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Connect PC to G35L through Bluetooth Channel

Version 1.00

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Release History

Revision	Date	Content
1.00	2010/09/12	It is initial release

Introduction

As mentioned in G35L user manual, not only connected to PC directly through G35's USB or RS232 UART port, but also can G35L be interfaced to PC through wireless communication channel -- Bluetooth

This document introduce user how to bring PC and G35L together by using Bluetooth adaptor, BT-232B or BT-232B-E.

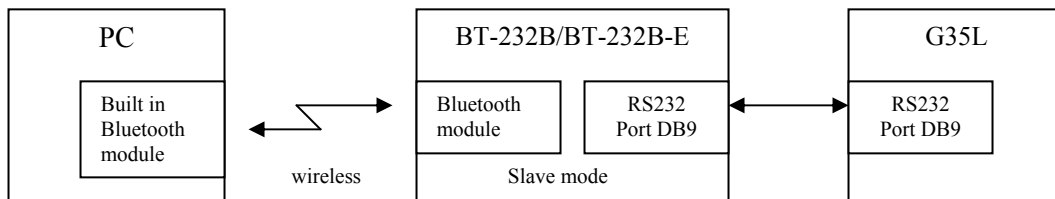


Fig. 1

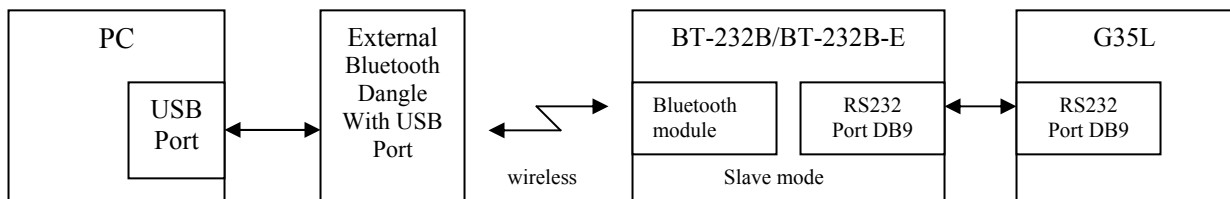


Fig. 2

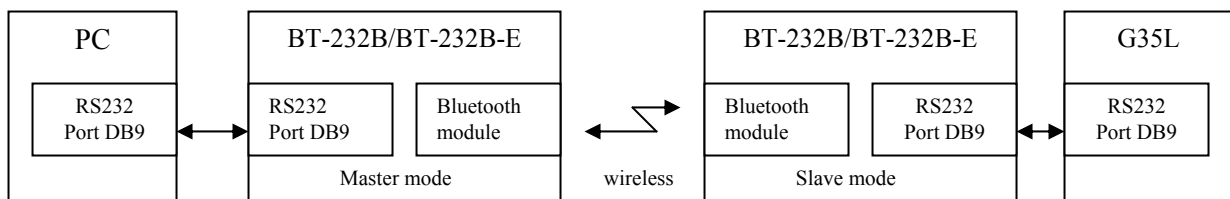


Fig. 3

Fig. 1 to Fig. 3 shows three kinds of typical method to connect PC and G35L by means of BT-232B or BT-232B-E.

Quick Start

Here are 2 examples to help user know about how PC and G35L are connected in the way shown in Fig. 2.

Example 1 – Exchanging data between G35L and remote PC at 19200bps through BT-232B/BT-232B-E

a. Set RS232 port of G35L to be 19200bps

- Install G35L utility (Refer to G35L user manual)
- Connect PC to G35L through latter's USB port or RS232 port (USB to RS232 bridge adaptor may be used if PC doesn't have RS232 port)

