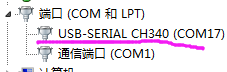
**Multiple Gas Detector Data Upload Software Operation Manual**

1. **Software installation**
   1. Open the installation pack. Click the below icon to install the driver of USB port to serial port.



After successful installation, when connecting the device to the PC through the USB port, the icon of conversion driver can be seen in the column of device manager in the computer control panel.



If the driver is not installed, the computer cannot recognize the USB interface, which makes the upper computer unable to use.

1.2 Click the below icon to install the software onto the computer.

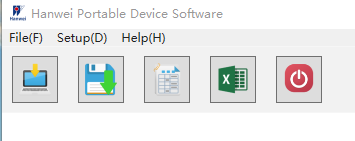


After successful installation, the desktop will display the software icon as shown in below picture:



1. **Software function**

2.1 Open the software and the main interface is show as below:



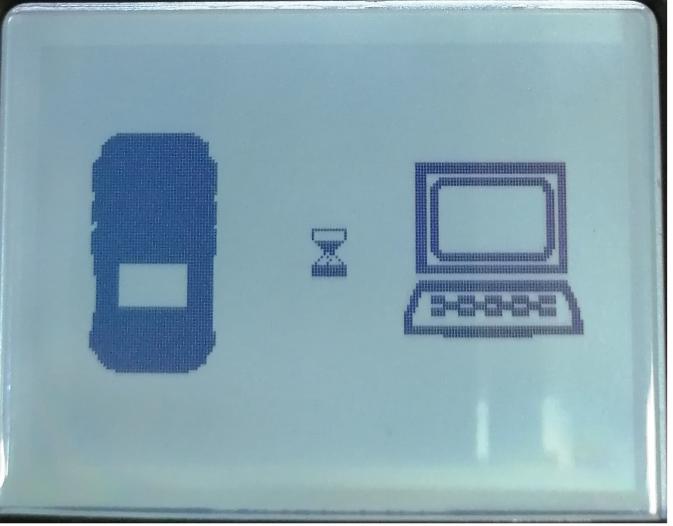
2.2 Icon functions are explained in the below table:

|  |  |  |
| --- | --- | --- |
| **Icon** | **Function** | **Explanation** |
|  | Upload data | Left-click this icon to upload the data from the detector onto the computer software. |
|  | Save data | Left-click this icon to save the uploaded data into the software database. |
|  | Inquiry data | Left-click this icon to review the historical data of the device in the software on different selection conditions. |
|  | Export data | Left-click this icon to export the data to Excel file onto your computer. |
|  | Software exit | Left-click this icon to exit the software. |

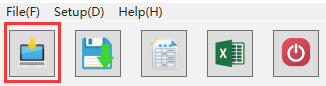
2.3 Sub menu functions are explained in the below table:

|  |  |  |
| --- | --- | --- |
| **Menu** | **Function** | **Explanation** |
| **File(F)** | Inquiry(Q) | To review the historical data of the device in the software on different selection conditions. |
| Save(S) | To save the uploaded data into the software database. |
| Delete history record(D) | To delete the record in the software database. |
| Export Excel(E) | To export the data to Excel file onto your computer. |
| Exit(X) | To exit the software. |
| **Setup(D)** | Check device’s record (U) | To review the data record on the device. |
| Settings(S) | 1. To set the “Serial number”, “Operator” ID, “Location” and “Date & Time” of the device. (It’s not allowed to modify the serial number of the device). 2. For this function, firstly click “Read” to read the device information. And then modify the information. Then click “Write” to save the settings. |
| Channel configuration | To make modification on the alarm values, calibration point etc. |
| Delete device’s record | To delete the data record on the device itself. |
| **Help(H)** | About(A) | To check the version of this software. |

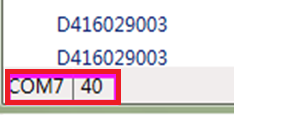
1. **Data upload operation**
   1. Power on the detector and wait the detector to enter the normal monitoring status.
   2. Connect the detector with computer through USB data cable. (For E series, the detector should firstly enter **data upload** model. Refer to the operation manual of E series detector for entering this mode.)



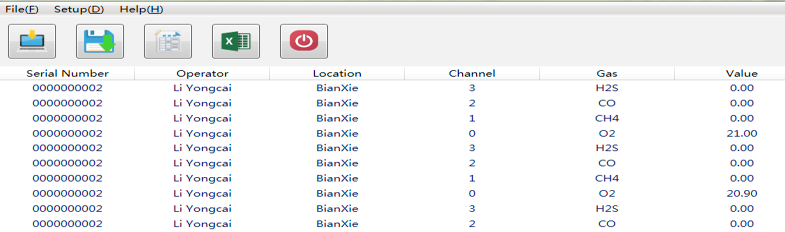
* 1. Click the “Upload data” icon to start uploading data onto the computer.



