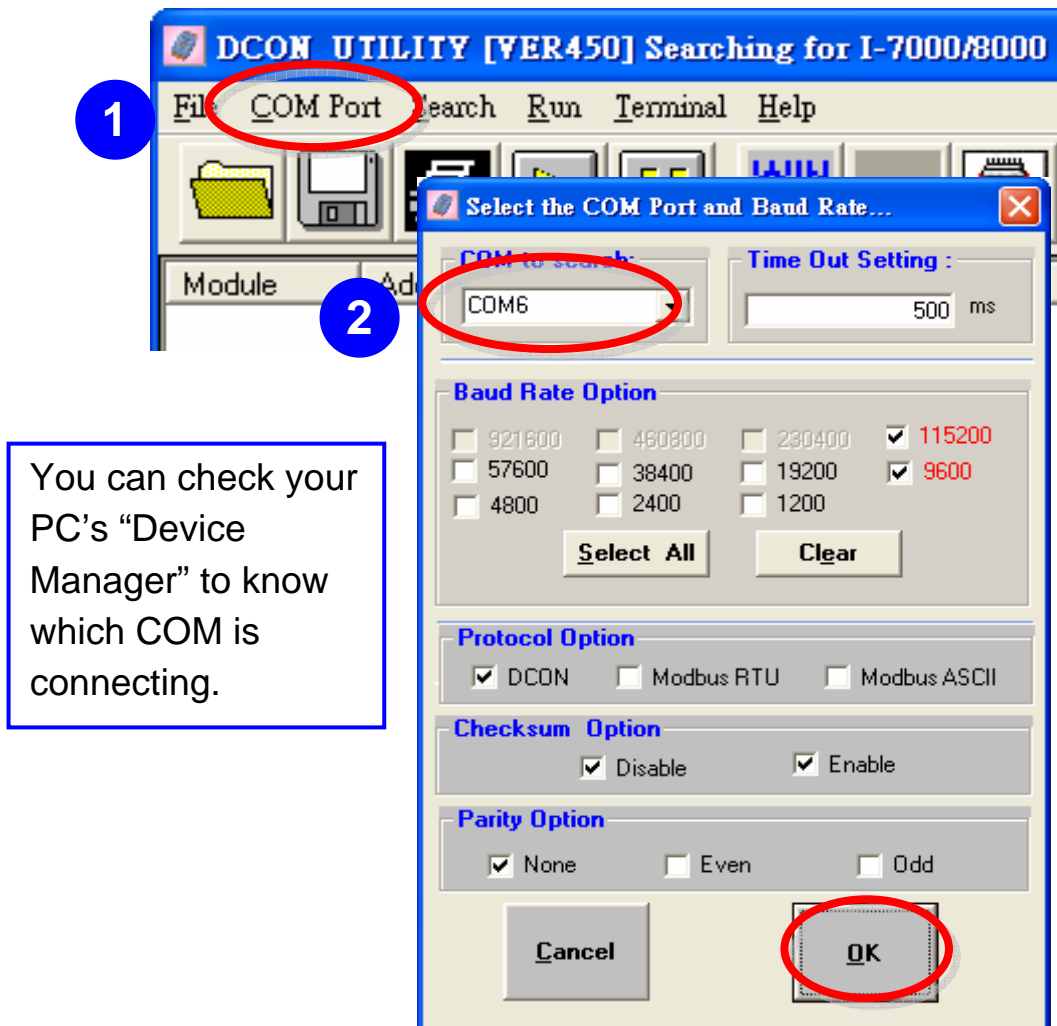
When found RU-87Pn, click ⏸ to stop search.

"[X,0,0,0]" of "Status" means "The configuration of that slot is not completed or corrected.

2. Click "RU-87Pn" to setup slots

3. Configure the 87K I/O module

4. Click "Write To 87Pn" button
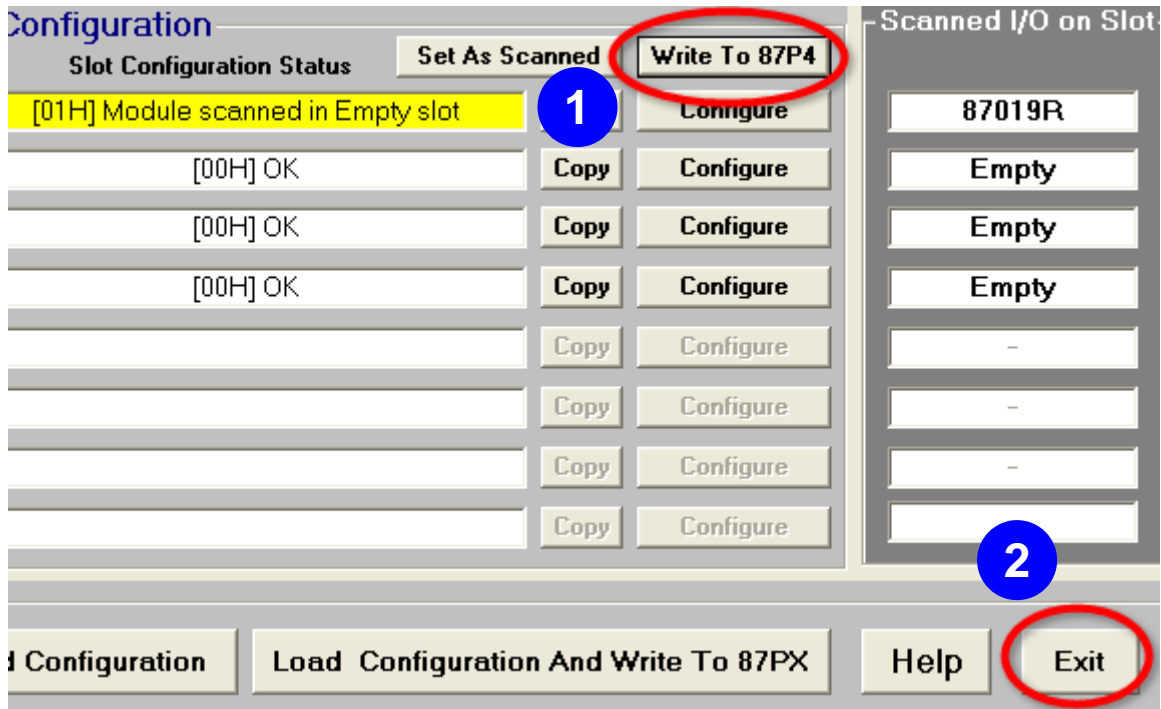
5. Click "Start Search" button
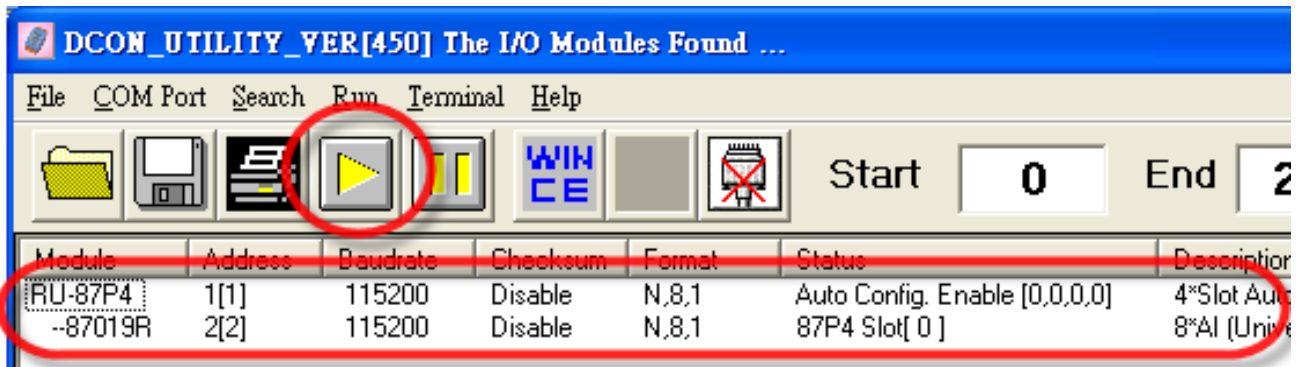
Now the configuration is done!

"[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 RU-87Pn. User can click the name of I/O module to <u>see</u> its configuration.
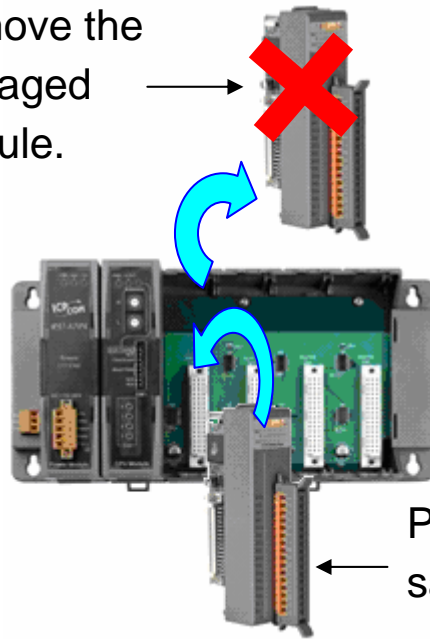
Note:

1. **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

User doesn't need to configure I/O module again!

Remove the
damaged
module. →

Plug in a new one with the
same model number.

Easy! Convenient!

➲ Technical Support

1. RU-87P1/2/4/8 User Manual
CD:\NAPDOS\87Pn_io_unit\RU-87Pn   or
ftp://ftp.icpdas.com/pub/cd/8000cd/napdos/87pn_io_unit/ru-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/

3. I-87K high profile series I/O modules selection guide
http://www.icpdas.com/products/PAC/i-8000/8000_IO_modules.htm

4. Our service email account : service@icpdas.com

5. Our website : www.icpdas.com