

**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 500 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 :**

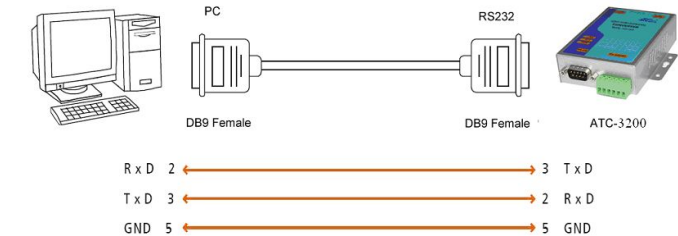
SET — Indication Zigbee Link , yellow on Zigbee Link established.

LINK — Data Sending/Receiving between Serial and the Zigbee

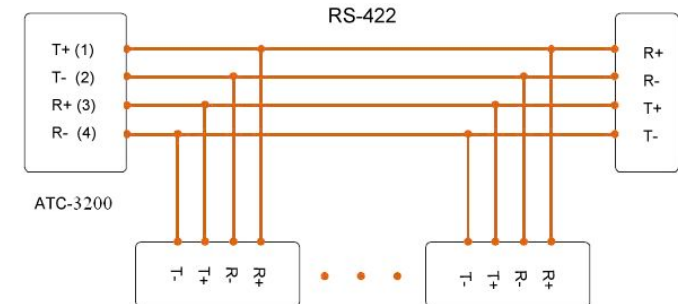
PWR — Indication Power

**5. Connection Diagram**

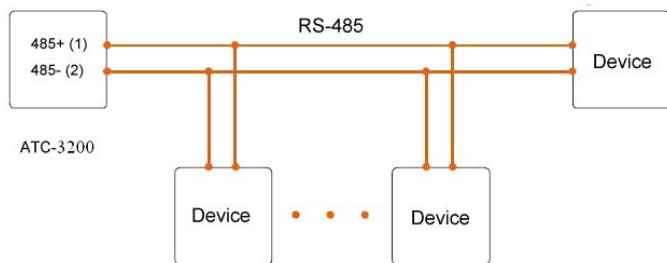
**RS-232 Connection**



**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

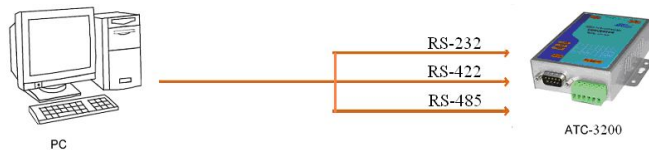
Encryption Key:ffff

Check Time:Unknow

### 2. Configure ATC-3200

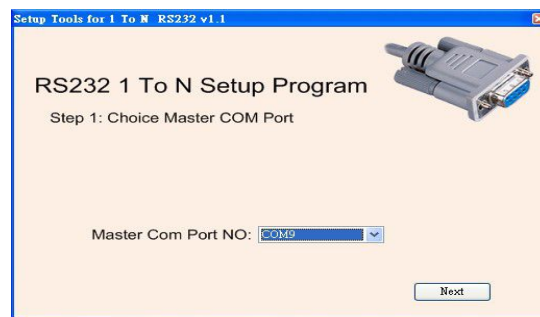
**Step1.** Use a connector or converter to make a connection

between the ATC-3200 and PC.

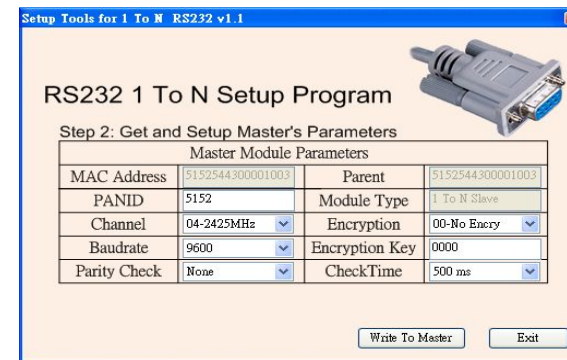


**Step2.** With a fine needle through the small hole next to the power plug inside the set by holding down the switch for 5 seconds, the red light flashes. Equipment belonging to the state can be set.

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

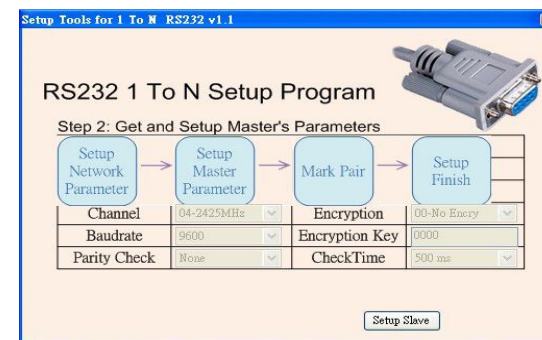


**Step4.** Click the "Next" button to read the ATC-3200 firmware configuration. Select Master module parameters.



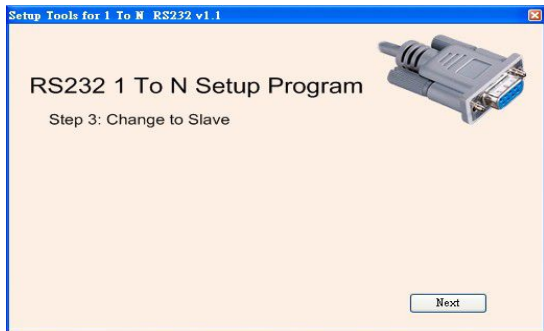
Selection is complete, click "Write To", began to set parameters.

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



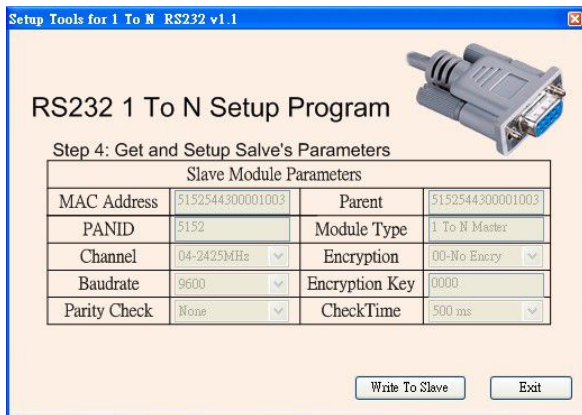
**Step6.** Click the "Setup Slave", enter the Slave matching process.

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



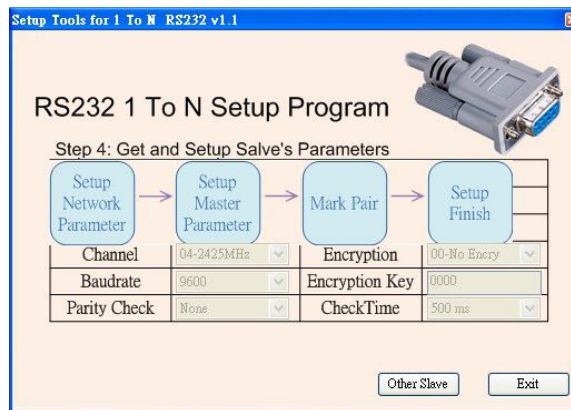
**Step8.** Press the pairing button Slave module until the matching light flashes.

**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.