Advantech AE Technical Share Document

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Category	■FAQ □ SOP	Related OS	N/A
Abstract	ADAM-4521, How to set to be a baud rate converter		
Keyword	ADAM-4521, Baud Rate, ASCII command		
Related Product	ADAM 4521		

■ **Problem Description:**

ADAM4521 allow users to connect RS-232 and RS-422/485 interface with different baud rate and data format. This document explains how to configure the setting and transmit data into different baud rate interface.

■ **Answer:**

First of all, Modbus protocol is not supported in addressable mode of ADAM-4521.

Steps for configure module's baud rate setting

● Switch the module into initial mode and configure the setting in Utility as below. (Remember to connect to the host with RS-422/485 interface)

● Addressable Setting: Addressable

● Protocol: RS-485

● RS-232, RS-422/485 Parameter: Choose baud rate and data format according to users' requirement.
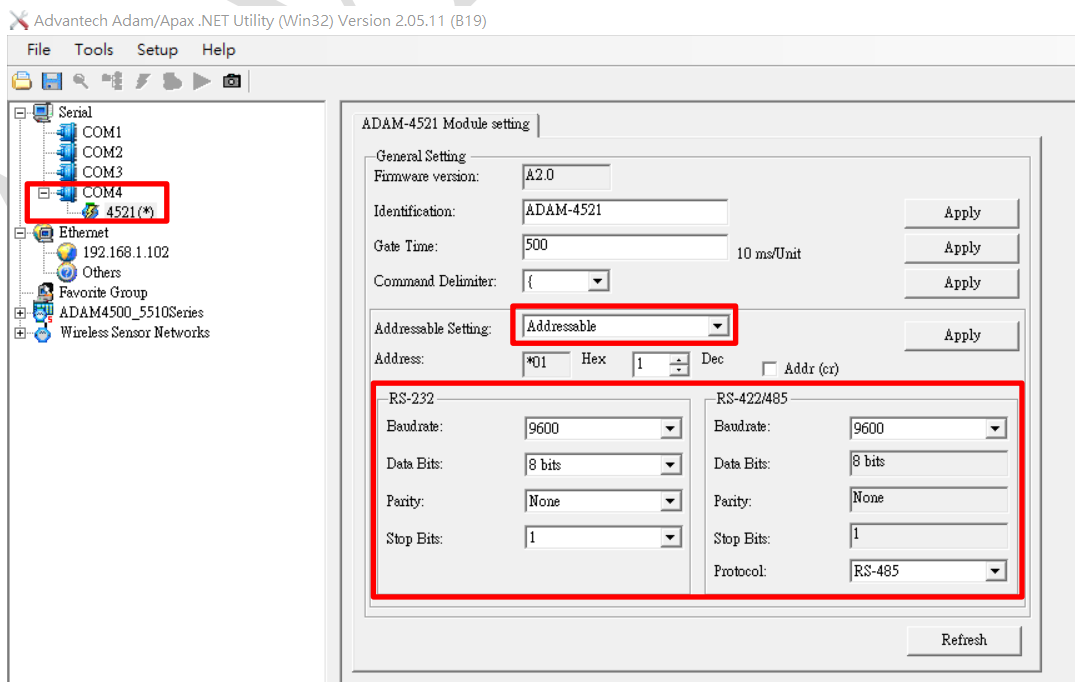

Figure 1 Utility Configuration

Steps for test the communication

- Connect ADAM-4561, ADAM-4521 as below topology.
- Open two AccessPort for creating two COM ports consisting of a Sender and a Receiver.
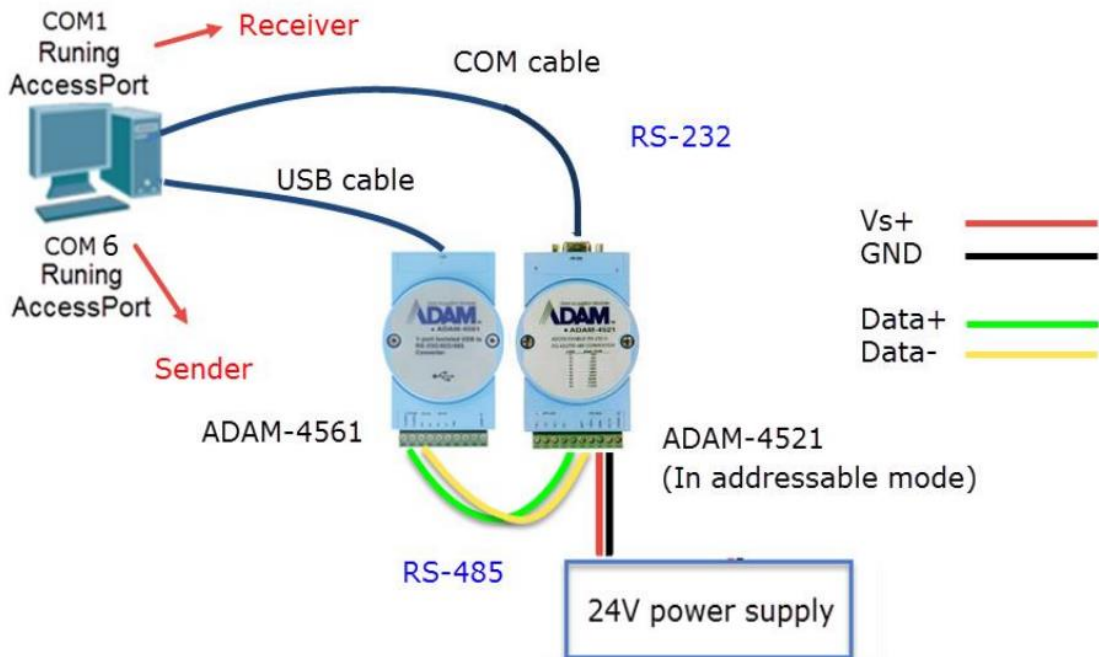

