

## UHF Demo Program User Guide

Connected reader with PC through RS232 com port and power on the reader

Run the demo program from the path : \demo program\delphi\UHFReader18demomain.exe

other demo program version as follow :

: \demo program\Csharp

: \demo program\VB.net

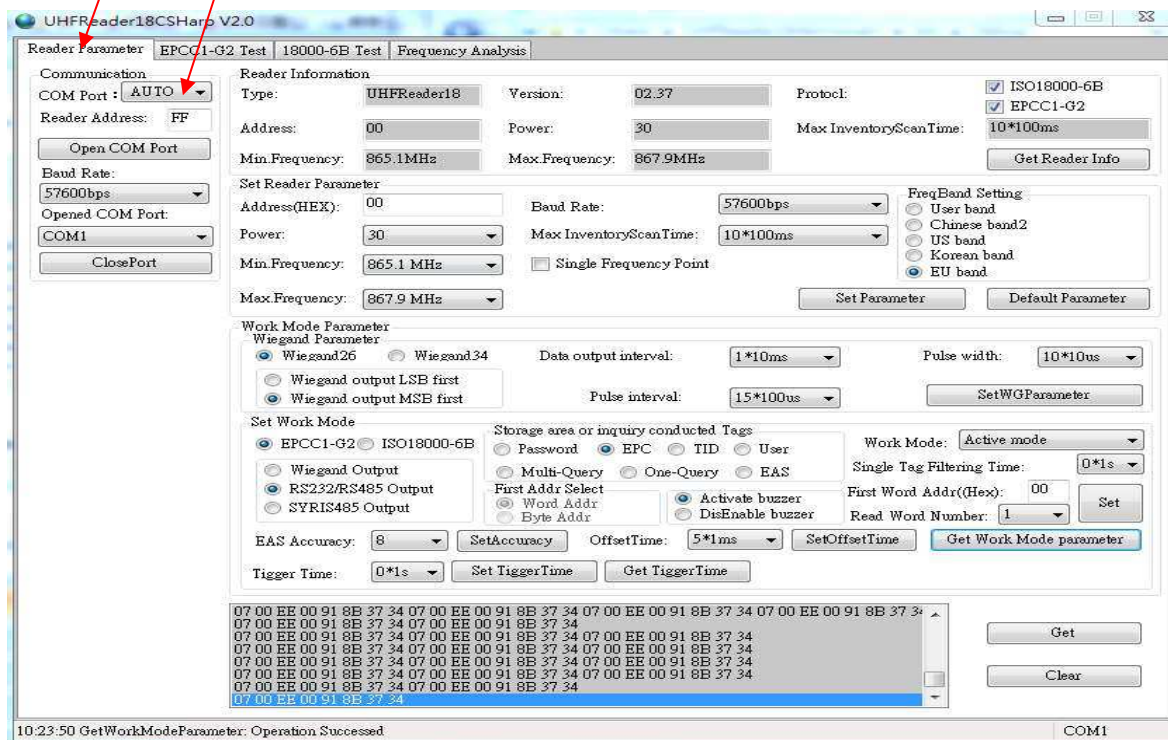
: \demo program\VC

Click on "Reader Parameter" from menu bar

Select correct "COM port" and click on "Open COM Port"

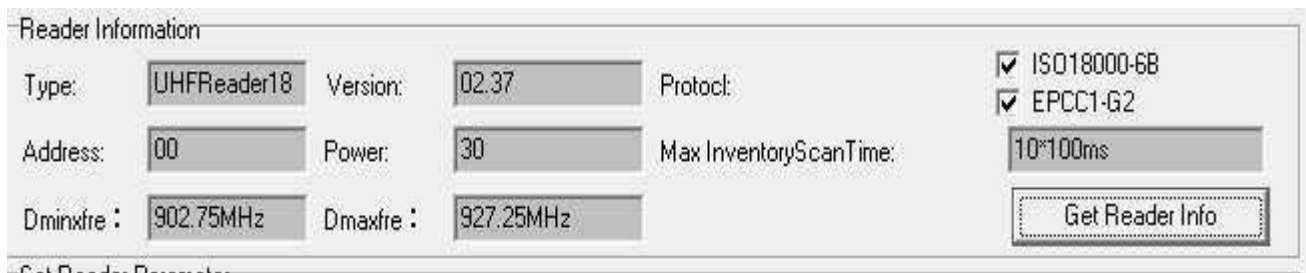
Remark : "AUTO com" may not work with some PC's com port , pls select the correct "com port" number for operation

**Remark :** Make sure No UHF tag within the detection range when open the com port, otherwise it may cause "serial communication error" message.



## Reader Information

Click on "Get Reader Info" to get Reader information



## Set Reader Parameter

Set Reader Parameter

Address(HEX):  Baud:

Power:  Max InventoryScanTime:

Dminxfre:  ☐ Single Freq

Dmaxfre:

FreqBand

☐ User band

☐ Chinese band2

☒ US band

☐ Korean band

☐ EU band

**Address** : Reader address

**Power** : reader power from 0-30 level

**Dminxfre** : select Min. UHF frequency

**Dmaxfre** : select Max UHF frequency

**Baud** : select com port baud rate

**Max InventoryScanTime** : select Scan time (e.g. 10\*100ms = 1 second / scan)

**Single Freq.** : set single Frequency

### FreqBand :

User Band – can be defined by user (902.6Mhz to 927.4Mhz)

Chinese Band2 – 920Mhz – 925Mhz

US Band – 902.75Mhz - 927.75Mhz

Korean band – 917.1Mhz – 923.3Mhz

EU band – 865.1Mhz – 867.9Mhz

### Remark :

**US reader version** can define the freq. range from 902.6Mhz to 927.4Mhz

**EU reader version** can select the "EU band" only and define the freq. range from 865.1Mhz to 867.9Mhz

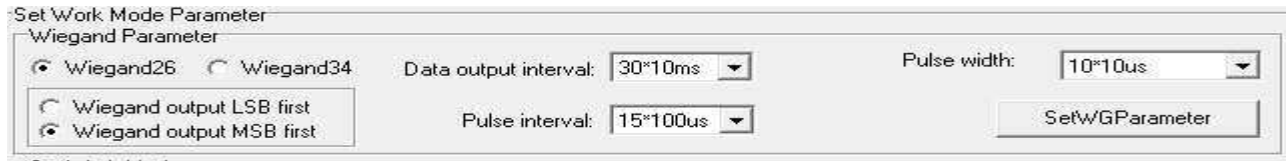
**Set Parameter** : save parameter value

**Default Parameter** : restore factory default setting

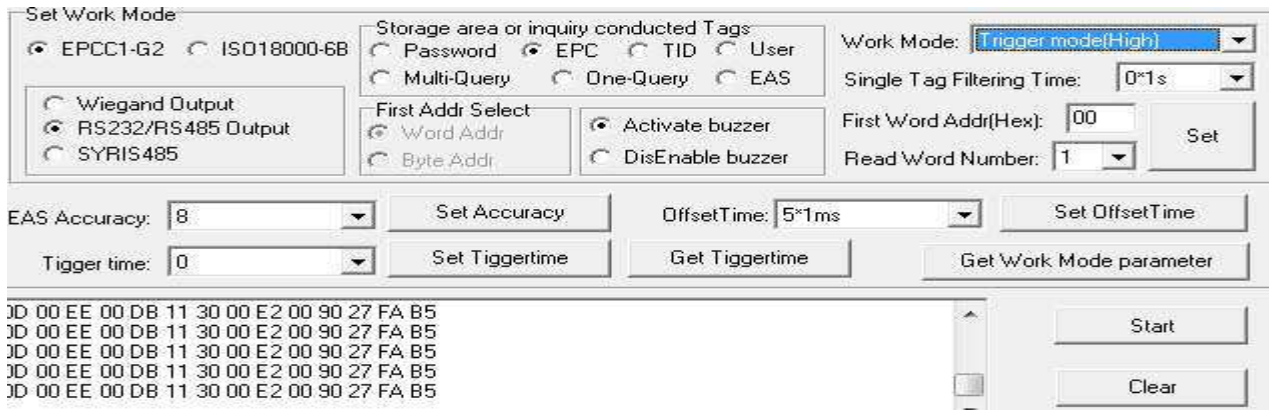
## Set Work Mode

Function : Select wiegand interface and parameter .

### SetWGParameter – Save setting



The 'Set Work Mode Parameter' dialog box is shown. It has a 'Wiegand Parameter' tab. Under this tab, there are two radio buttons: 'Wiegand26' (selected) and 'Wiegand34'. To the right, 'Data output interval' is set to '30\*10ms' and 'Pulse width' is set to '10\*10us'. Below the radio buttons, there are two more radio buttons: 'Wiegand output LSB first' and 'Wiegand output MSB first' (selected). To the right of these, 'Pulse interval' is set to '15\*100us'. A 'SetWGParameter' button is located at the bottom right.



The 'Set Work Mode' dialog box is shown. It has two tabs: 'EPCC1-G2' (selected) and 'ISO18000-6B'. Under the 'EPCC1-G2' tab, there are two radio buttons: 'Wiegand Output' and 'RS232/RS485 Output' (selected). Below these, there is a 'SYRIS485' radio button. To the right, there are two radio buttons: 'Password' and 'EPC' (selected). Below these, there are two radio buttons: 'Multi-Query' and 'One-Query' (selected). To the right of these, there are two radio buttons: 'User' and 'EAS' (selected). Below these, there are two radio buttons: 'Activate buzzer' (selected) and 'DisEnable buzzer'. To the right of these, there are two radio buttons: 'First Addr Select' and 'Word Addr' (selected). Below these, there are two radio buttons: 'Byte Addr' and 'DisEnable buzzer'. To the right of these, there are two radio buttons: 'Work Mode' (set to 'Trigger mode(High)') and 'Single Tag Filtering Time' (set to '0\*1s'). Below these, there are two radio buttons: 'First Word Addr(Hex)' (set to '00') and 'Read Word Number' (set to '1'). A 'Set' button is located at the bottom right. Below the dialog box, there is a text area showing the tag data: '0D 00 EE 00 DB 11 30 00 E2 00 90 27 FA B5'. To the right of the text area, there are two buttons: 'Start' and 'Clear'.

**Select UHF Tag type** - EPC-G2 or ISO18000-6B

**Select Output Interface** - wiegand , RS232 output or SYRIS485

### Storage area or inquiry conducted Tags

Select data memory (Password , EPC ,TID , User or Inventory )

**Activate or Disable buzzer**

### Work Mode :

#### Answer Mode :

Need send command to the reader for operation , select this mode for tag read/write testing

**Active Mode (default setting)** : read Tag automatically and output data as the parameter setting

**Trigger Mode (Low)** : reader is triggered by Trigger pin (Low)

**Trigger Mode (high)** : reader is triggered by Trigger pin (Low)

**SET** : save work mode parameter

**Get Work Mode Parameter** : Get current work mode parameter

## EPC – G2 Testing under Active Mode

[1] Select the work mode to "Active mode" and click on "Set" to save the parameter

[2] click on the "GetWork Mode parameter"

[3] click on "Start" to start the tag reading / click on "Stop" to stop the tag reading

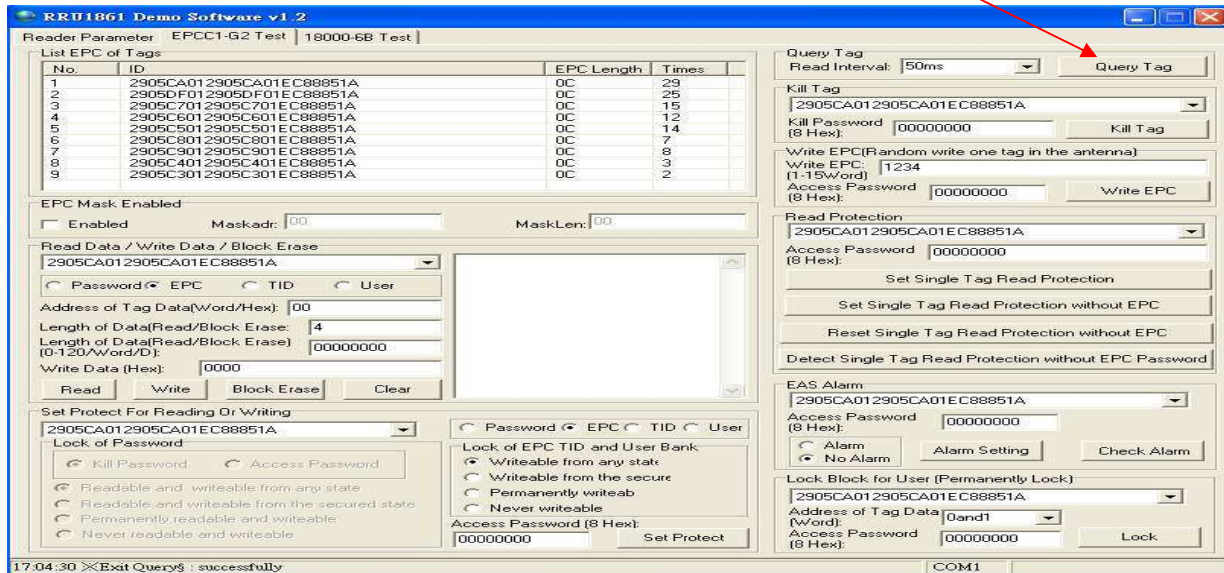
[4] place the EPC G2 card on the reader then the tag ID will be shown as follow :



The tag ID display is shown. It consists of a text area displaying the tag ID: '0D 00 EE 00 DB 11 30 00 E2 00 90 27 FA B5'. To the right of the text area, there are two buttons: 'Start' and 'Clear'.

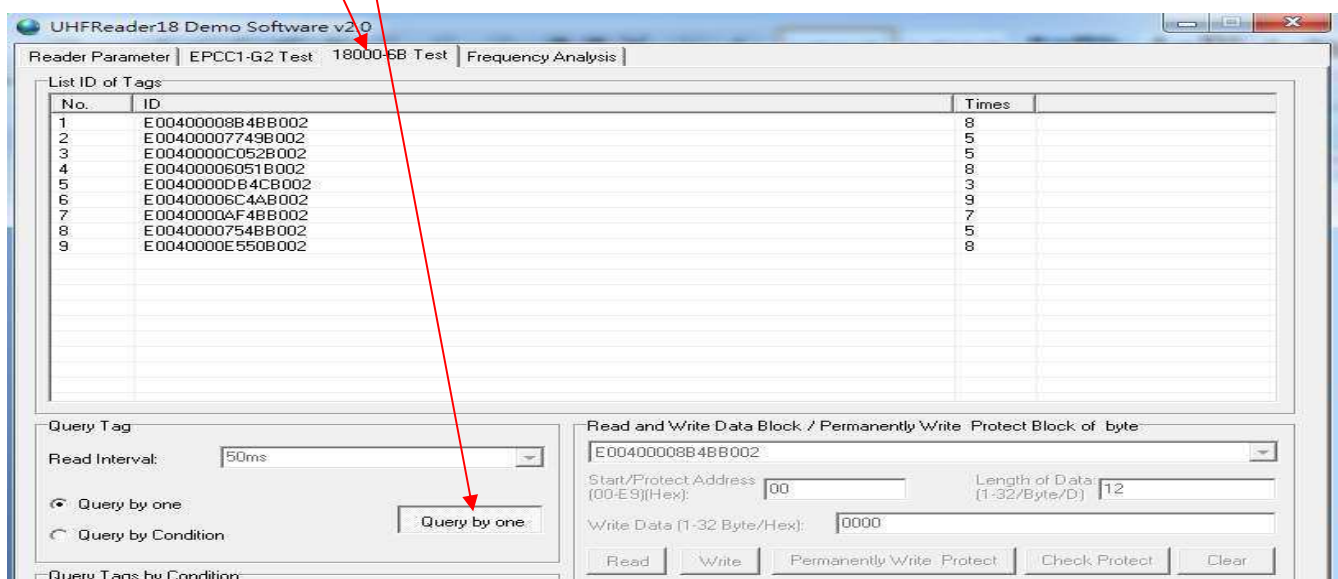
## EPC – G2 Testing under Answer Mode

- [1] Select the work mode to "answer mode" and click on "Set" to save the parameter
  - [2] click on "EPCC1-G2 Test"
  - [3] Click on "Query Tag" to start Tag reading
  - [4] place the EPC G2 card on the reader then the tag ID will be shown as follow :
- Click on "Query Tag" once again to stop Tag reading  
 Similar operation for other button (Press once start and Press again to stop)  
 Other read/write operation , pls refer to EPC-G2 datasheet

