

# Quick Start Guide for I-8431/I-8831/I-8431-80/I-8831-80

January 2011, Version 1.1

## Congratulations!

Congratulations on purchasing 8000 series PAC, I-8431/I-8831/I-8431-80/I-8831-80 - the most popular automation solution for remote monitoring and control application. This Quick Start Guide will provide information needed to get started. Please also consult the User Manual for detailed information on the setup and use of I-8431/I-8831/I-8431-80/I-8831-80.

## What's In the Box?

In addition to this guide, the package includes the following items:



**8000 series PAC**  
**I-8431/I-8831/I-8431-80/I-8831-80**



**Software Utility CD**



**RS-232 Cable**  
**(CA-0915)**



**Screw Driver**  
**(1C016)**

## Technical Support

- **I-8431/I-8831/I-8431-80/I-8831-80 User Manual**

CD:\NAPDOS\8000\843x883x\Document\

<http://ftp.icpdas.com/pub/cd/8000cd/napdos/8000/843x883x/document/>

- **I-8431/I-8831/I-8431-80/I-8831-80 Website**

I-8431/I-8831:

<http://www.icpdas.com/products/PAC/i-8000/i-8431-i-8831.htm>

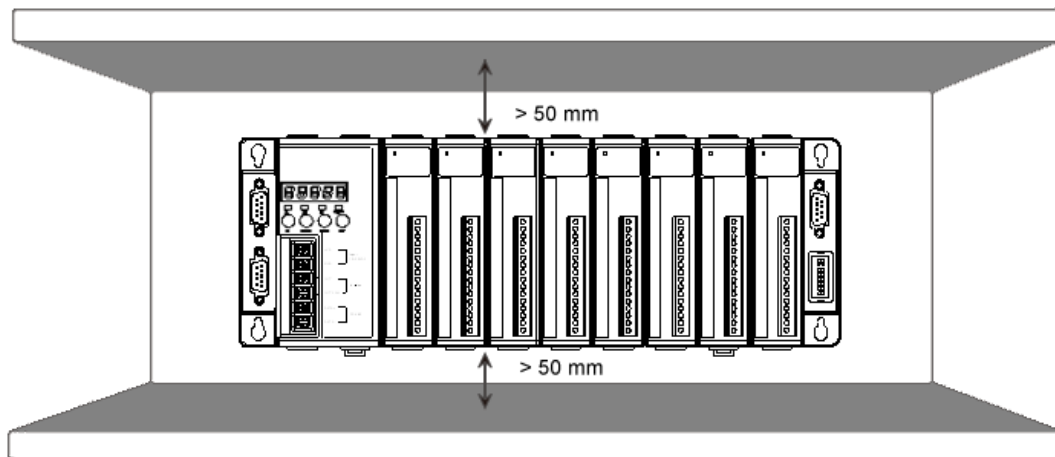
I-8431-80/I-8831-80:

<http://www.icpdas.com/products/PAC/i-8000/i-8431-80-i-8831-80.htm>

# 1

## Mounting the I-8431/I-8831/I-8431-80/I-8831-80

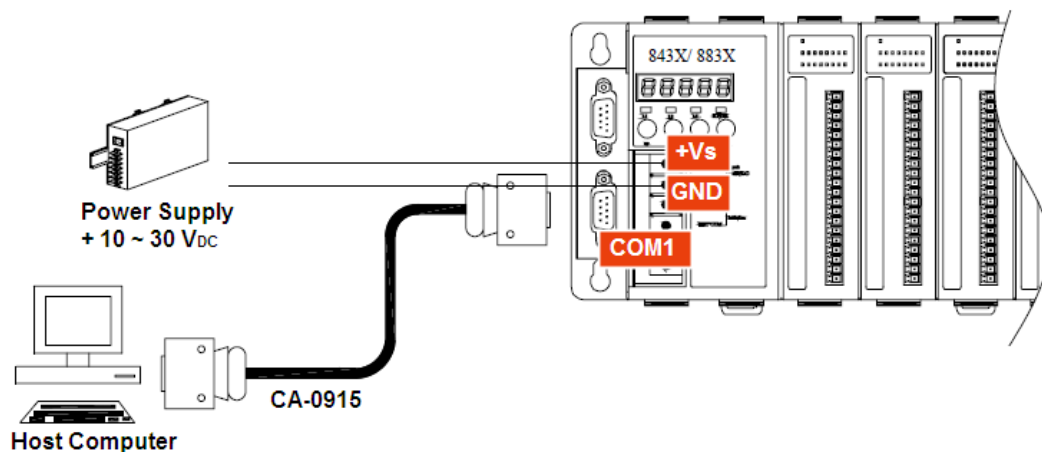
The PAC installation must provide proper ventilation, spacing, and grounding to ensure the equipment will operate as specified. A minimum clearance of 50mm between the PAC and the top and bottom side of the enclosure panels must be provided.



# 2

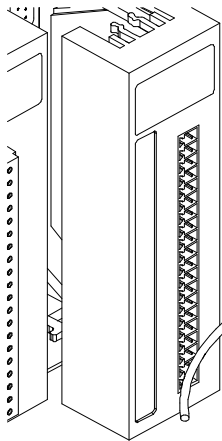
## Connecting to PC and Wiring to Power Supply

The PAC has a power input to receive input power from a power source, and a RS-232 interface to connect to PC.



- i. Connect the positive of the power supply to the PAC terminal labeled (+Vs) and connect the negative of the power supply to the PAC terminal labeled (GND).
- ii. Connect the serial port of the PC to the COM1 of the PAC using the CA-0915 that came with the package.

## 3 Inserting and Wiring I/O Modules



There are various types of I/O expansion modules for interfacing many different field devices to the PAC system.

For more information about I/O expansion module, please refer to [http://www.icpdas.com/products/PAC/i-8000/8000\\_IO\\_modules.htm](http://www.icpdas.com/products/PAC/i-8000/8000_IO_modules.htm)

These modules have their own manuals, so if you are using them you should supplement this manual with the manual specifically designed for the special module.

## 4 Installing the DCON Utility

DCON Utility is an easy-to-use tool designed for communicating with DCON protocol I/O modules.

### Step 1: Get the DCON Utility



DCON\_Uti...

The DCON Utility can be obtained from companion CD or our FTP site:

CD:\Napdos\8000\NAPDOS\Driver\DCON\_Utility\setup\

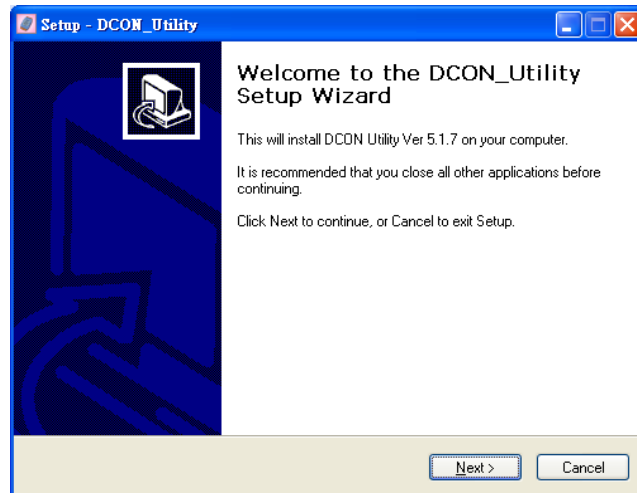
[http://ftp.icpdas.com/pub/cd/8000cd/napdos/driver/dcon\\_utility/](http://ftp.icpdas.com/pub/cd/8000cd/napdos/driver/dcon_utility/)

## Step 2: Follow the prompts to complete the installation



dcon\_utility...

After the installation has been completed, there will be a new short-cut for DCON Utility on the desktop.



# 5 Using DCON Utility to Set the I/O Modules

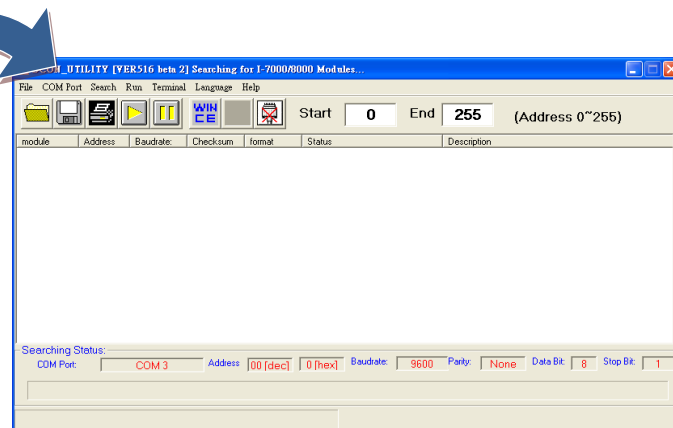
To set the I/O modules, a communication must be made with the PAC via DCON Protocol. The DCON Utility is the DCON Protocol Utility that can be used to make the communication between the PAC and PC.

## Step 1: Run the DCON Utility



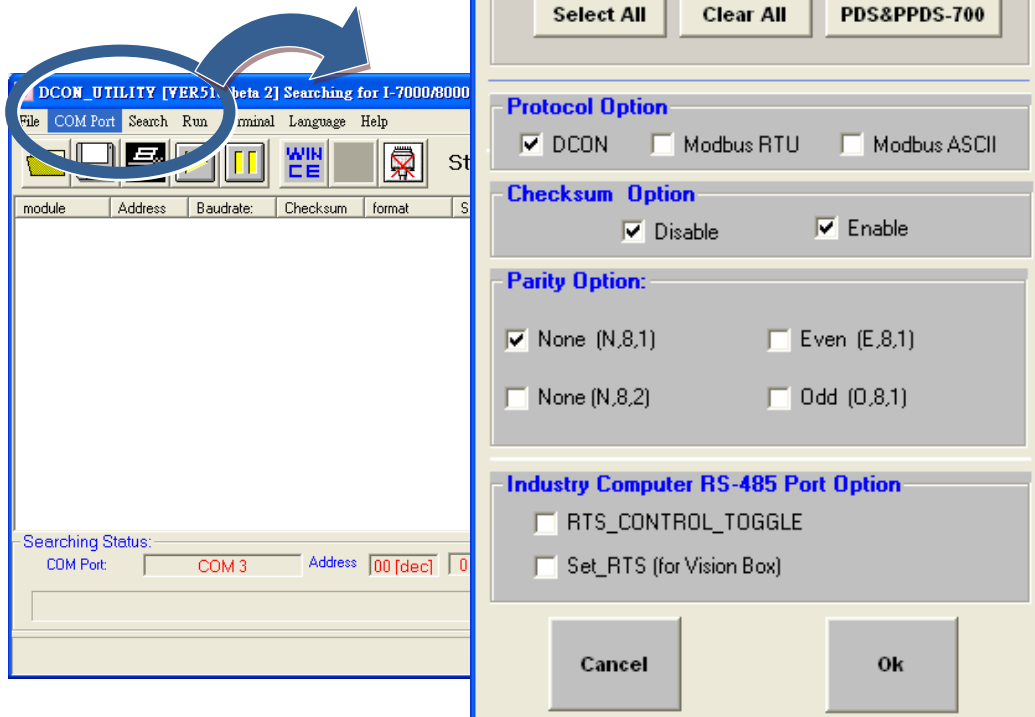
dcon\_utility...

Double-click the DCON Utility shortcut on your desktop.



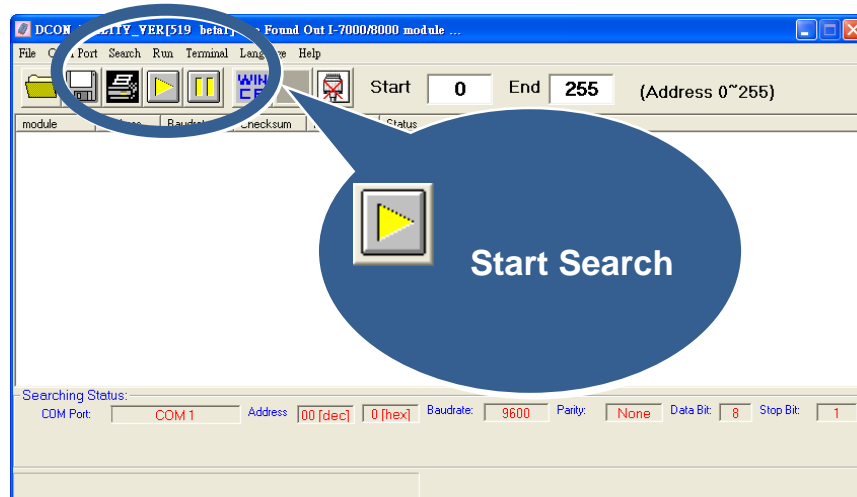
## Step 2: Select COM port number which is used for connection

- Click "COM Port" from the menu, a dialog box will appear.
- In the dialog box, select COM port number which is used for connection between PAC and PC.



## Step 3: Search the I/O Modules

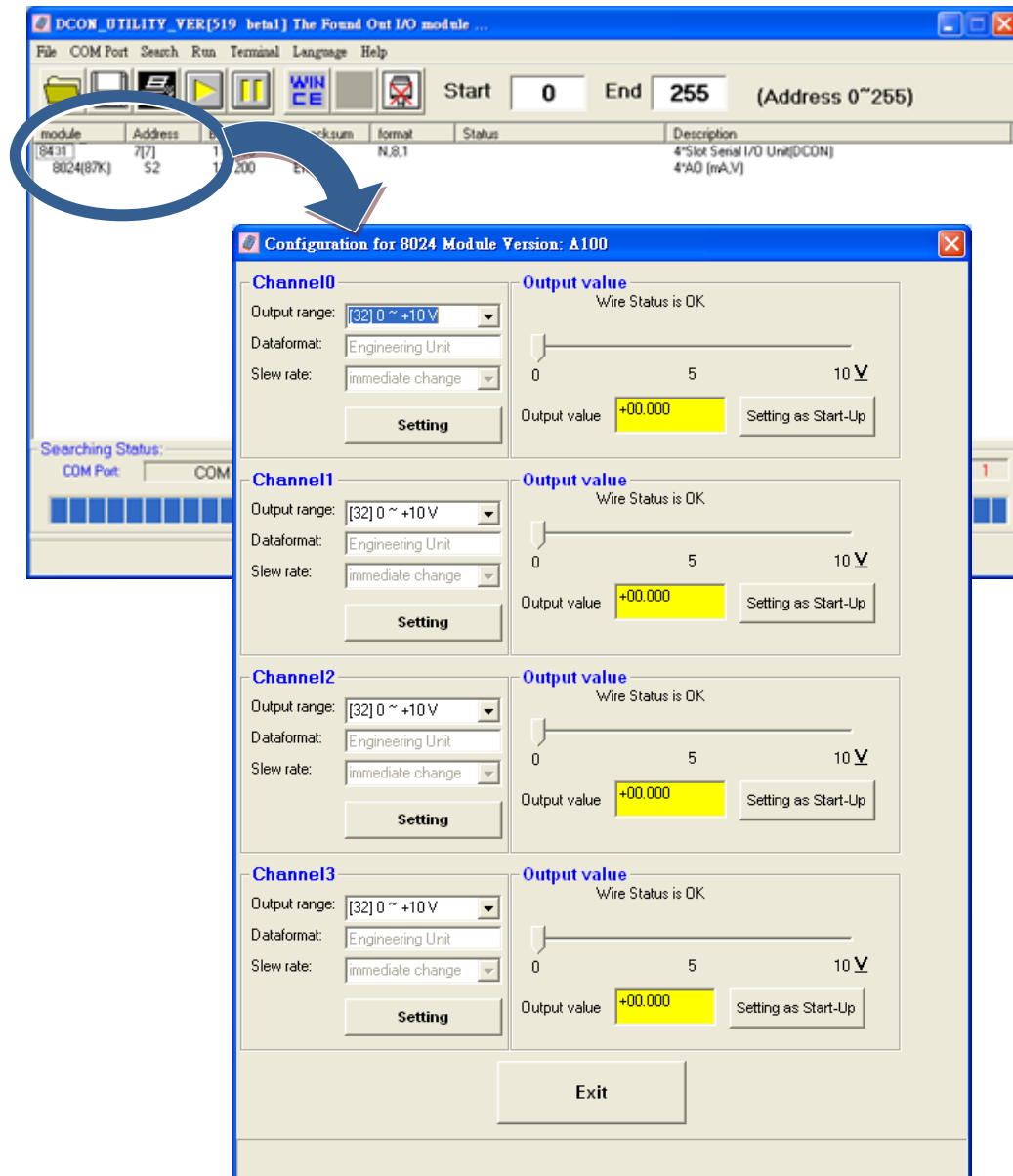
Click "Start Search" button from the toolbox to search the I/O modules.



