Model ATC-3200

Zigbee to RS232/422/485 Converter

User's Manual

Introduction

The ATC-3200 is a cost effective and highly integrated Serial-to-Zigbee wireless Converter. Built on ZigBee technology, the ATC-3200 is ideal for a range of applications from simple RS-232 cable replacement to sophisticated multi-drop RS-485 networks and everything in between. Available in RS-232/RS-422/RS-485.

ZigBee is the global wireless language connecting dramatically different devices to work together and enhance everyday life. The ZigBee Alliance is a non-profit association of more than 280 member companies driving development of ZigBee wireless technology. The Alliance promotes world-wide adoption of ZigBee as the leading wirelessly networked, sensing and control standard for use in energy, home, commercial and industrial areas.

Features:

• Utilizes globally available 2.4 GHz ISM band

• Control and Configuration with UART commands.

• 65535 unique node addresses, IDs allow multiple large networks to coexist.

• Programmable Transmit Power Output, max. 12 dBm

• Complete IEEE 802.15.4 spec compliant

• Typical Receiver Sensitivity –102 dBm

• Typical Throughput rate 250,000 bps

• Obstructed signal range to 100 meters @ 12dBm/PA and -102dBm/LNA

• Multiple Low Power Operating modes

• 3-in-1 RS-232/422/485 interface Max.115.2Kbps Serial interface and zigbee.

• Supports 4- and 2-wire RS-485 with AUTO-SEND™ and built-in terminator

• Supports industrial 24 VDC power input and optional Power over Serial

• Terminal block accessories for easy RS-422/485 serial wiring

• Easy and powerful configuration program

• Approval CE, RoHS

Hardware Description

1. RS-232 Pinout：（DB9 Male）

（DB9Male）	**Signal**	**I/O**
PIN2	RXD	IN
PIN3	TXD	OUT
PIN5	GND	-

2. RS-422/485 Pinout：（six Terminal from left）

Terminal No	1	2	3	4	5	6
RS-422	T+	T-	R+	R-	VIN	GND
RS-485	485+	485-	-	-	VIN	GND

3. Power Supply：

ATC-3200 Zigbee converter can adopt the product's 9V power adapter for power supply or adopt power from other DC power or device.(+9--+24V@500-100mA)。

4. ATC-3200 LED indication：

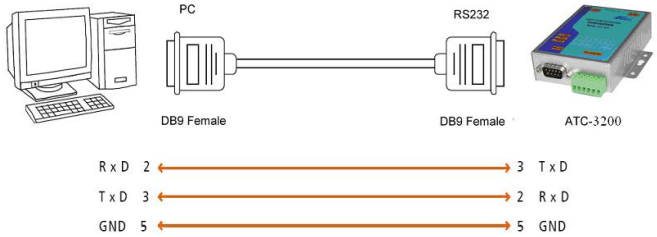
SET —— Indication Zigbee Link， yellow on Zigbee Link established。

LINK —— Data Sending/Receiving between Serial and the Zigbee

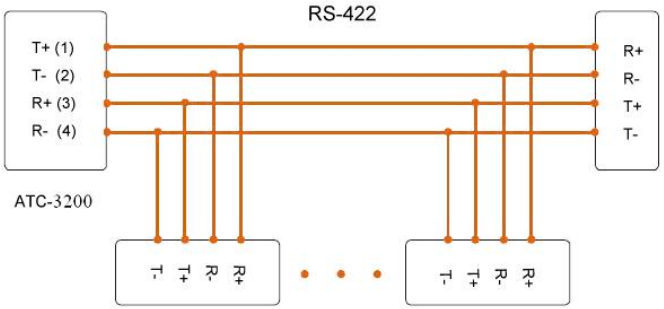
PWR —— Indication Power

5. Connection Diagram

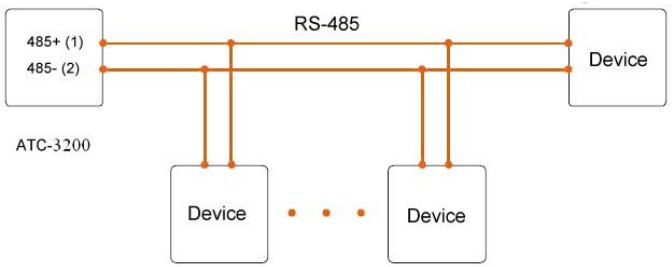
RS-232 Connection



RS-422 Connection



RS-485 Connection



Applications

• Wireless remote control
• Building automation
• Personal area network
• Industrial control
• OEM equipment
• PC peripherals

