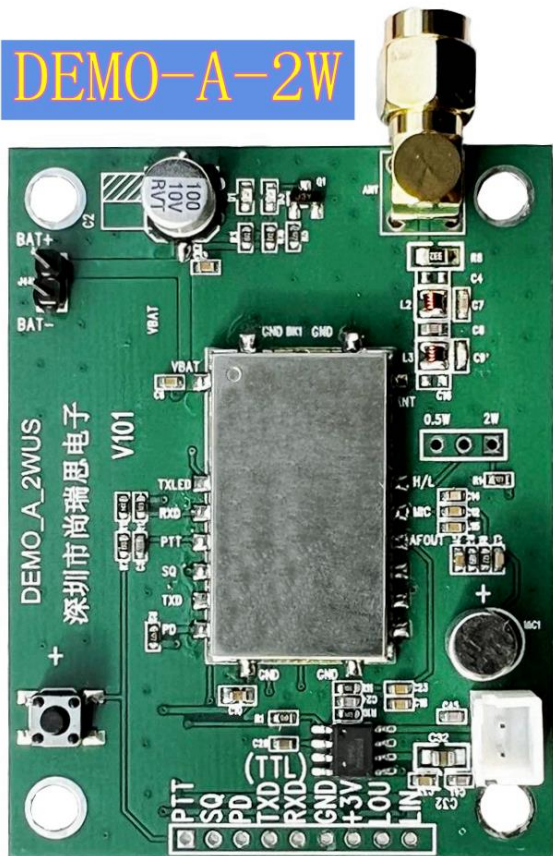


**DEMO-A- 2W**

**Walkie talkie module**

**Demo board/ Development board**

DEMO-A-2W



01

DEMO-A outline

02

Development interface

03

Voice intercom

04

Parameter setting

05

Data transfer

## Fast evaluate

Just mount Antenna,  
Speaker ,Battery ( recommend 3.6-  
4.2V ) ,it can works.

## Voice intercom demo

Just press PTT key , then can make  
voice intercom

## Data transfer demo

USB2UART tools connected to PC and  
demo board , then you can send SMS via  
UART software.

01

OPTION

02

OPTION

03

OPTION

04

OPTION

05

OPTION

## Parameter setting demo

USB2UART tools connected to PC and  
demo board, you can set these  
parameter on PC UART software, such  
as Volume, Mic sensitivity, VOX level,  
SQL level , etc.

## Fast develop

Demo board reserved all  
interface , it is easy for  
connect user board for  
product developlment.

**DEMO-A-0W5**

**For 0.2W/0.5W module demo**

SR-0W5U, SR-0W5V,  
SR-105U, SR-105V  
SR-102U;

**DEMO-A-2W**

**For 2W Module demo**

SR-2WUS, SR-2WVS,  
SR-120U, SR-120V

**DEMO-A-1W**

**For 1W module demo**

SR-1WU, SR-1WV,  
SR-110U, SR-110V  
SR-350P;

**DEMO-A-5W**

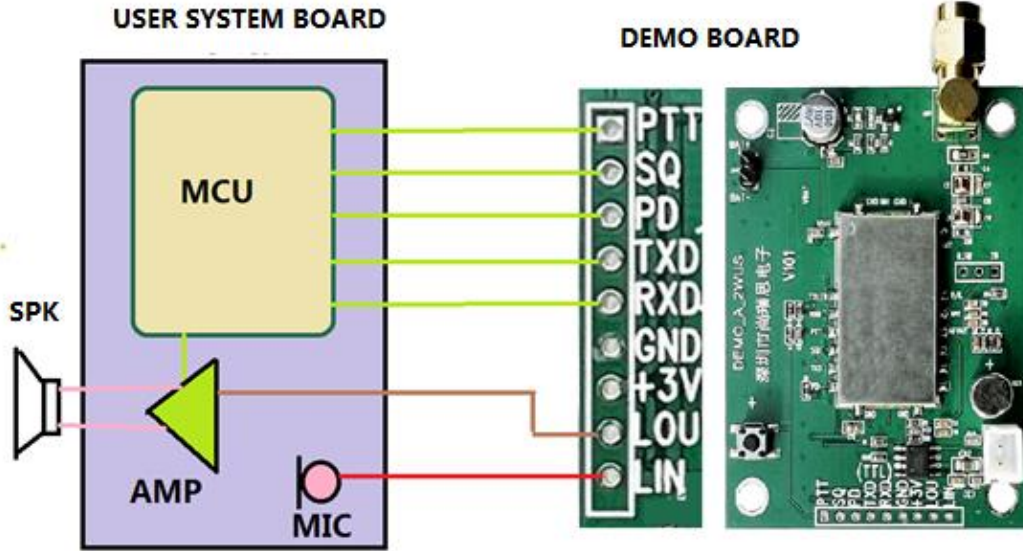
**For 5W module demo**

SR-150U, SR-150V



## 2-1 Development interface

### Development interface



01

TXD RXD GND

Module para setting interface

02

PD

MCU control module ON/OFF

03

PTT

MCU control module transmit

04

SQ

Detect if received a valid RX signal

05

MIC

User mic into demo board

06

AF

Audio to user board

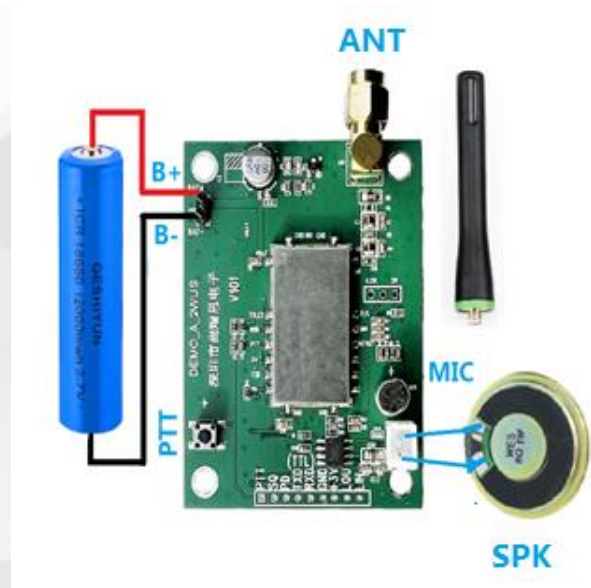
3-1

## Voice intercom demo

# DEMO-A-2W



A board



B board

1

### Preparation

Mount battery, ant, speaker

2

### Voice intercom

Press PTT key for talk;  
Release PTT key for listen

3

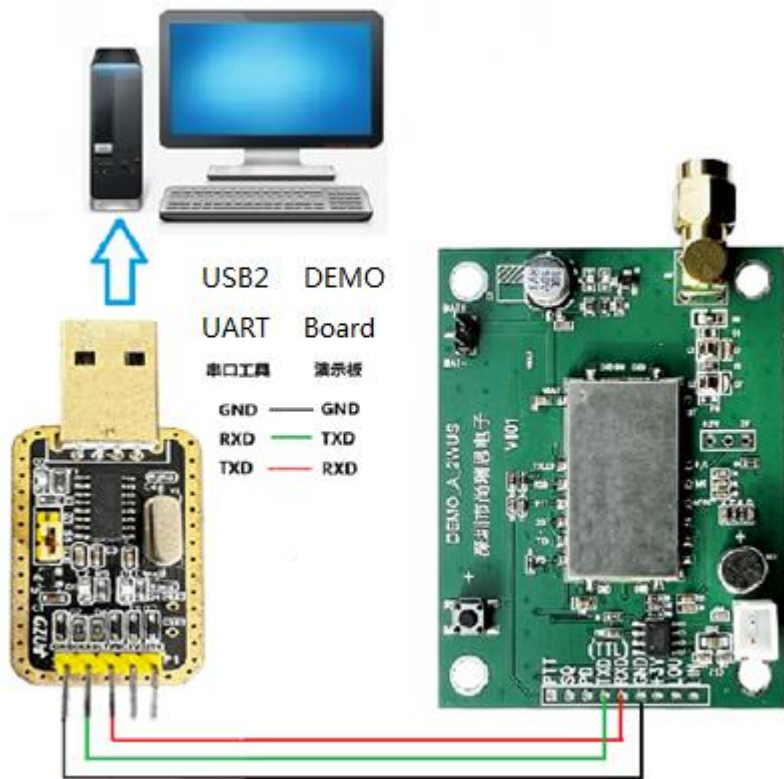
### squeaking

Keep A, B board far away

4

### Not intercommunicate

Check power supply ;  
Make A,B has same Frequency  
And CTCSS/CDCSS



1

## UART connection

Board **TXD,RXD** connect with  
Tools **RXD,TXD** (crossing-link) ;  
UART is TTL ;  
9600 , 8 , N, 1

2

## U S B connection

Connect Tools USB with  
PC USB port

3

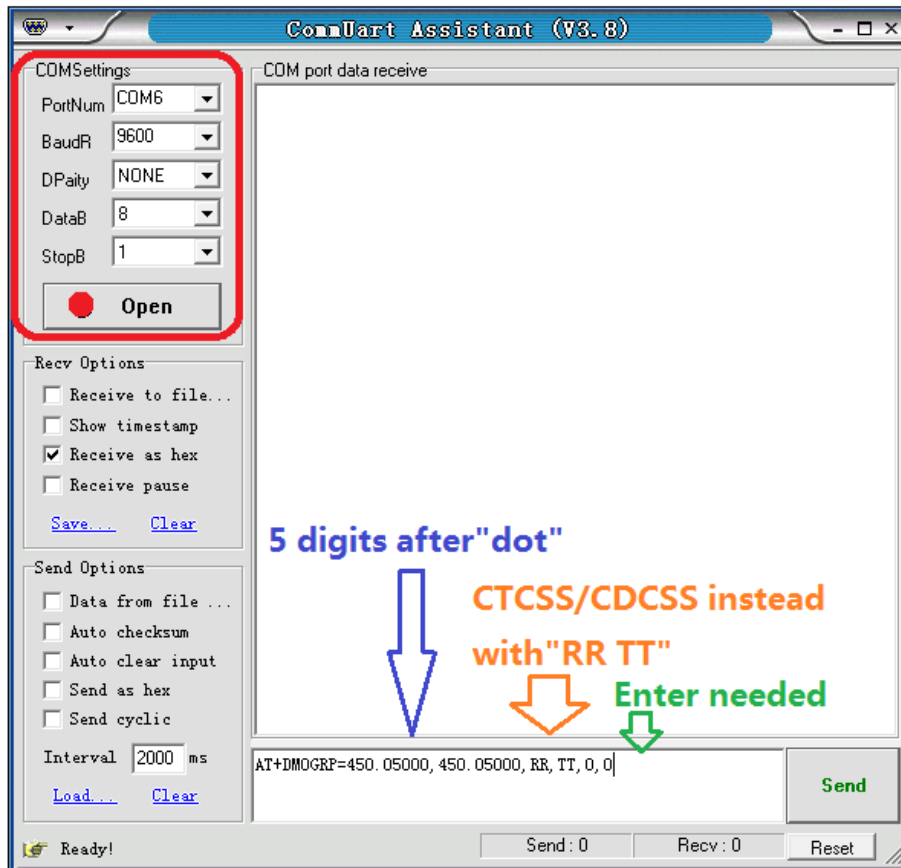
## Board power supply

3.3-5V, recommend 3.6-4.2V

4

## Setting kept

After setting, parameter can be kept after power down



01

## Parameter setting

Must add "enter" at the end of command;

02

## For frequency

Must be 5 digits after "dot"

03

## CTCSS/CDCSS

It is "HEX", in TEXT input state, instead it with "RR TT"

04

## UHF, VHF different

UHF, Freq: 400M-470M

VHF, Freq: 136M-174M



## 4-3 Parameter setting

COMSettings

PortNum COM6

BaudR 9600

DPaiiy NONE

DataB 8

StopB 1

Open

Recv Options

Receive to file...

Show timestamp

Receive as hex

Receive pause

Save... Clear

Send Options

Data from file...

Auto checksum

Auto clear input

Send as hex

Send cyclic

Interval 2000 ms

41 54 2B 44 4D 4F 47 52 50 3D 34 35 30 2E 30 35 30 30  
 30 2C 34 35 30 2E 30 35 30 30 2C 52 52 2C 54 54 2C  
 30 2C 30 0D 0A

RR TT

Send: 0 Recv: 0 Reset

eg. CTCSS is 67.0HZ,  
 Its coding should be HEX  
 70 06, select "Send as hex",  
 find the "RR TT" related HEX  
 "52 52 54 54"  
 instead it with "70 06"

COMSettings

PortNum COM6

BaudR 9600

DPaiiy NONE

DataB 8

StopB 1

Open

Recv Options

Receive to file...

Show timestamp

Receive as hex

Receive pause

Save... Clear

Send Options

Data from file...

Auto checksum

Auto clear input

Send as hex

Send cyclic

Interval 2000 ms

41 54 2B 44 4D 4F 47 52 50 3D 34 35 30 2E 30 35 30 30  
 30 2C 34 35 30 2E 30 35 30 30 2C 70 06 2C 70 06 2C  
 30 2C 30 0D 0A

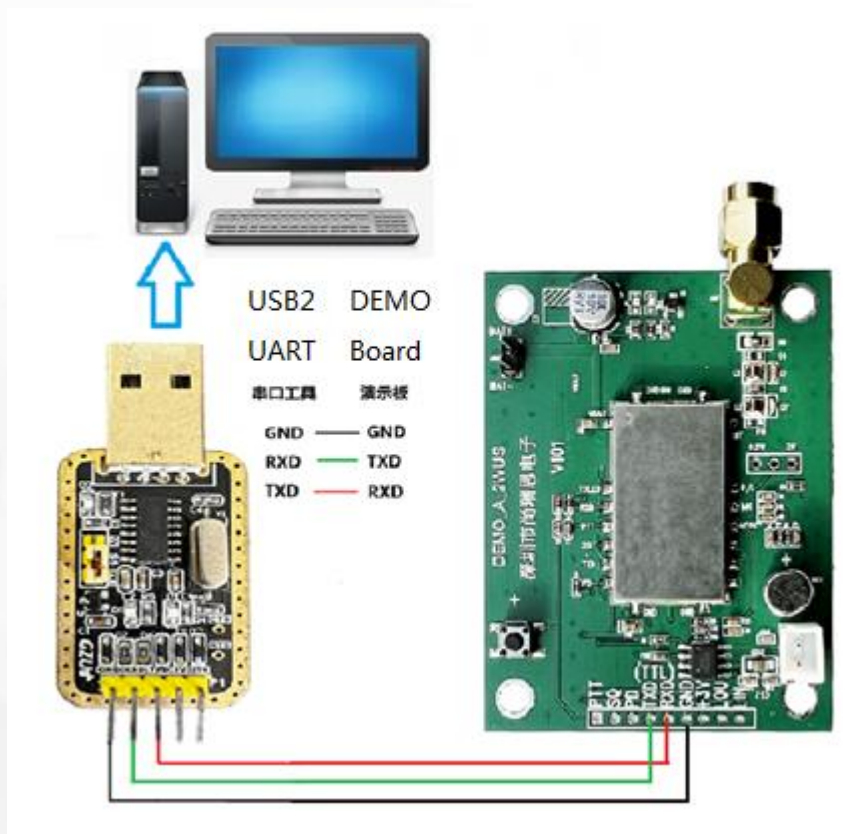
RR TT

Send: 0 Recv: 0 Reset

+DMOGRPP:0 module response  
 :0 OK  
 :1 NG

after instead, The correct  
 CTCSS/CDCSS code is 70  
 06 as below;  
 then "send"

Command response : 0 OK  
 : 1 NG



01

## UART connection

Board **TXD,RXD** connect with  
Tools **RXD,TXD** (crossing-link) ;  
UART is TTL ;  
9600 , 8 , N, 1

