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# tZT-P4C4 Quick Start

v1.0, February. 2018

## 1 What's in the box?

Without “Quick Start”, The package includes the following items:



tZT-P4C4



Screw Driver

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## 2 Introduction to the Configuration Parameters

### 1) Pan ID :

group identity for a ZigBee network, and must be the same for all devices in the same ZigBee network. (Setting Range : 0x0000~0x3FFF)

### 2) Address/Node ID :

distinguish identity of a specific the ZigBee module, and must be unique for each device connected the same ZigBee network. (Setting Range : 0x01~0xFF)

### 3) RF Channel :

indicates the radio frequency channel, and must be set to the same value as other modules on the same ZigBee network.

Channel	0x00	0x01	.....	0x0F
Frequency(MHz)	2405	2410	.....	2480

RF channels 0x04, 0x09, 0x0E or 0x0F are recommended because they do not overlap with the Wi-Fi frequencies based.

# 3 Preparation

- 1) Turn the switch to “Init”
- 2) Connect tZT-P4C4 module.
  - i. Open DCON Utility and use ZT-2000 Coordinator connect

Default Parameter :

Protocol	DCON
Checksum	Disable
PAN ID	0x1234
Node ID	0x01
RF Channel	0x0E
RF Power	0x07

- ii. Use RS-232
- 3) Power supply range : +10 ~ +30 VDC

# 4 Communication Test

As the ZigBee network is controlled by the ZigBee coordinator, the ZT-2550/ZT-2570 (ZigBee coordinator) must be configured first. Please refer to documents shown below for full details of how to configure these devices.

Once configuration of the ZigBee coordinator has been completed. Set the "Pan ID" and the "RF Channel" values for the tZT-P4C4 to the same values as the network, and then reboot the device. The module will automatically start to function on the ZigBee network using the default protocol.

※ Documents

[http://ftp.icpdas.com.tw/pub/cd/usbcd/napdos/zigbee/zt\\_series/document/zt-255x/](http://ftp.icpdas.com.tw/pub/cd/usbcd/napdos/zigbee/zt_series/document/zt-255x/)

[http://ftp.icpdas.com.tw/pub/cd/usbcd/napdos/zigbee/zt\\_series/document/zt-257x/](http://ftp.icpdas.com.tw/pub/cd/usbcd/napdos/zigbee/zt_series/document/zt-257x/)

※ Configuration Utility (Used to configure ZT-2000 I/O device Coordinator)

[http://ftp.icpdas.com.tw/pub/cd/usbcd/napdos/zigbee/zt\\_series/utility/](http://ftp.icpdas.com.tw/pub/cd/usbcd/napdos/zigbee/zt_series/utility/)

# 5 Communication Test

Once the tZT-P4C4 has joined the ZigBee network, the signal quality can be confirmed by monitoring the status of the ZigBee Net LED indicators. If the LED indicator shows a steady light, communication with the tZT-P4C4 has been successfully established for data acquisition and control.

ICP DAS also provides the “DCON Utility”, which can be used to simulate DCON/Modbus communication. This software can also be used to verify the device settings and ZigBee I/O functions.

※ The DCON Utility can be download from:

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

- Simulate I/O channel operating via using DCON Utility
  - 1) Launch DCON Utility and select the correct COM Port settings to connect the ZigBee Coordinator (ZT-2550/ZT-2570).
  - 2) Clicking “Search” button will start searching which tZT-P4C4 is in the same ZigBee network.
  - 3) If there is any tZT-P4C4 displayed, double clicking the “module name” will start the I/O channels operated platform.

# 6 Troubleshooting

## 1. Technical Support

If you have any difficulties using your tZT-P4C4, please send a description of the problem to [service@icpdas.com](mailto:service@icpdas.com) Include the following items in your email:

- A. Set the DIP switch of the ZT-255x device to the [ZBSET] position then reboot the device. Launch the ZT Configuration Utility and select [Save Log] icon to save the configuration of the ZT-255x as a file.
- B. After clicking the [Save Log] icon, enter the “File Name” and the “File Path” in the Windows “Save” dialog box. Once the configuration has been successfully saved, the following message will be displayed.

## 2. LED Indicator Status:

LED Indicator	Status	Introduction
ZBNet (Green LED)	ZigBee Coordinator (Master)	
	Steady Lit	ZigBee Net is set up correctly
	Blinking to Steady Lit	Already have same ZigBee network or rejoin ZigBee network
	ZigBee Router (Slave)	
	Steady Lit	The Signal is Strong
	Blinking (500ms)	The Signal is Available
	Blinking (1s)	The Signal is Weak
	Blinking (2s)	The Signal is Unstable or There is no Available
ZigBee PWR (Red LED)	The status of module board	
	Steady Lit	The Power is ON and the Module Initialization is Correct
	Blinking (200ms)	Module Initialization Failure
	Blinking (1s)	Watchdog is Enabled and the status of the I/O channel has been changed to the Safe Value. Reset the module via the power switch or configuration commands.
	Steady Unlit	The Power is OFF