



FEASYCOM®

FSC-BP109

USB - Bluetooth Super Long Range Transceiver Get Started

Version 1.0

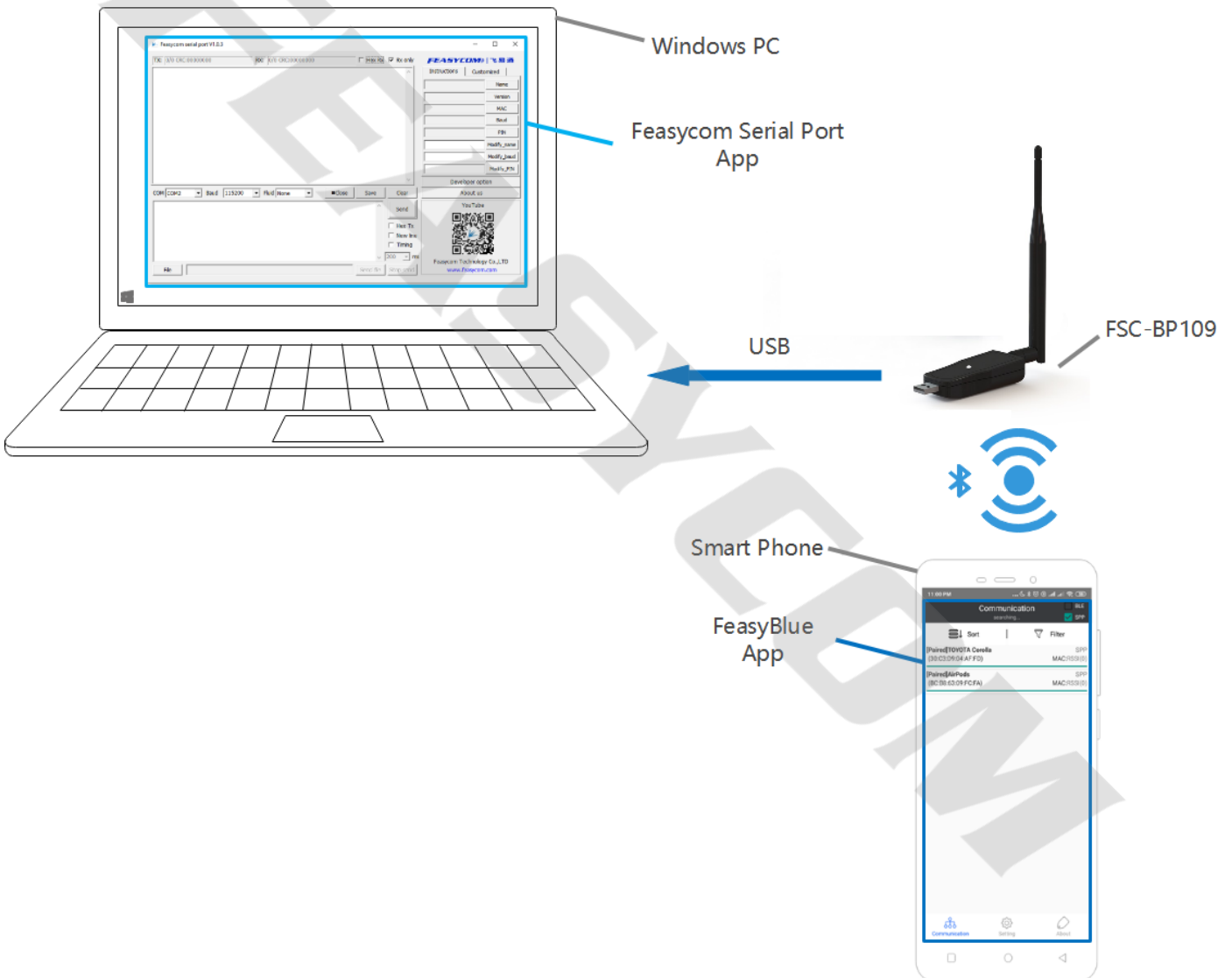
1. Introduction

This application note describes a quick start for using FSC-BP109 super long-range Bluetooth data-transceiving USB adapter.

In this application note, The basic usage of three Bluetooth profiles (SPP, GATT, HID) of FSC-BP109 will be introduced step by step.