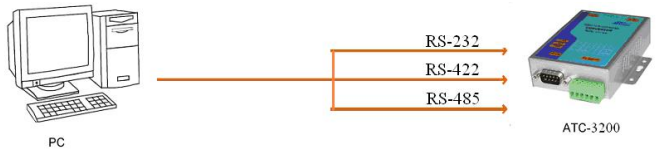
Configuration and Operation

1. ATC-3200 default Settings

Master Com Port No: com1
Slave Com Port No: com1
Pan ID: 5152
Channel: 01-2410MHz
Baud rate: 9,600
Parity Check: Unknow
Encryption:01-Encry
Encryption Key:ffff
Check Time:Unknow

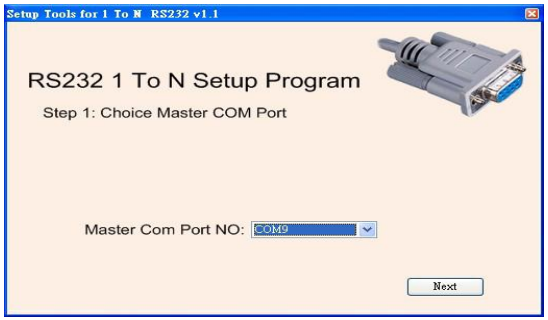
2. Configure ATC-3200

Step1. Use a connector or converter to make a connection between the ATC-3200 and PC.

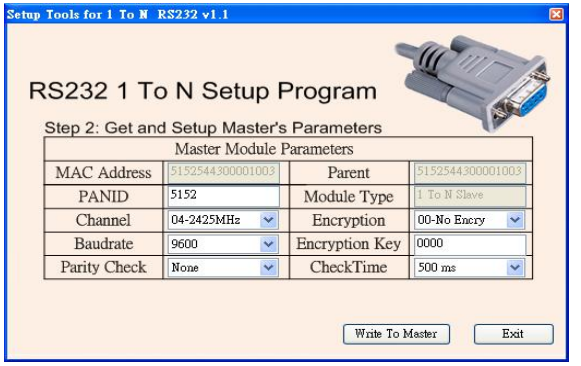


Step2. With a fine needle through the small hole next to the power plug inside the set by holding down the switch for 5 seconds, the red light flashes. Equipment belonging to the state can be set.

Step3. Start software QR RS232 1 to N, selected using a computer to connect the Master module serial port

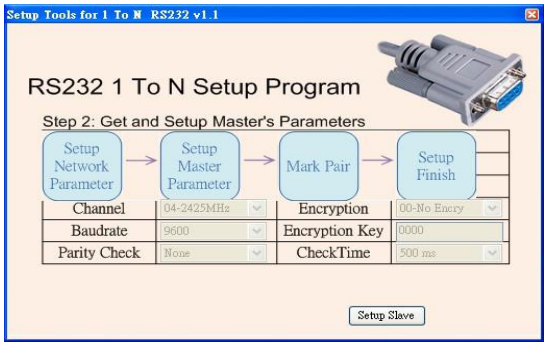


Step4. Click the “Next” button to read the ATC-3200 firmware configuration. Select Master module parameters.



Selection is complete, click "Write To", began to set parameters.

Step5. When the screen appears the following screen, on behalf of parameters are set.



Step6. Click the "Setup Slave", enter the Slave matching process.

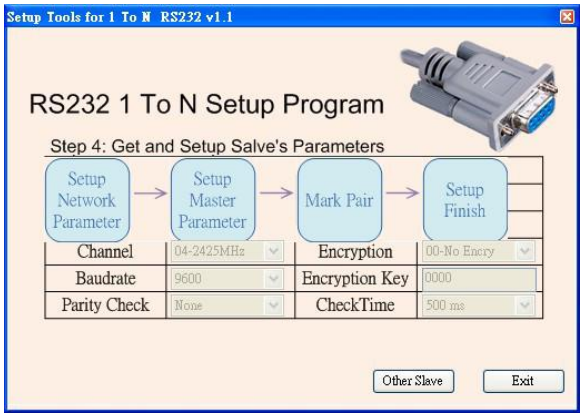
Step7. Remove Master module, COM Port connection Slave module.

Step8. Press the pairing button Slave module until the matching light flashes.

Step9. Click "Next", enter the Slave matching images.

Setp10. Click the "Write To Slave", set the Slave parameters start

Setp11. When the screen appears the following screen, on behalf of parameters are set.



Step12. If the remaining Slave modules required settings, click the "Other Slave". Starting from step 7 to reset.