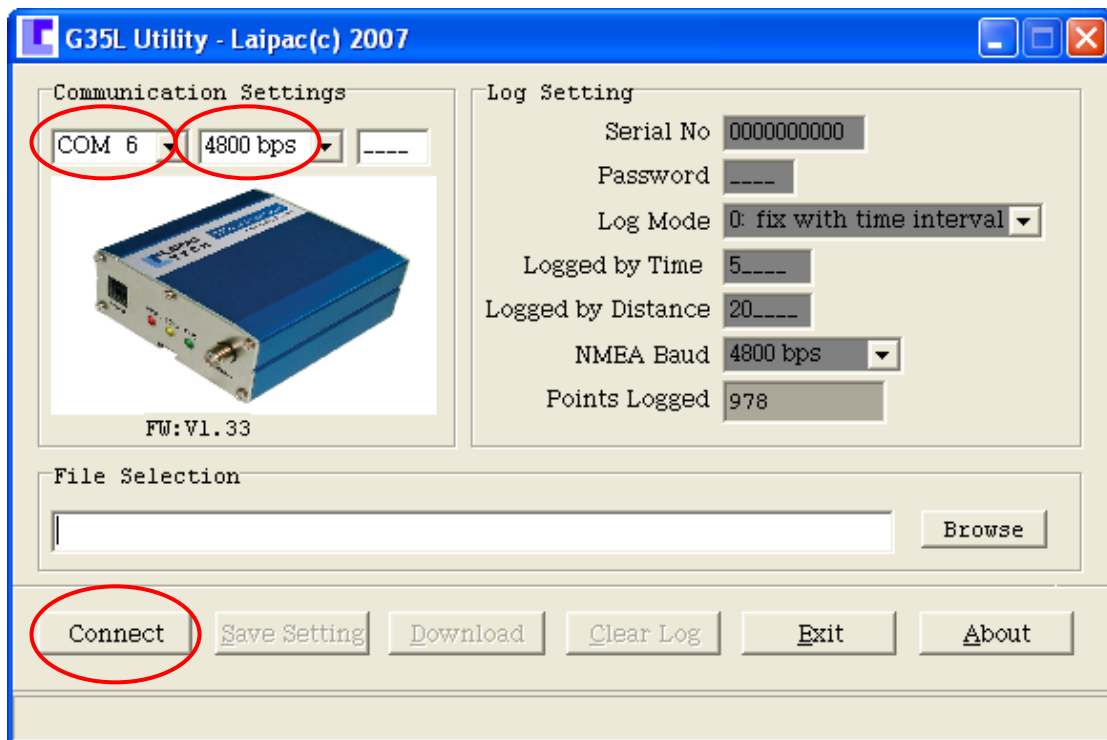


Fig. 1 Using default 4800bps and assigned COM port by utility to connect unit

Note:

The default factory setting of RS232 port on G35L is below
RS232 Port: 4800BPS, 8 bit data, No parity, No flow control
The COM port here is **COM6**. It may be different on other user's PC