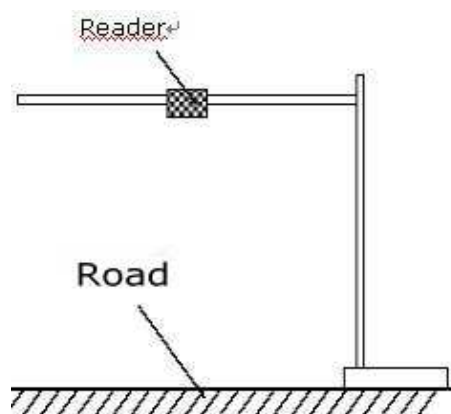
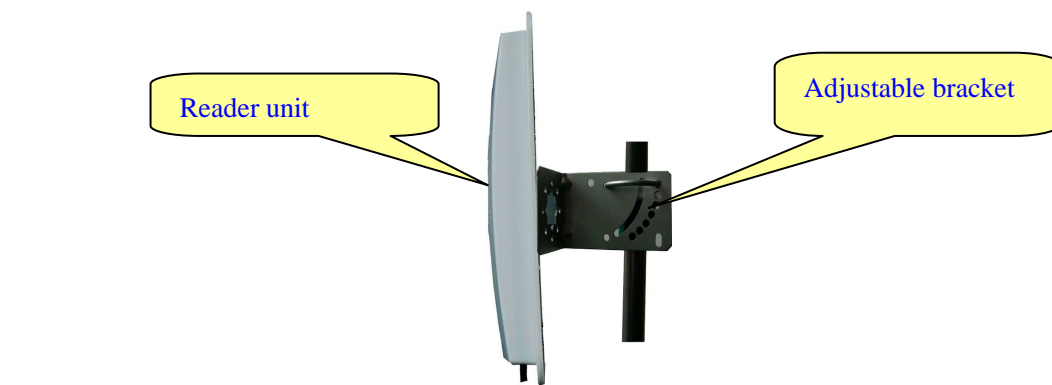


## ISO18000-6B Testing under Answer mode

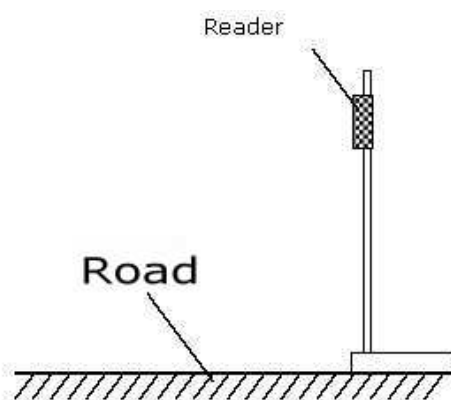
- [1] Select the work mode to "answer mode" and click on "Set" to save the parameter
  - [2] click on "18000 6B Test"
  - [3] Click on "Query by once" to start Tag reading
  - [4] place the 18000-6B card on the reader then the tag ID will be shown as follow :
- Click on "Query by once" once again to stop Tag reading



## Reader installation

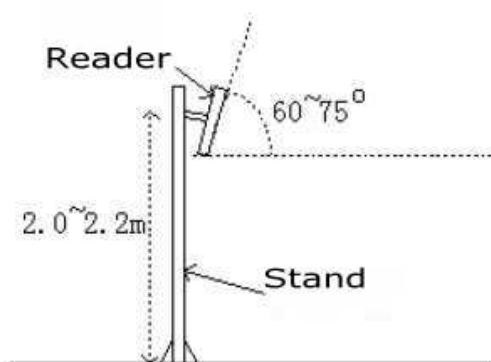


Horizontal installation



Vertical Installation

### Adjust the reader to get the best detection performance



When measuring or testing the reader's read range, make sure that the tag is properly oriented to the reader antenna, and for optimum performance, be sure the operator's finger is not within three inches of the tag's antenna surface.

Environment Interference will affect the reading distance.