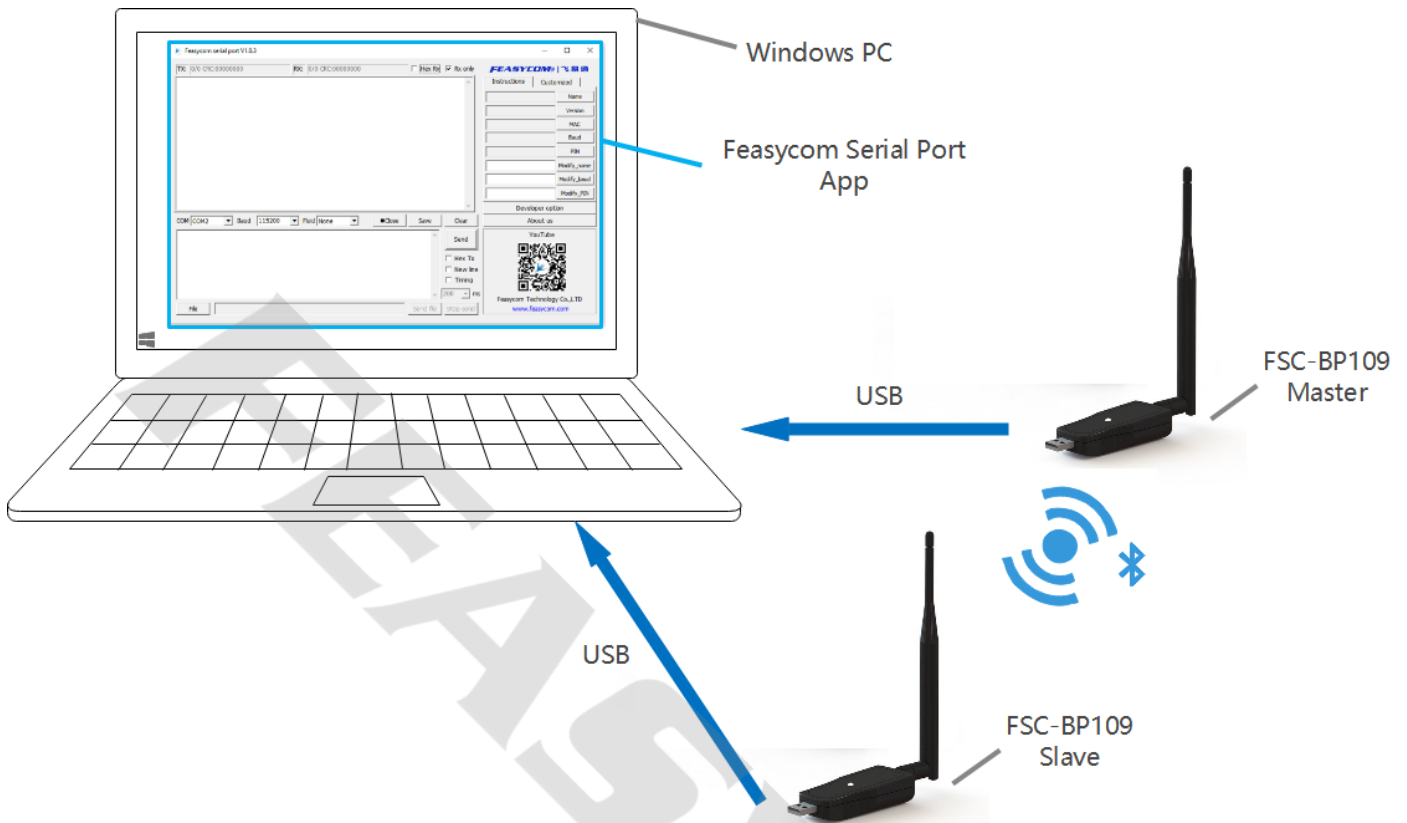
2. Minimum System Diagram

2.1 Basic Diagram



[1]. Smart Phone in the diagram could be Android device (SPP, BLE, HID) or iOS device (BLE, HID).

2.2 SPP Master-Slave



3. Common Setup Procedure

- Refer the demonstration in Chapter 2.1 or Chapter 2.2, prepare Windows PC, FSC-BP109.
- Download CP210x Windows driver and Feasycom serial port from: <http://www.feasycom.com/service/45.html>
- Plug FSC-BP109 in Windows PC, install driver for FSC-BP109, after driver installation finished, a COM port will be enumerated for FSC-BP109.
- Open Feasycom serial port on PC, select the correct COM, leave the other COM port settings (Baud, etc) as default if you didn't change them before, click 'Open' to open COM port.

4. SPP Profile (BR/EDR)

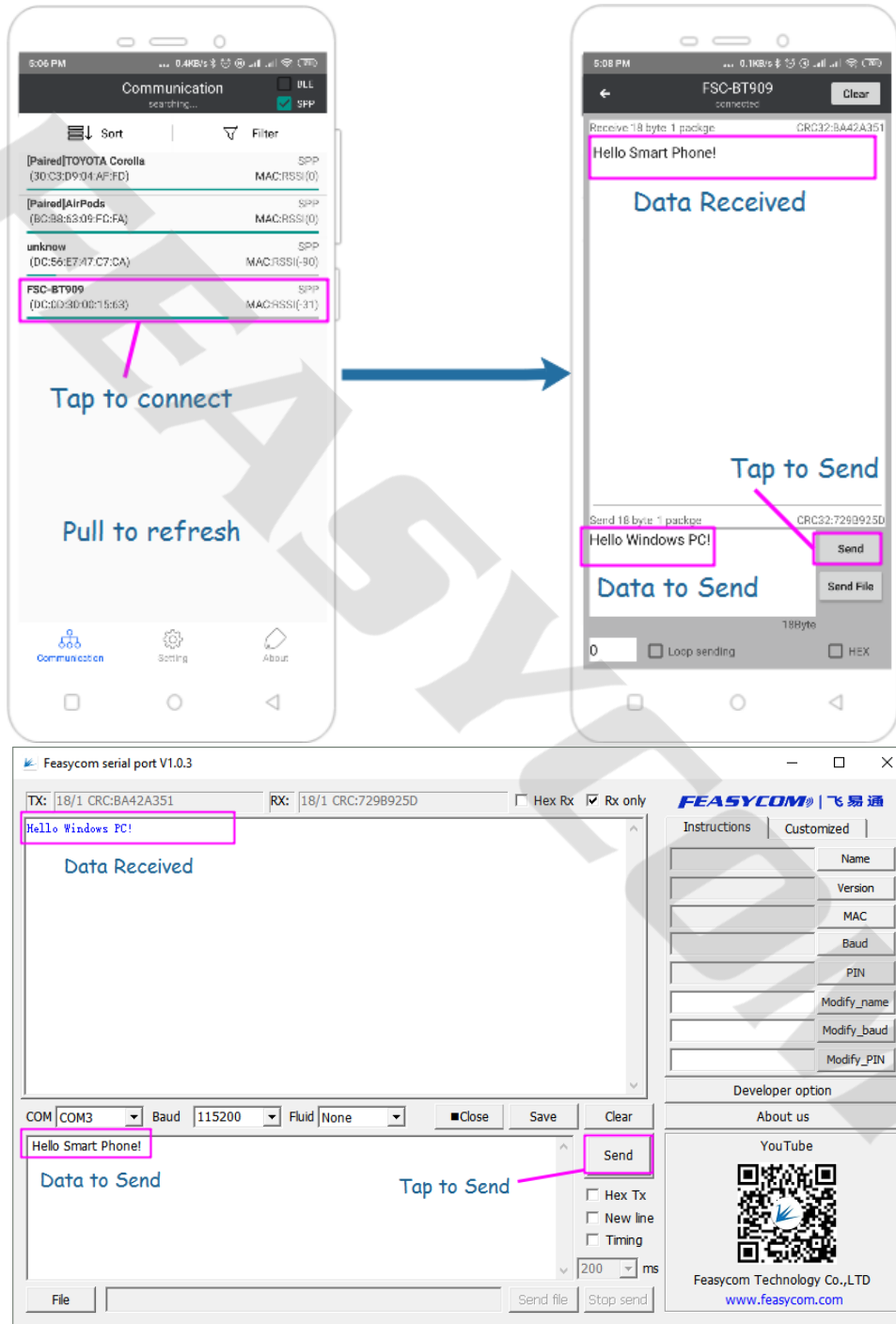
4.1 Operating Procedure

- Follow Common Setup Procedure in Chapter 3. Prepare Android device.
- FSC-BP109 works in SPP-enabled mode by default.
- Install FeasyBlue from Google Play app store, make sure FeasyBlue have permissions for using the locations of Android device, turn on Bluetooth of Android device. Installation link for FeasyBlue app: <https://play.google.com/store/apps/details?id=com.feasycom.feasyblue>
- Open FeasyBlue on Android device, pull down to refresh, tap the specific device (recognize by name, MAC, RSSI) to connect it, if connection established, the LED on FSC- BP109 will stop blinking and the

status bar on the top of FeasyBlue app will show 'connected', input data into the Send edit box, and click 'Send', then the data in the Send edit box of Feasycom serial port will show up on Feasycom serial port.

- Input data into the Send edit box of Feasycom serial port, and click 'Send', then the data in the Send edit box of Feasycom serial port will show up on FeasyBlue.

4.2 Operating Example

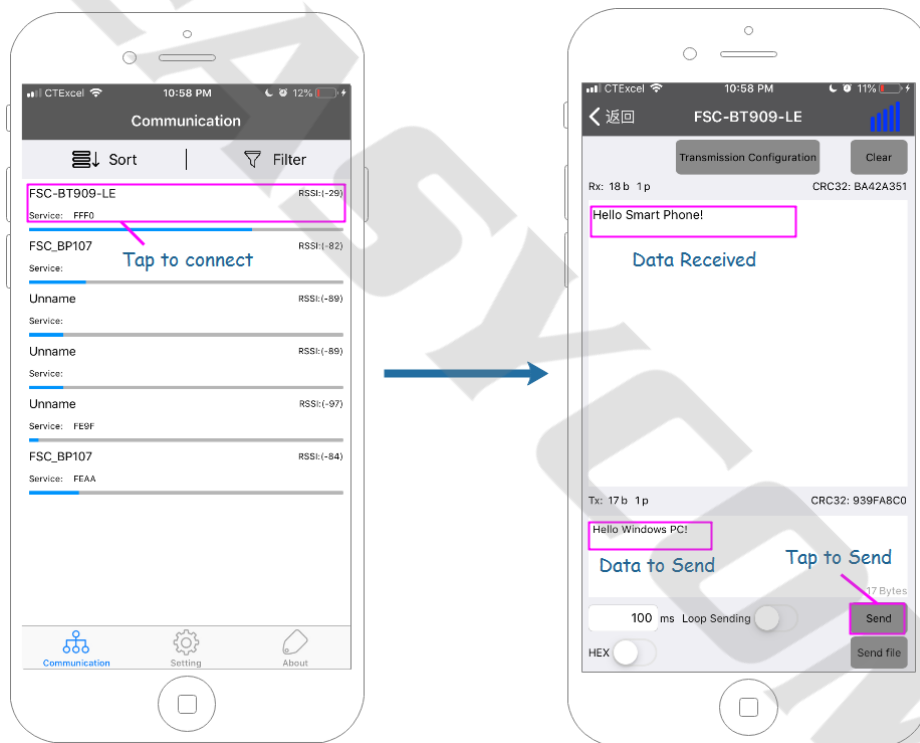


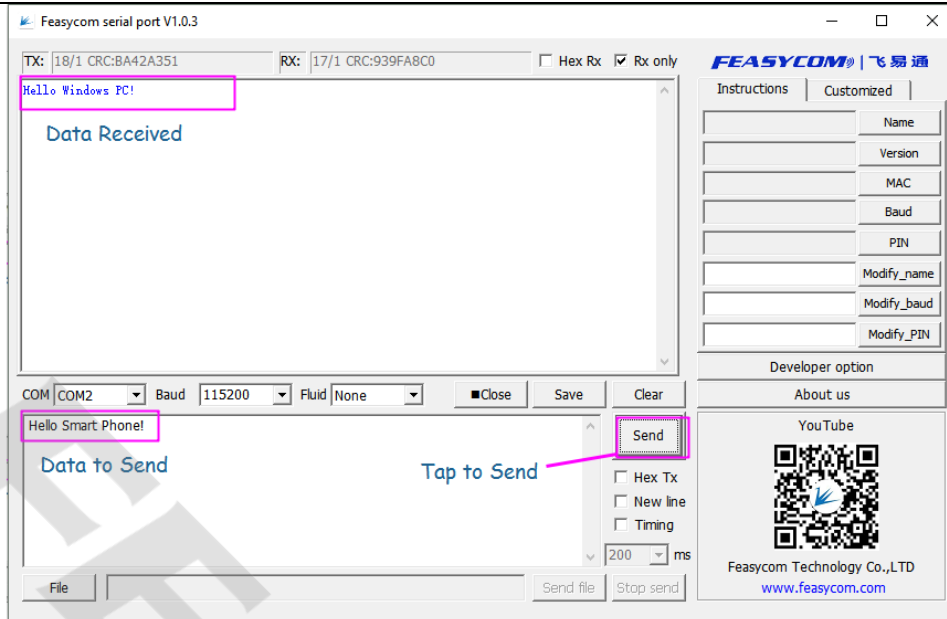
5. GATT Profile (BLE)

