

Demo Board User Manual





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1. General description

DEMO_SX12M Demo board is plug and play,can directly demostrate the module hardware performance including TX output power, current, RX sensivitity, quiescent current, frequency & RF range,etc.

DEMO board is equipped with rechargable battery holder(LC16340 1300mAh, the client need to buy the battery locally) and Mini USB socket, which enables power supply by both USB and battery.DEMO board has the buzzer & 2 LEDs indication, tact switch operation.

The demo board can be used to quickly evaluate the module function, with slight changes it can be directly applied into your product design.

DEMO_SX12M is default configured based on the ordered adapter board. If the configuration software need to change, pls contact with us.

2. Evaluation board features

- 1. Built-in 1P1T power switch;
- 2. Built-in Mini USB socket, 5V USB power supply or charging

3. Built-in LC16340 rechargeable battery holder, which can be powered by batteries and is convenient for field testing.

- 4. Single touch switch Function Operation
- 5. Under mode 1, TX output power, frequency, frequency deviation and TX current can be tested.
- 6. Under mode 2, RX sensitivity can be tested.
- 7. Under mode 3,4,5, it demostrates the module's transmit/receive function and RF range.
- 8. Build-in buzzer indication.
- 9. 2 LEDs(red & green) indication for different work modes.
- 10. LED charger indication.
- 11. SMA connector & SMA antenna.
- 12. Fit to all LJ module's adapter board.



3. Hardware & dimension





3.1. Dimension

Main Board: DEMO_SX12M (61.94mm×65.52mm); Adapter board: ADP-LJ1269H-433(29.59mm×40.2mm)

3.2. Power supply

3.7V-5V (recommend CR123A LC 16340 1300mAh 3.7V lithium battery)

4. Operation specification

4.1. Modes description

Mode 1: Long transmission mode, used to test TX performance including output power, frequency, TX current.

Mode 2: Long receiving mode,

used to test RX performance including RX sensitivity, Quiescent current.

Mode 3: transceiver mode,

In transceiver mode, the module transmit & receive, which demostrate the transceiver function and RF range. (For transceiver module use only)

Mode 4: receiver mode,

In receiver mode, the module receives, which demostrate the receiving function and RF range. (for receiver module use only)

Mode 5: transmitter mode,

In transmit mode, the module transmit, which demostrate the transmission function and RF ragne. (for transmiter module use only)



4.2 5 modes operation instruction

—Direct power on ——> mode 1	
Press&hold the button when power on	hear Bi soundbefore 2s, release the buttonmode 2 hear Bi soundafter 2s,hear Bi soundrelease the buttonmode 3 hear Bi soundafter 2s,hear Bi soundwait 1s, release the buttonclick the button oncemode 4 hear Bi soundafter 2s,hear Bi soundwait 1s, release the buttonclick the button twicemode 5

- 1. Mode 1:
- In long transmission mode, red LED light is on. When press the tact switch for 2s, the module don't transmission and red LED light flash once every second.
- 2. Mode 2:
- In long receiving mode, green LED light is on. When press the tact switch for 2s, the module enter into sleep, no receiving, green LED light flash once every second.
- 3. Mode 3:

In transceiver mode,

- > when transmit, red LED light is on, when receive, green LED light is on.
- > When transmit and receive successfully, RED LED and Green LED flash alternatively.
- > When RED light keep flashing once every second, it tells the RF communication failed.
- 4. Mode 4:
- > When receiving standby, the green LED light flash once every second.
- When the module receive and transmit well, the green LED and red LED will flash alternately if RF communication is built well.
- 5. Mode 5:
- > In transmitter mode, the red LED light is on.



5. Ordering information

Kit contents:

- 2 DEMO_SX12M Demo board
- 2 ADP-LJ1269H-433 Ad

Adapter board (please change the adapter board Part number for different module)

ADP - LJ1269H - 433





6. Contact us

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