* For BX616, the detector will show “**UP**” on the screen. It means it’s in data uploading process.
* For E series detector, there will be **processing bar** showing on the screen.
  1. Wait for data upload to end. The bottom left of the interface will show the total record number.



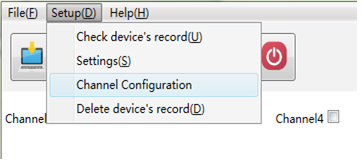
Then the software shows all the data uploaded:



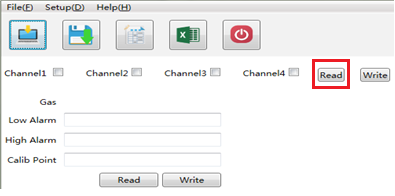
1. **Channel configuration**

**Note: This function is only available for the model BX616. For E series detectors, it’s not available.**

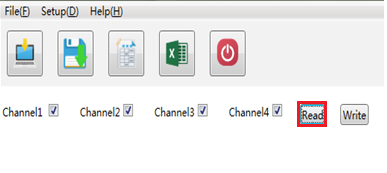
* 1. Enter the sub menu of “Channel configuration” as shown in below picture:



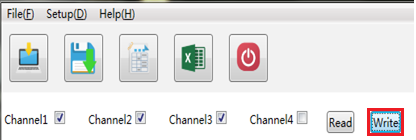
* 1. Click the “Read” button in the red box of the below picture to read the open/close information of the channels.



* 1. If the channel is ticked with “√”, it means the channel is open. See below picture.



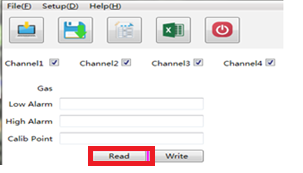
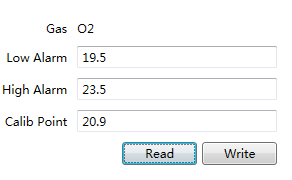
* 1. If need to close any channel, then untick it and click the “Write” button in the red box of the below picture. Below picture shows that the channel 4 is closed.



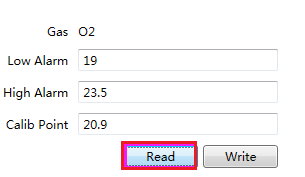
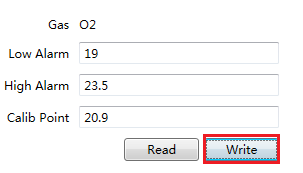
1. **Setting of alarm values**

**Note: This function is only available for the model BX616. For E series detectors, it’s not available.**

* 1. Click the “Read” button in the red box of the below picture to read the preset alarm value and span calibration value.

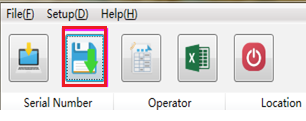
 

* 1. If need to modify the values, then write the values you need in each column and then click the “Write” button to save your setting. And then click the “Read” button and you will see the modified value. Below pictures show the modification of “Low Alarm” value from 19.5 to 19.0 for O2 gas:



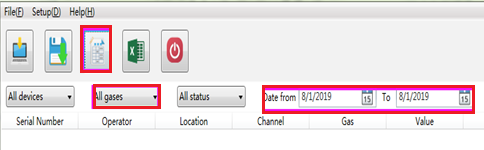
1. **Data save and inquiry**
   1. Data save:

After data uploading, click the “Save data” icon. Then data is saved in the software database. And the records on the device will be deleted.



* 1. Inquiry data:

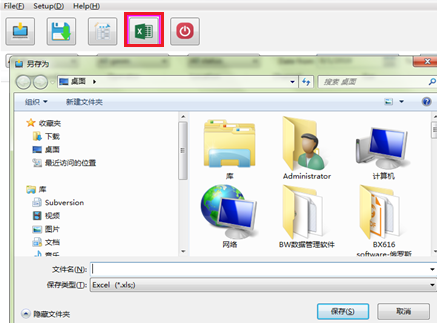
Click the “Inquiry data” icon, the historical data in the software database can be found. The data can be captured according to the gas type, alarm status, date & time etc. See below picture.



1. **Data export**

Click the “Export data” icon, the historical data can be exported as Excel file and saved on the computer.

See below picture.



Below is the demonstration of the exported data in Excel file:

