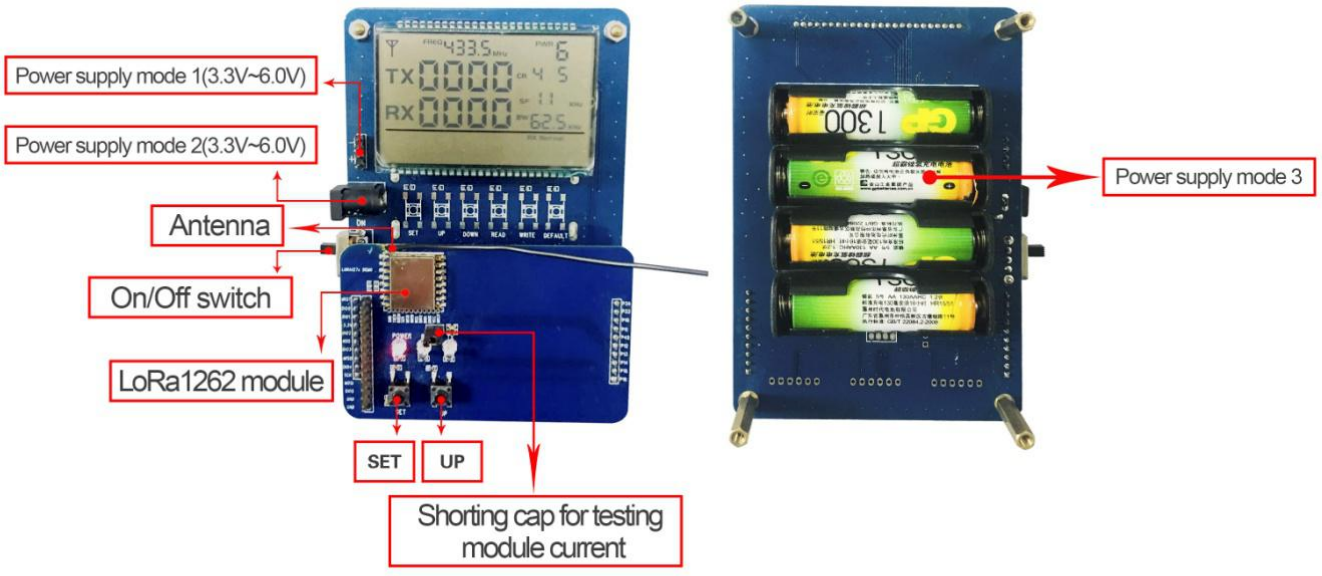
LoRa1262 wireless module demo board function tutorial

1、LoRa 1262 demo board function introduction

1.1. Demo board introduction:

The LoRa wireless module of LoRa1262 is a hot product of our company. Its core chip adopts Semtech SX1262 RF chip. The lora1262 wireless module antenna switch is integrated and controlled by the chip, which saves resources of external MCU. The working frequency band is: 433/470 /868/915 MHz. Below is an introduction to our Demo board.



Only one of the three power supply methods can be selected

1.2 Function Description

The demonstration board of LoRa1262 wireless module can easily observe the SPI communication between MCU and wireless module with our sample program, and can use this development board as a standard signal source without professional RF instrument to debug the customer's development program. Can greatly shorten the product development cycle of software engineers. The parameters such as the frequency band, power, bandwidth, and speed of the wireless module can be set in the demo board.

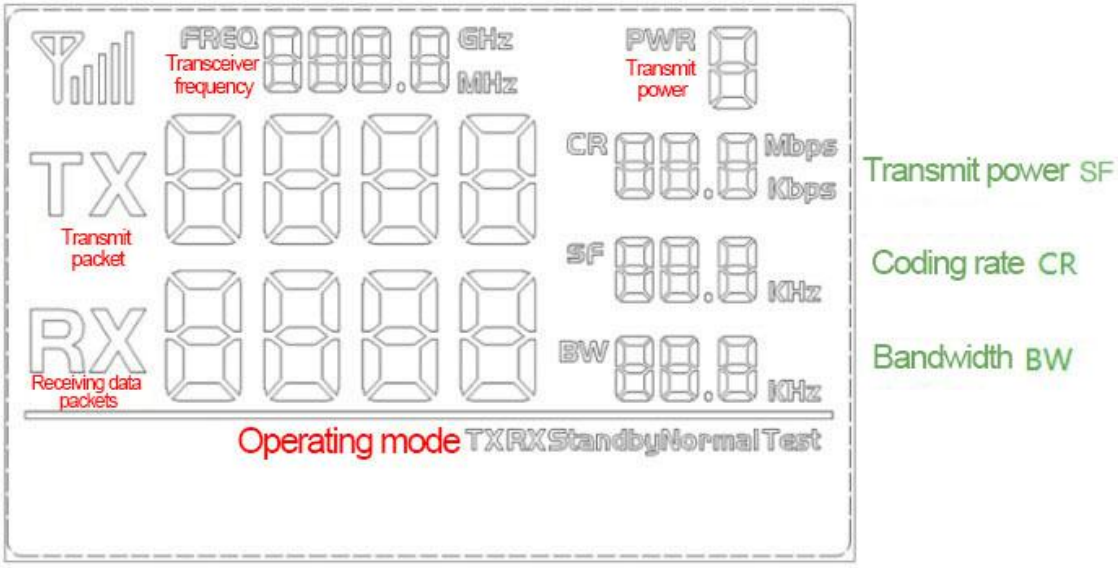
1.3 Button Features

There are two buttons on the demo board: SET button, UP button.

Button	Features
SET button	Press the button to enter the setting mode. If the last parameter is set, the button will jump out of the setting mode.
UP button	In the setting mode, press the button to modify the corresponding setting parameters.

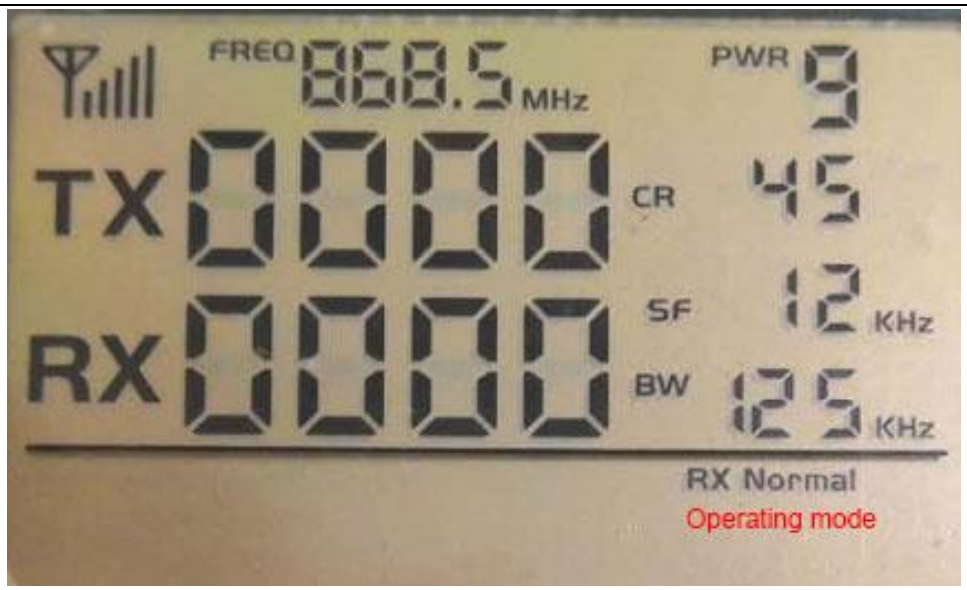
1.4 Operation method:

Normal power supply, toggle the power switch, the main interface will appear on the LCD screen of the ranging demonstration board. The main interface displays parameters such as TX, RX, FREQ, PWR, CR, SF and BW. Among them TX and RX represent the LoRa1262 wireless module communication is to transmit data packets, receive data packets, can not be modified. FREQ, PWR, CR, SF, and BW are frequency band, power, coding rate, propagation factor, and bandwidth, respectively. The setting method is as follows: SET key selection needs to modify parameters, such as modify power, SET key selects PWR, up key can adjust power size, power selection range is: 0-9, adjust parameter determination, press SET key, will jump to next need The parameters are modified and the power parameters are modified. (Note: FLASH is included internally, and all set parameters can be saved when powered down.)



(SX1262 demo board LCD interface analysis)

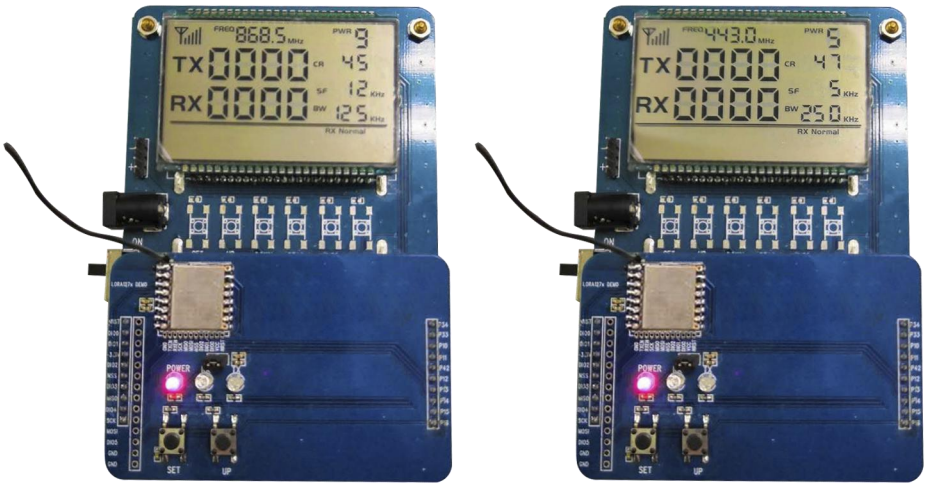
At the bottom of the main interface is the working mode. There are five working modes, RX-Normal, TX-Normal, TX-test, RX-test and standby. RX-Normal and TX-Normal are the receiving mode and the transmitting mode respectively. TX-Normal, TX-test, RX-test are test modes, and standby is sleep mode. Modify the operation mode: SET button enters the working mode, UP button selects the working mode, and finally press the SET button to confirm the working mode. If you do not need to modify the working mode, press the SET button to skip.



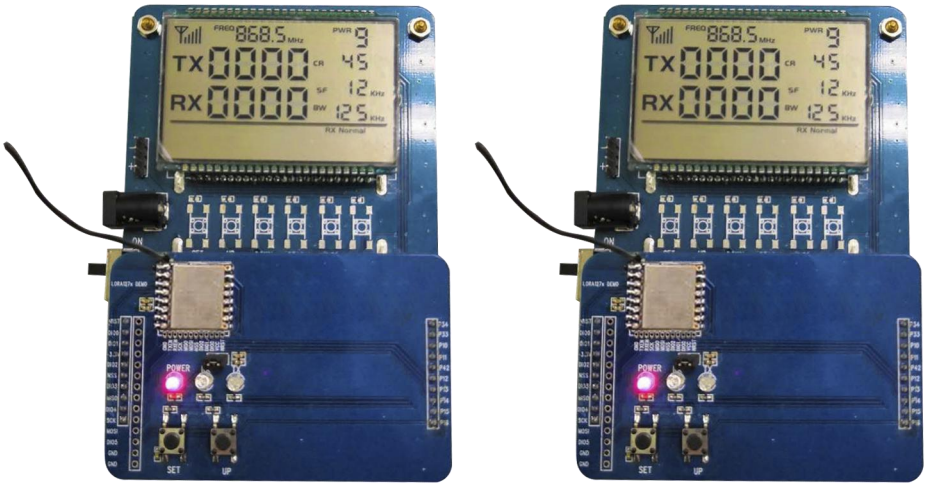
（Main interface working mode location map）

2.LoRa1262 wireless module demonstration board communication test method

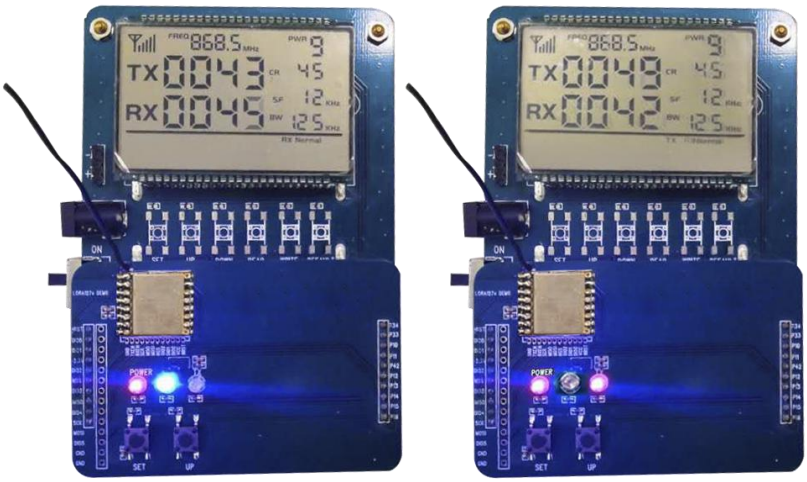
2.1 Prepare two LoRa 1262 demo boards



2.2 Set the parameters of the two LoRa1262 demo boards to the same.



2.3 Set the working mode of one LoRa1262 demo board to: RX-Normal, and set the other working mode to: TX-Normal. At this time, observe the TX and RX on the LCD screen, and the number of digits increases continuously, and the communication is successful. (The red light indicates that the transmission was successful once, and the blue light indicates that the reception was successful once)


868.5
TX 0043
RX 0045
868.5
TX 0049
RX 0042