

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

Packing List

In addition to this guide, the package includes the following items: (The USB cable is included with USB-87P2/ USB-87P4/ USB-87P4 only.)









<u>USB-87Pn</u>

- USB Cable (1.8M)
- Software CD

Screw Driver

Technical Support

service@icpdas.com www.icpdas.com

For Desktop Web

Resources

How to search for drivers, manuals and spec information on ICP DAS website.

• For Mobile Web



Hardware Configuration

NOTE: USB-87Pn is **only for High Profile I-87K I/O modules**, please **DO NOT** use Low Profile I/O modules.

- Power Supply +10 ~ +30 VDC GND +Vs +Vs GND +Vs FC (COM X) USB Connector Cable (CA-USB18)
- **1.** Wire the I-87Pn unit to power and PC.

2. Make sure that the Auto Config switch is in the ON position.



3. Plug in the High Profile I/O modules and power on the I-87Pn unit.

Example: Plug in I-87018R to Slot 0.

(I-87018R is a High Profile analog input module.)





I-87018R is auto-configured: Baud Rate: 115200 Checksum: Disable Net Address: 2

Note: The Net Address of USB-87PN is always 1.



- After a module is plugged in, the slot indicator flashes once per 2 seconds.
- When software configuration is completed, the LED becomes off.
 - If configuration is failed, the LED is always on.

Software Configuration

- Install the USB-87Pn driver https://www.icpdas.com/en/download/show.php?num=2974
- 2. Download the DCON Utility Pro and decompress the file <u>https://www.icpdas.com/en/download/show.php?num=1046</u>
- **3.** Run **DCON_Utility_Pro.exe** to search the USB-87Pn (e.g. USB-87P4)



- Check the COM port number created for the USB-87Pn unit in Device Manager under Ports (COM & LPT) section.
- Select the COM port on the "Configuration Search Options" dialog box, make sure that 115200 bps is checked on Baud Rate tab and click the Start Search button.

4. Click on the name of the searched module.



 Make sure that the module name (e.g. I-87018R) is displayed in the text box for Addr 02 (slot 0) in the Scanned I/O field, and click the Set As Scanned button.

USB-87P4Firmware[A401]		_					×
	Auto Configuration	Configure Data	a Error Code References C	commands Log			
	Configured I/O	Addr.[Hex]	Slot Configuration Status	Set As Scanned	Write To 87PN	Scanned I/O	
ON ↑	Empty ~	02	[01] Module scanned in	Empty slot	Configure	87018R	
OFF	Empty ~	03	[00] OK		Configure	Empty	×
Auto Config.	Empty ~	04	[00] OK		Configure	Empty	
	Empty ~	05	[00] OK		Configure	Empty	

6. Click the **Configure** button for Addr 02 (slot 0).

USB-87P4Firmware[A401]							×
	Auto Configuration	Configure Da	ta Error Code References	Commands Log			
	Configured I/O	Addr.[Hex]	Slot Configuration Status	Set As Scanned	Write To 87PN	Scanned I/O	
ON	87018R ~	02	[01] Module scanned in	n Empty slot	Configure	87018R	
	Empty ~	03	[00] OK		Configure	Empty	
Auto Config.	Empty ~	04	[00] OK		Configure	Empty	
	Empty ~	05	[00] OK		Configure	Empty	

7. Configure the module and then click the **Exit** button.

1	87018R [Offli	ne Configuration]		\times
	Configuration	AI Commands Log	Summary	
	[05] +/- 2.5	V		
		Al Value	CJC Offset	
	CH:00	+00.0000	0.00 + -	
	✓ CH:01	+00.0000	0.00 + -	
	CH:02	+00.0000	0.00 + -	
	CH:03	+00.0000	0.00 + -	
	✓ CH:04	+00.0000	0.00 + -	
	✓ CH:05	+00.0000	0.00 + -	
	✓ CH:06	+00.0000	0.00 + -	
	CH:07	+00.0000	0.00 + -	
	✓ Enable/Dis	Module CJC	00.00 + _ Temperatur	
	Exit	M.		

8. Click the **Write to 87Pn** button and click the **Yes** button in the pop-up box.

USB-87P4Firmware[A401]						×
	Auto Configuration	Configure Da	ata Error Code References C	commands Log		
	Configured I/O	Addr.[Hex]	Slot Configuration Status	Set As Scanned	Write To 87PN	canned I/O
	87018R ~	02	[01] Module scanned in	Empty slot	Configure	87018R
	Empty ~	03	[00] OK	[Configure	Empty
Auto Config.	Empty ~	04	[00] OK	[Configure	Empty
	Empty ~	05	[00] OK	[Configure	Empty

9. Click the Start Search icon to search module again.



10. Click the I/O module name to view real-time data on the module.

DCON Utility Pro V 4.2.0.5	5					
₹ ► II		смр				FAQ
⊡ COM5:*	:DCON USE -87	Address 3-87P4 1[01h] 018R 2[02h]	Baud Rate 115200 115200	Checksum Disabled Disabled	Format N,8,1 N,8,1	Status Auto Config. En 87PN Slot 0
18 87018R Firm	ware[B206]				×	
Configuration	Al Commands L	og Summary				
[05] +/- 2.5	v					
CH:00	Al Value +01.7262	CJC Offset				
☑ CH:01	-00.0005	0.00 + -				
✓ CH:02	+01.7261	0.00 + -				
✓ CH:03	+01.7265	0.00 + -				
✓ CH:04	+01.7264	0.00 + -				
✓ CH:05	+01.7265	0.00 + -				
✓ CH:06	+01.7266	0.00 + -				
CH:07	+01.7267	0.00 + -				
Enable/Di	sable Module CJ	C 00.00 +	Temperatur			
Exit						
					:	

Quick replacement of damaged modules

In the case of replacing a damaged module, you only need to replace the module with a new one. It is needless to repeat the configurations any more.

