



LRA-900 Quick Start

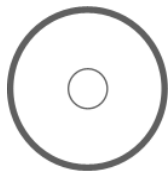
v1.0, Jan 2018

What's in the box?

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



LRA-900



CD



ANT-109-01



**Screw
Driver
(1C016)**



CA-0910

Technical Support

- **LRA-900 User Manual:**

- CD: \napdos\rf_modem\document\lra-900

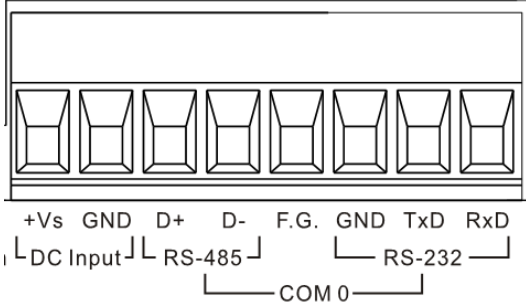
- http://ftp.icpdas.com.tw/pub/cd/usbcd/napdos/rf_modem/document/lra-900/

- **LRA-900 Utility:**

- CD: \napdos\rf_modem\utility\lra-900\

- http://ftp.icpdas.com.tw/pub/cd/usbcd/napdos/rf_modem/utility/lra-900/

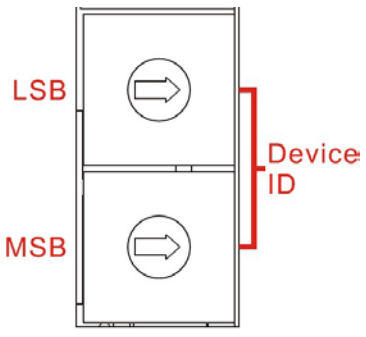
1 Pin Assignment

	Pin	Description
 <p>+Vs GND D+ D- F.G. GND TxD RxD DC Input RS-485 RS-232 COM 0</p>	+Vs	+10 ~ +30 V _{DC}
	GND	Power Ground
	D+	RS-485 Logic High
	D-	RS-485 Logic Low
	F.G.	Frame Ground
	GND	RS-232 Ground
	TxD	RS-232 Transmit Data Pin
	RxD	RS-232 Received Data Pin

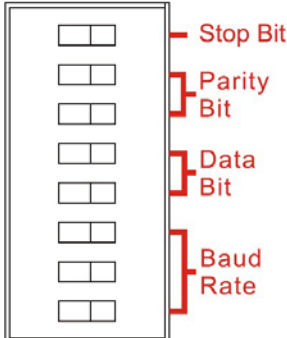
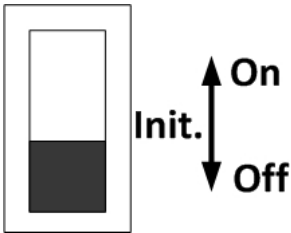
2 LED Indicator

LED	Behavior	Description
PWR	On	+10 ~ +30 V _{DC} Power On
	Off	Power Off
RF_Tx	On	RF is transmitting data
	Off	RF is no data to transmit
RF_Rx	On	RF is receiving data
	Off	RF is no data to receive

3 Rotary Switch

Switch Name	Description
 <p>LSB MSB Device ID</p>	<p>Device ID, 0x01 ~ 0xFE</p> <p>NOTE:</p> <ul style="list-style-type: none"> ➤ Each module's "Device ID" must be different from each other. ➤ 0x00 and 0xFF are reserved for broadcast id used.

4 DIP Switch

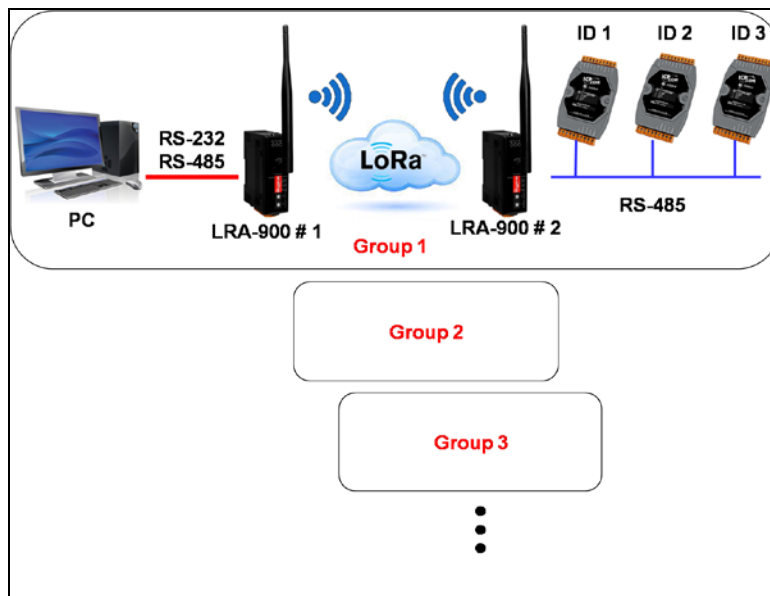
		Pin	Switch Name	Description			
 <p>COM 0</p> <p>■ : ON □ : OFF</p>		1 ~ 3	COM0 Baud Rate (bps)	Baud Rate	1	2	3
				115200	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
				57600	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
				38400	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
				19200	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
				9600	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
				4800	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
				2400	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
				1200	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
		4 ~ 5	COM0 Data Bit	Data Bit	4	5	
				8	<input type="checkbox"/>	<input type="checkbox"/>	
				7	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
				6	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
				5	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
		6 ~ 7	COM0 Parity Bit	Parity Bit	6	7	
				NONE	<input type="checkbox"/>	<input type="checkbox"/>	
				EVEN	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
				ODD	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
				Reserved	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
		8	COM0 Stop Bit	Stop Bit	8		
				1	<input type="checkbox"/>		
				2	<input checked="" type="checkbox"/>		
 <p>Init. ↑ On ↓ Off</p>			Init / Run Mode	<p>Init Mode: Be able to use Utility to configure via the RS-232 interface.</p> <p>Run Mode: Use to transmit data to the remote device</p>			

5 Configuration Tool

ICP DAS provides a configuration tool (LRA-900 Utility) for user to set some advanced parameters, like “Group ID”, “LoRa frequency”, “Module operation mode” and so on. More detail information about the module configuration, please refer to the user’s manual.

6 Applications

- One-to-one: PC controls RS-485 modules ID 1 ~ 3 through LRA-900



- One-to-many: PC controls RS-485 modules ID 1 ~ 3 through a LRA-900#2 and modules ID 4 ~ 6 through another LRA-900#3 with the same group ID.