5.1 Operating Procedure

- Follow Common Setup Procedure in Chapter 3. Prepare iOS device.
- FSC-BP109 works in BLE-enabled mode by default.
- Install FeasyBlue from iOS App Store, turn on the Bluetooth of iOS device.
- Open FeasyBlue on iOS device, pull down to refresh, tap the specific device (recognize by name, RSSI) to connect it, if connection established, the LED on FSC-BP109 will stop blinking, input data into the Send edit box, and click 'Send', then the data in the Send edit box of FeasyBlue will show up on Feasycom serial port.
- Input data into the Send edit box of Feasycom serial port, and click 'Send', then the data in the Send edit box of Feasycom serial port will show up on FeasyBlue.

5.2 Operating Example





6. SPP Master-Slave

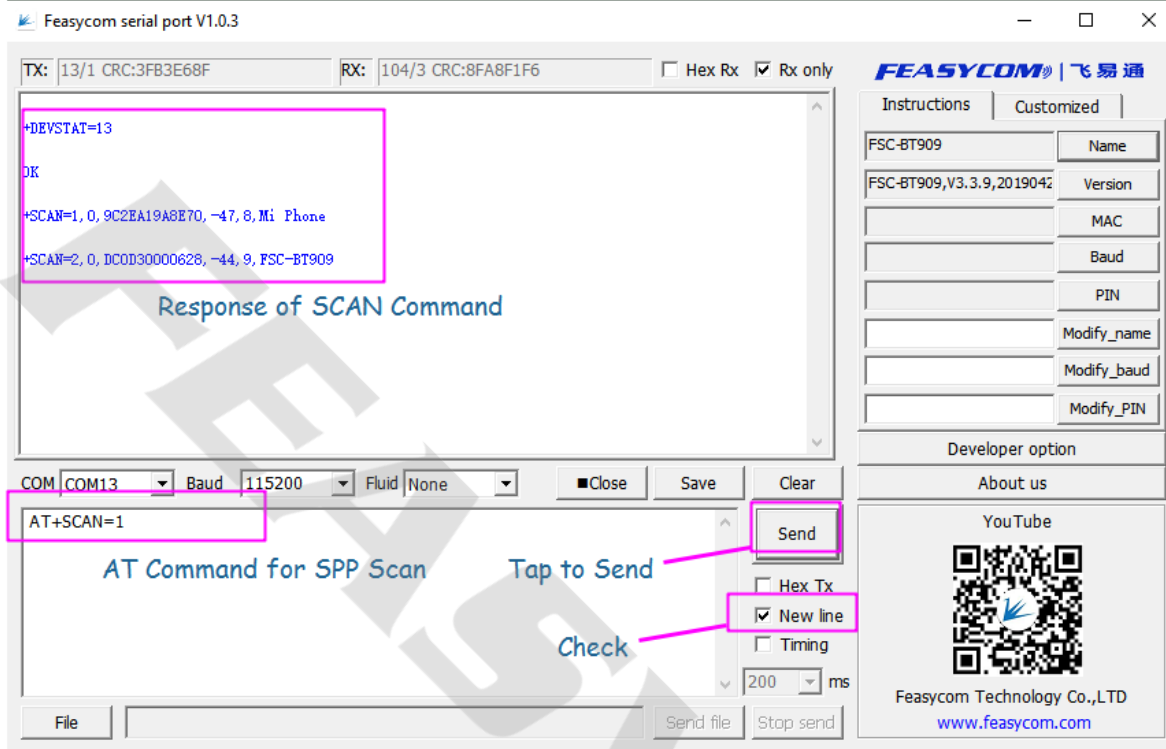
In this SPP application scenario, one BP109 act as the master role and another BP109 act as the slave role, present specific AT commands (AT+SCAN, AT+SPPCONN) when using as SPP master, just wait for incoming connection when using as SPP slave.