**Step 4: Click on the name of the module to enter the configuration form, and then set the I/O module**

After searching has been completed, that will display a list of the PAC and its expansion I/O modules.

- i. Click on the name of the module to enter the configuration form.
- ii. Set the configuration parameters of I/O modules.



# 6

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## Developing Your Own Application

After you have finished configuring the I/O modules, then you can start developing your own applications

Here are some development guideline and tips related to the PAC.

### **Being a Programmable Controller (Master)**

- **I-8431/I-8831/I-8431-80/I-8831-80 User Manual**

CD:\Napdos\8000\843x883x\Document\

<http://ftp.icpdas.com/pub/cd/8000cd/napdos/8000/843x883x/document/>

- **I-8431/I-8831/I-8431-80/I-8831-80 Demo Program**

**General function:**

CD:\Napdos\8000\841x881x\demo\

<http://ftp.icpdas.com/pub/cd/8000cd/napdos/8000/841x881x/document/>

**Ethernet function (for XServer and TCP application):**

CD:\Napdos\8000\843x883x\TCP\

<http://ftp.icpdas.com/pub/cd/8000cd/napdos/8000/843x883x/tcp/>

- **MiniOS7 API and the Particular 8K Module Reference Manual**

CD:\Napdos\MiniOS7\Document\

<http://ftp.icpdas.com/pub/cd/8000cd/napdos/minios7/document/>

### **Being a Remote Slave I/O unit (Slave)**

- **I-8430/I-8830 User Manual**

CD:\Napdos\DCON\8430\_8830\Documents\

[http://ftp.icpdas.com/pub/cd/8000cd/napdos/dcon/8430\\_8830/documents/](http://ftp.icpdas.com/pub/cd/8000cd/napdos/dcon/8430_8830/documents/)

## **The Reference Manual for the Supported I/O Module**

- **I-8K and I-87K Series I/O module Reference Manual**

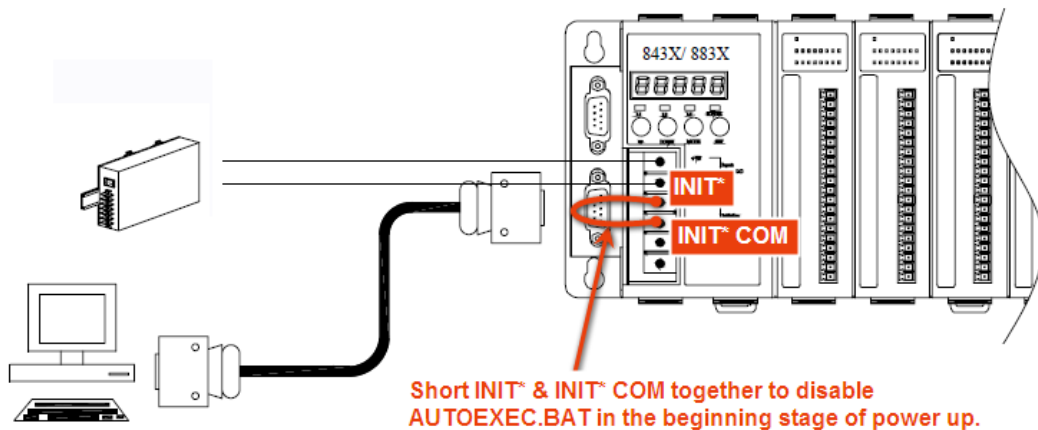
CD:\Napdos\DCON\IO\_Module\

[http://ftp.icpdas.com/pub/cd/8000cd/napdos/dcon/io\\_module/](http://ftp.icpdas.com/pub/cd/8000cd/napdos/dcon/io_module/)

### **Tips & Warnings**



The PAC has programs installed that start up automatically when you start-up the PAC. When you want to set the PAC, you will have to initialize the PAC if there are any programs that start up automatically before you start-up the PAC.



Connect the INIT\* and the INIT\* COM