- Change G35L’s default baud rate to **19200bps**

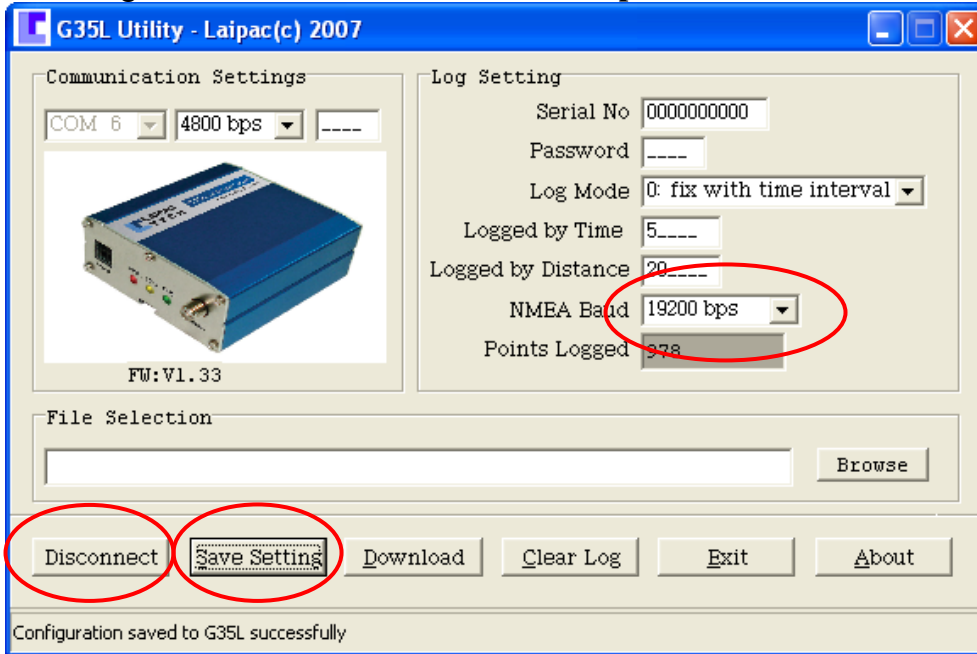


Fig. 2 Change G35L’s baud rate to 19200

Change Item NEMA Baud from 4800bps to 19200 → Save Setting (See “Configuration saved to G35L successfully” if setting has been accepted by unit) → Disconnect

- Double check if G35L has been set to be **19200bps**

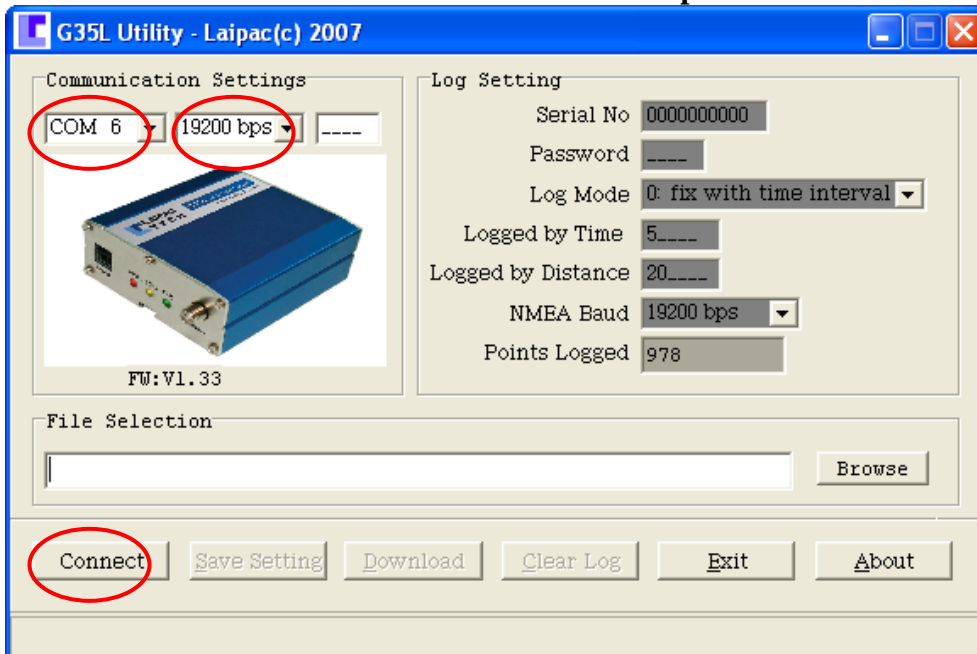


Fig. 3 Double check if G35L’s baud rate is 19200bps

If the setting is valid, after click “Connect”, user can see “Device connected” on the bottom of screen window. Click “Disconnect” → “Exit” to exit this utility.

b. Configure BT-232B/BT-232B-E’s RS232 port capable of working with G35L at 115200bps

The default factory setting of RS232 port and other critical working parameters coming with BT-232B/BT-232B-E adaptor are as below

RS232 Port: **19200BPS**, 8 bit data, No parity, No flow control
Name: **Serial Adaptor**
PIN: **1234**
Mode: **Slave**

Keeping “Reset” button on this adaptor pressed more than 3 seconds will force this device resume its default factory setting.

It is obvious here that default setting of BT-232B/BT-232B-E’s RS232 port has already met the need of G35L if **19200BPS** is requested here. In this case, user doesn’t need to change this adaptor’s setting.

c. Install a standard external Bluetooth Dangle on PC running Windows XP/Vista.

The standard external Bluetooth Dangle can be purchased from computer store or electronics store. It should come with Bluetooth device management software. Such as, **BELKIN’s Mini Bluetooth Adaptor** is coming with “**My Bluetooth**”. About the installation of those Bluetooth Dangles on Windows XP/Vista, user should follow those Dangles’ own user manual.

d. Configure the virtual COM port required by Bluetooth channel

On PC, run Bluetooth device management software coming with the external Bluetooth Dangle.

Mainly, it will go through the steps below

- Search and locate the G35L unit to be connected through Bluetooth channel
A device “Serial Adaptor” should be found
 - Assign a virtual COM port to be used for exchanging data between G35L unit and PC, such as, COM 8 is assigned. PIN is asked during this process, whose default one is “1234”
- e. On PC, re-start G35L utility to execute user desired operation**

To ensure the operation successfully, the two settings below must be correct

- The selection of COM port should be the same as the one assigned by step d, such as “COM8”
- The baud rate should be the same as the one being set on this selected G35L, that is, 19200bps.

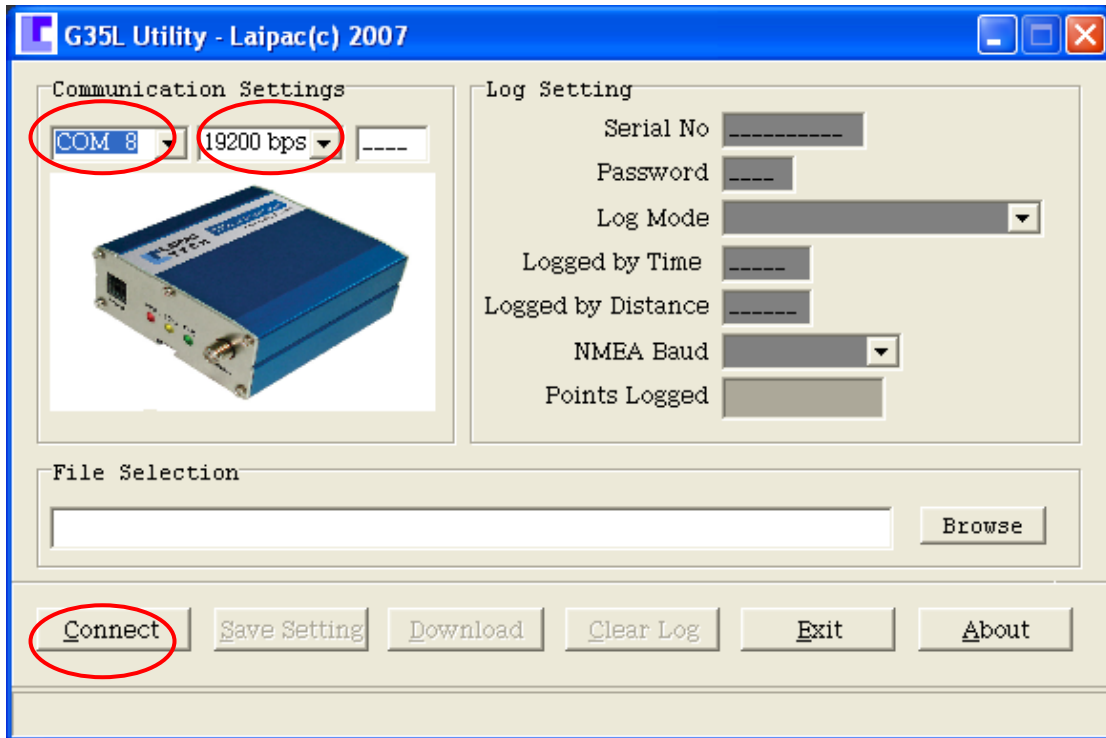


Fig. 4 Reconnect G35L through Bluetooth Dongle using its assigned COM port

Click “Connect”, user should see “Device connected” on the bottom of screen window if the whole setting process above is correct. Now, user can start the operation he/she wants to do.

Example 2 – Exchanging data between G35L and remote PC at 115200bps through BT-232B/BT-232B-E

a. Set RS232 port of G35L to be 115200bps

Refer to Example 1 -- step a (Ensure to connect PC and G35L through COM6 and at 19200bps)

Except changing G35L RS232 port’s baud rate to **115200bps**, other actions should be the same as ones listed by **item a** of Example 1.

b. Configure BT-232B/BT-232B-E’s RS232 port capable of working with G35L at 115200bps

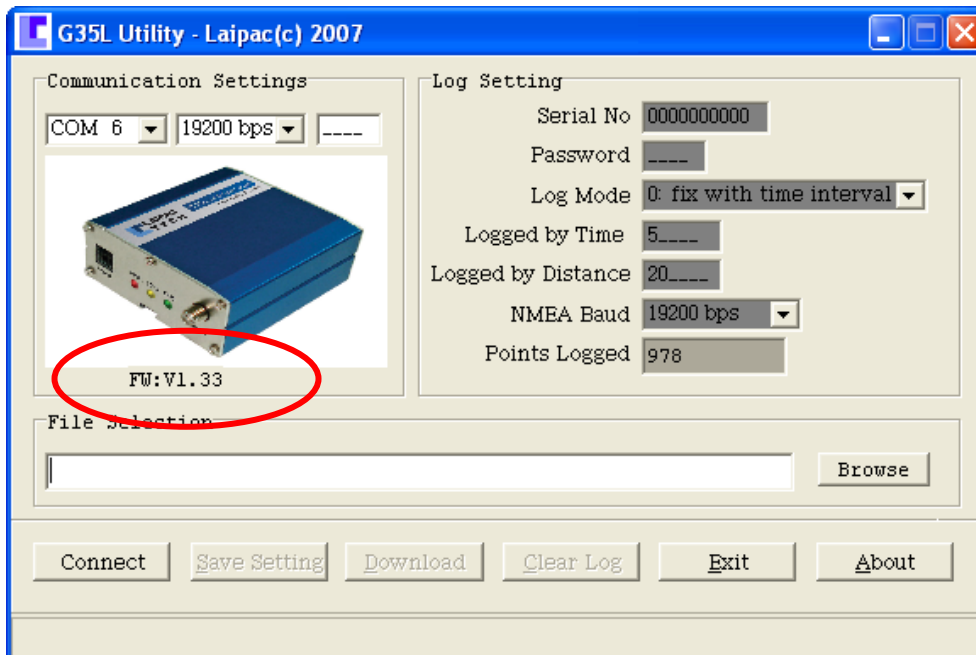
Refer to procedure provided by **BT-232B/BT-232B-E**'s user manual, by means of "Hyperterminal" software tools running on PC, send command "BAUD=115200" to **BT-232B/BT-232B-E**. Only its RS232 port is able to talk with PC. USB to RS232 bridge adaptor is asked to run this setting process.

- c. Install a standard external Bluetooth Dangle on PC running Windows XP/Vista**
Refer to Example 1 – step c

- d. **Configure the virtual COM port required by Bluetooth channel**
Refer to Example 1 – step d
- e. **On PC, re-start G35L utility to execute user desired operation**
Refer to Example 1 – step e

Note

1. Normally, the standard Bluetooth Dongle bought from store is Class 2. The distance between PC and G35L should be less than **10 meters** if user selects the connection way shown in Fig. 2.
2. To meet the need of connection between PC and G35L through Bluetooth channel, G35L's firmware should be V1.33 and upper.

**Reference**

1. User manual for BT-232B and BT232B-E model
2. G35LGPS Data Logger User Manual (V1.0)