02

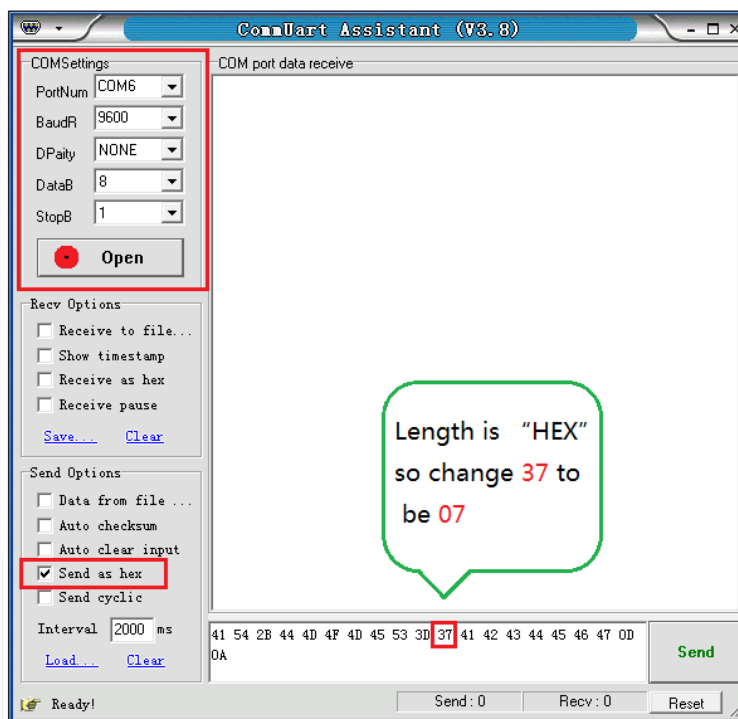
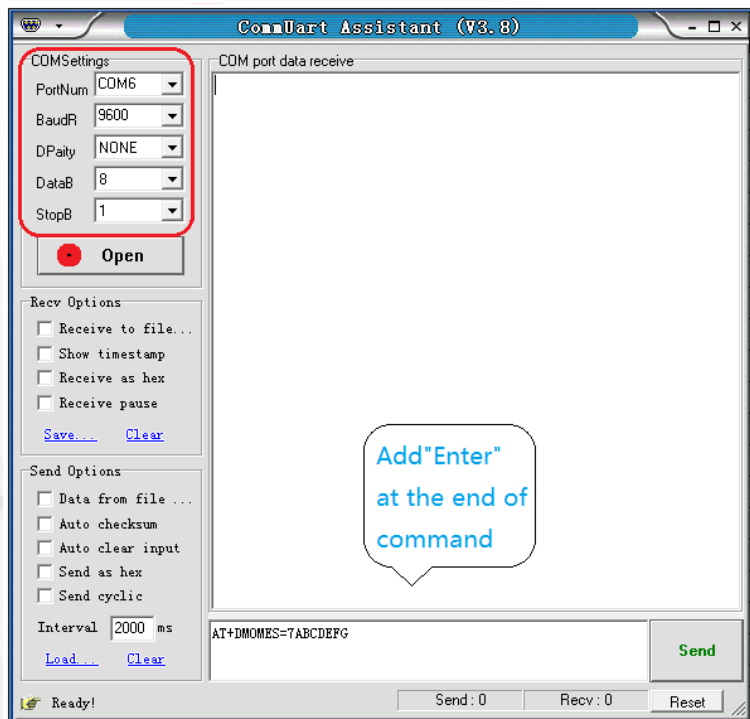
## U S B connection

Connect Tools USB with  
PC USB port

03

## Data transfer/SMS

Command refer to module  
spec.



01

Input SMS

An "enter" is must

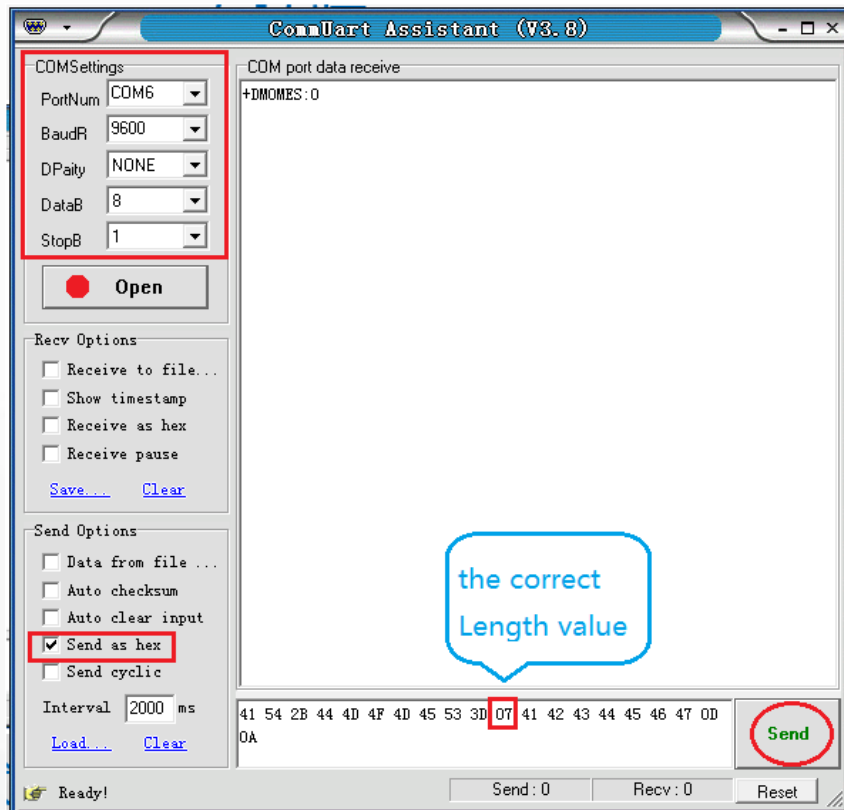
02

Length

The SMS LENGTH is HEX  
The LENGTH should equal the SMS content quantity

1 ) Type command with TEXT

2 ) Then switch to "send as hex"