Figure 2 Topology for the communication test

- Send DelimiterAA(data) command which is a data pass command telling the module at address AA to pass up to 32 bytes of data to the RS-232 device. Enter "{01$hello" and sending request from COM4(RS-485)
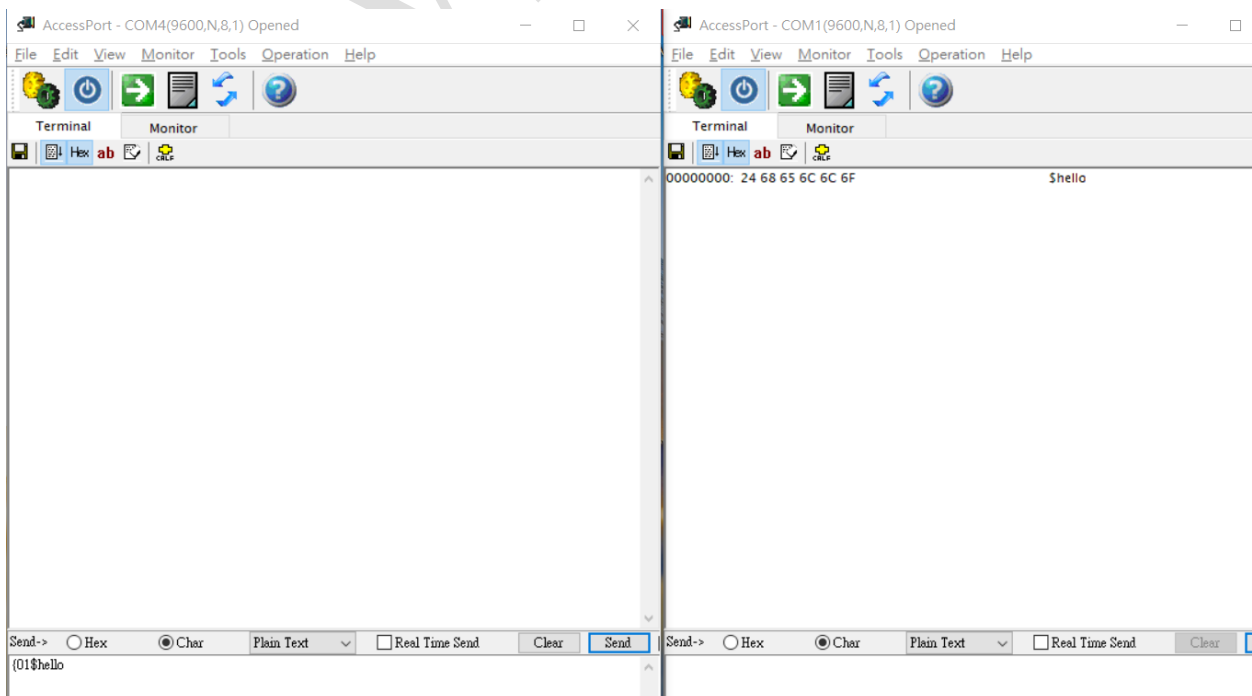- If succeed, COM1 (RS-232) should response "$hello" which is transmitted from COM4(RS-485).

Figure 3 COM1(RS-232,9600,N81) receives command send from COM4 (RS-485,9600,N81)
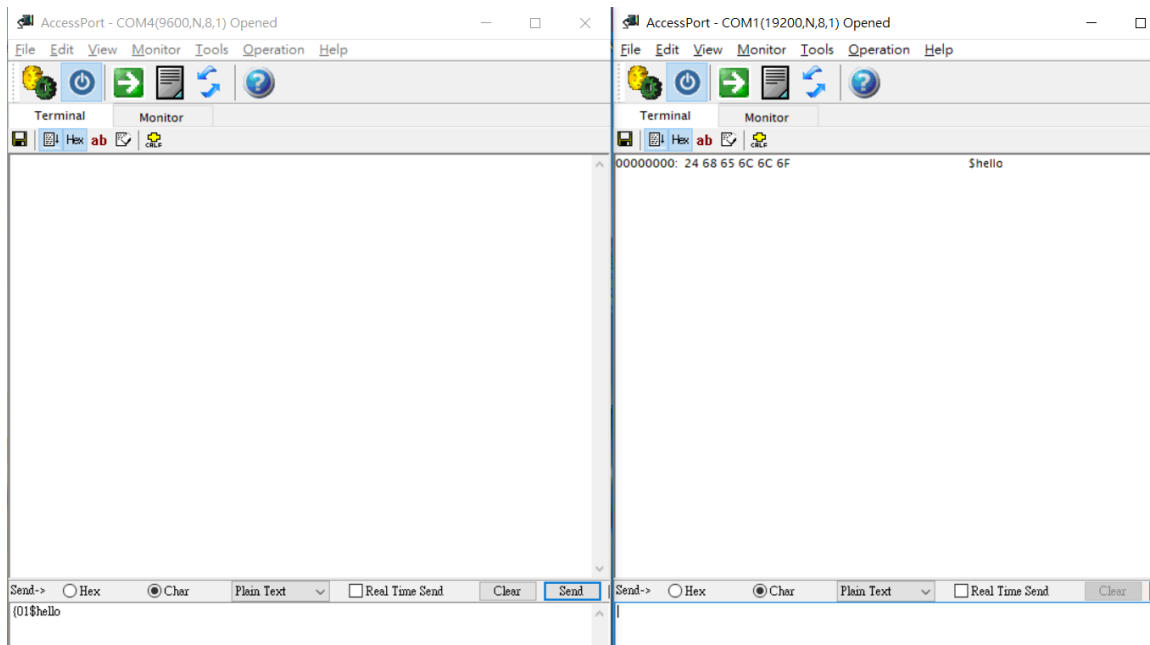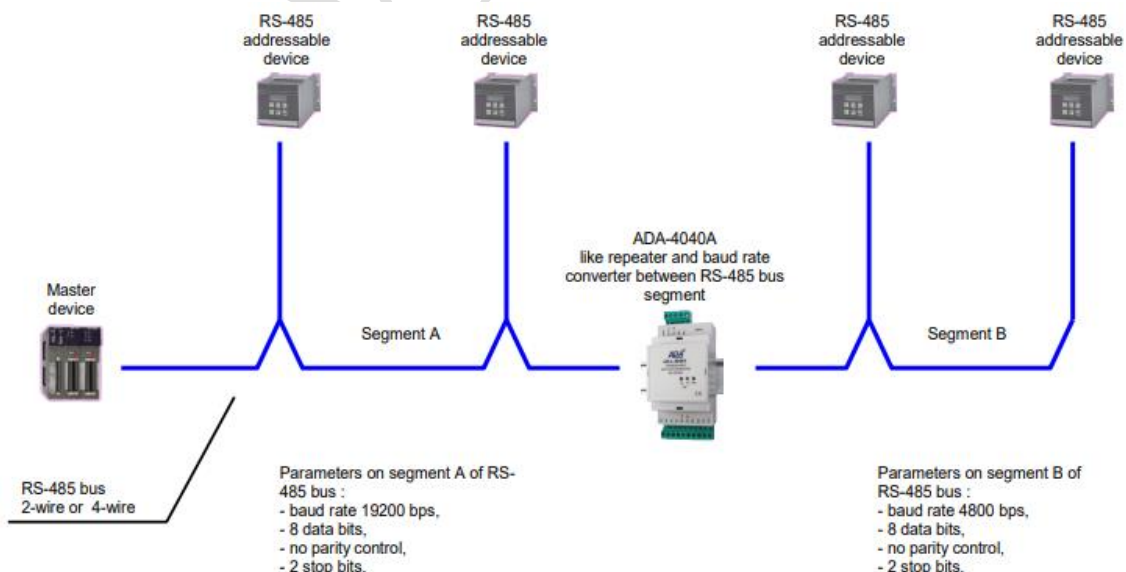

Figure 4 **COM1 (RS-232,19200,N81) receives command send from COM4 (RS-485,9600,N81)**

Note:

Due to ADAM-4510 can only serve as a repeater to connect two different RS-485 networks with same baud rate, customer has provided an example for RS-485/422 to RS-485/422 baud rate converter.

https://cel-mar.pl/en/addressable_rs485rs422_repeater_m4040a.htm%20%E6%97%A2?idk=1#poz