6.1 Operating Procedure

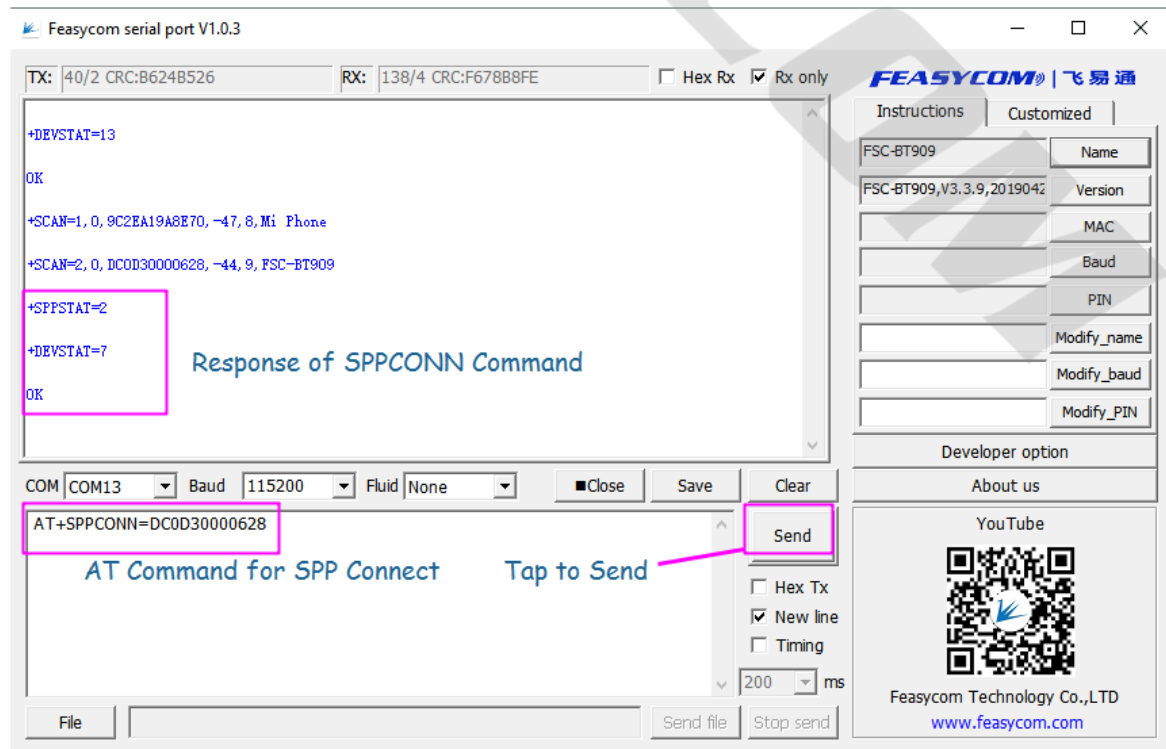
- Follow Common Setup Procedure in Chapter 3. Prepare another BP109.
- FSC-BP109 works in SPP-enabled mode by default. In this example, for both master and slave, every bytes of AT commands and data are sent to BP109 through Feasycom serial port app.
- Open another Feasycom serial port app for BP109 slave, select the correct COM, leave the other COM port settings (Baud, etc) as default if you didn't change them before, click 'Open' to open COM port.
- On the master side, Check the 'New Line' box on Feasycom serial port to automatically add CR and LF to the end of every AT command, send '**AT+SCAN=1**' to BP109 master, get the MAC address of BP109 slave from the scan results, for example, **DCOD30000628** is the MAC address of BP109 slave when citing '**+SCAN=2,0,DCOD30000628,-44,9,FSC-BT909**' in the results, send '**AT+SPPCONN=DCOD30000628**' to BP109 master, then the BP109 master will create SPP connection with BP109 slave.
- Input data into the Send edit box of one Feasycom serial port, and click 'Send', then the data will show up on another Feasycom serial port.

6.2 Operating Example

Step1: Scan Nearby Devices



Step2: Connect to Specific Remote Device



Step3: Data Transfer