1 ) Change “37” to be “07”, then “send”

01

## Length

LENGTH is “**HEX**” ,  
Change TEXT “7” to be HEX”07

02

## Response

: 0 OK  
: 1 NG

03

## Comment

The response “:0” just means the TX side finished the message sending, it doesn’t mean the RX side can get the message;

01

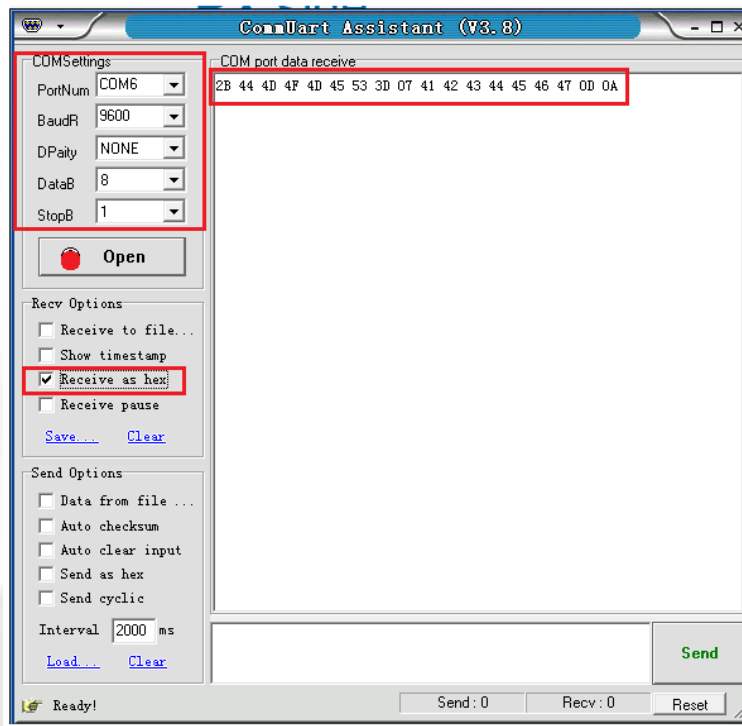
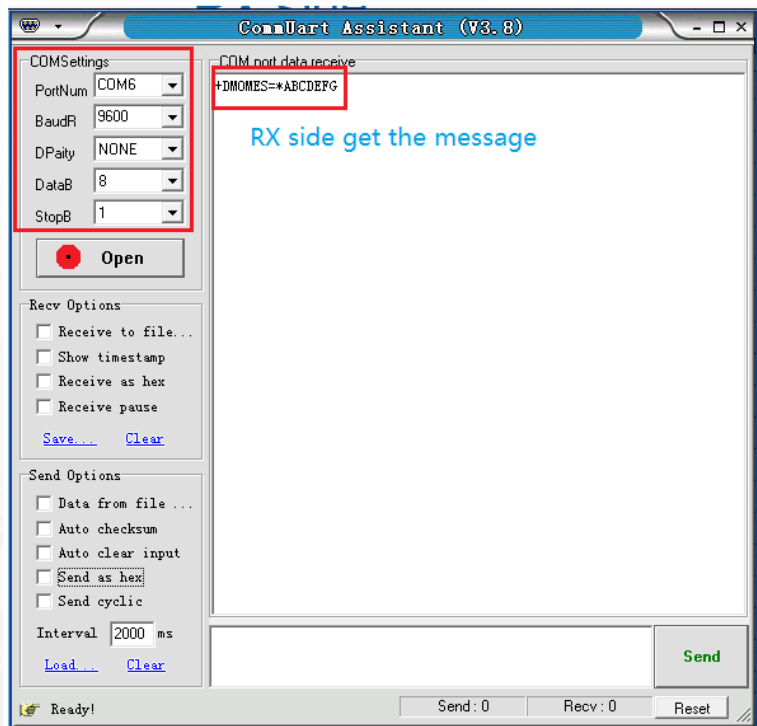
## RX SMS Upload

RX side received message,  
it sending the message to  
HOST/MCU automatically

02

## Response

RX side no need send  
response to module ;



## **HARDWARE SUPPORT**

Application circuit  
package  
Application notes

## **Software support**

Demo code

Service

## **Solution support**

Assist solution design  
Technology consulting

## **Custom order**

Frequency  
power  
size  
function

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