![RION TECH logo]

ELECTRONIC COMPASS HOST COMPUTER SOFTWARE
HOST COMPUTER SOFTWARE INSTRUCTION MANUAL

▶ MAIN PAGE INTRODUCTION

The overall view of the host computer interface (Figure 1-1) is as follows, mainly consists of serial port, device setting, system setting, save options, 3D dynamic view, original data area and main functional area. The prompt message moved to the column "?" is the description of each column, and the contents of each zone are introduced one by one below.
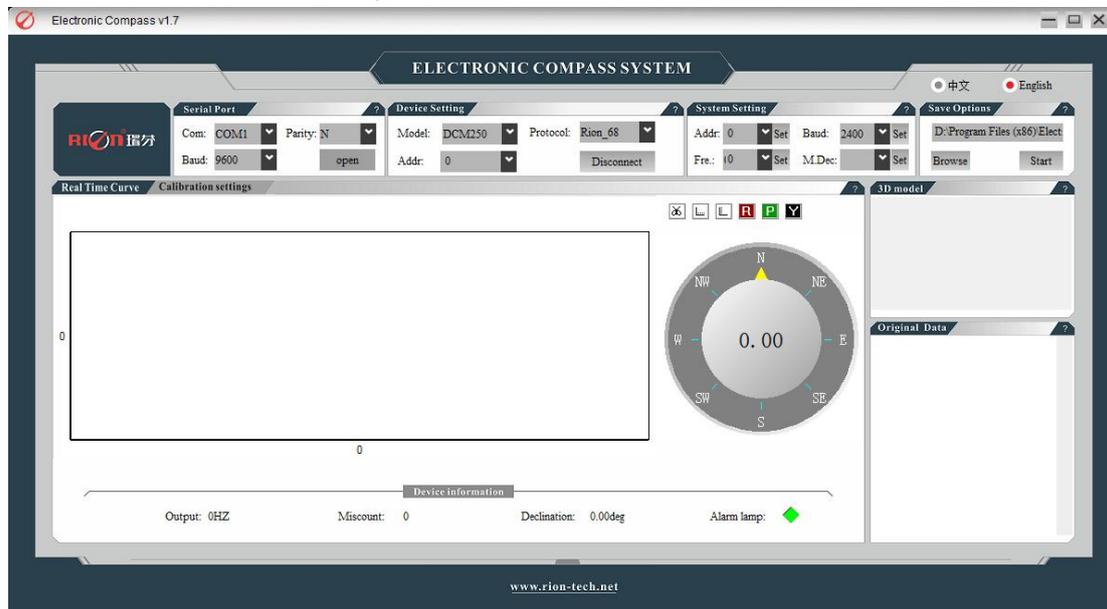
（ Fig 1-1 ）

▶ OPERATION STEPS

The software setting interface, as shown in (Figure 2-1): The operation steps are described below：


（ Fig 2-1 ）

STEP1:SERIAL PORT SETTING (Figure 2-2)

Port No.: select the COM port corresponding to the device;

Baud rate: select the current baud rate of the device (2400/4800/9600/19200/38400/115200), the factory default is 9600;

Calibration: select the current calibration method of the device

Open button: Click the open button to open the set port；
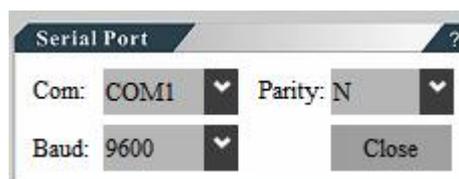
（ Fig2-2 ）

STEP2：DEVICE SETTINGS (Figure 2-3)

Model: Select the connected device model；
Protocol: select the protocol used by the connected device；
Mode: Set product output mode according to demand，Auto/Q&A mode optional；
Address: Connected device address；
Start button: Click the start button to start polling data；
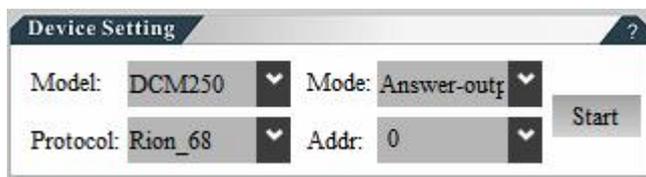
（ Fig2-3 ）

STEP3：SYSTEM SETTINGS (Figure 2-4)

Address: Set the address of the device;
Baud rate: set the device baud rate;
Frequency: Set the output frequency of the device;

（ Fig2-4 ）

○INCLINOMETER　○3D COMPASS　○ACCELEROMETER　○GYRO　○NORTH FINDER　○INS&IMU

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Magnetic declination: set the magnetic declination of the device;

STEP4 : SAVE THE FILE (Figure 2-5)
The edit box shows the file path. You can click the Browse button to select the storage path. After selecting, click the start button to start saving data. Open the catalog to find the CSV file with product name + DATA + date. The content of the file is the protocol data and time.

Save Options ?

D:\Program Files\Electronic

Browse   Start
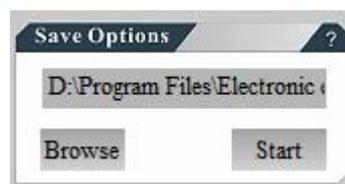
（Fig2-5）

▶ **MAIN FUNCTION AREA WAVEFORM INTERFACE**

（1）REAL-TIME CURVE
As shown in (Figure 3-1), the real-time data waveform is displayed, the corresponding color data value (Roll, Pitch, Yaw) is displayed on the upper right, the horizontal axis is the count value, and the vertical axis is the data value. Click the left mouse button to pull down the right The drawing area can be enlarged, right-click to move the drawing area, the following details。
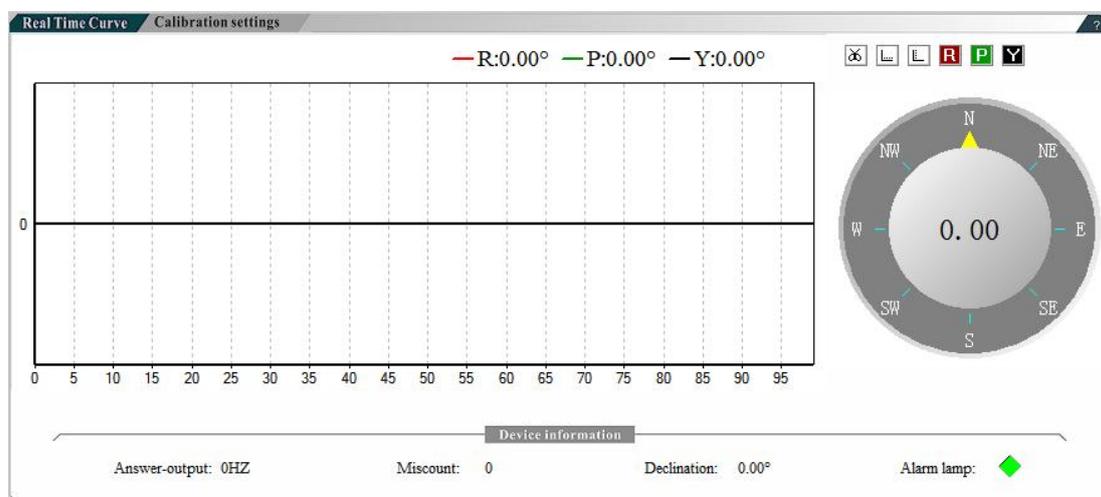

（Fig3-1）

1) The picture plate is the direction data indicator plate.
2) The toolbar in the upper right corner has the following functions: screenshot, enable/disable abscissa scale, enable/disable ordinate scale, draw/close ROLL data, draw/close PITCH data, draw/close YAW data;
3) Below are the data output frequency, output error count, magnetic declination and alarm indicators。

（2）CALIBRATION SETTING

DCM250/260/301/302 Calibration setting interface ▼

○INCLINOMETER   ○3D COMPASS   ○ACCELEROMETER   ○GYRO   ○NORTH FINDER   ○INS&IMU
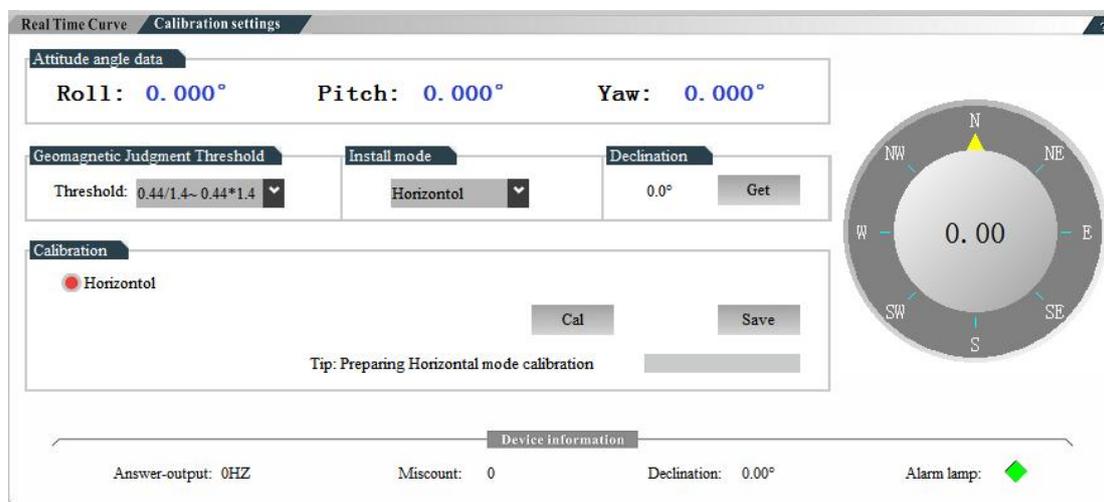
HCM370/375 Calibration setting interface ▼

Real Time Curve | Calibration settings | ?

Attitude angle data

Roll: 0.000°   Pitch: 0.000°   Yaw: 0.000°
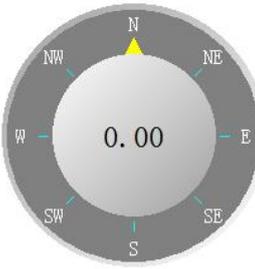
Geomagnetic Judgment Threshold
Threshold: 0.44/1.4~ 0.44*1.4 ∨ Set

Install mode
Horizontol ∨

Declination
0.0°   Get

Calibration
● Horizontol   ○ Vertical upward   ○ Vertical downward
Default   Clear   Cal   Save

Tip: Preparing Horizontal mode calibration

N
NW   NE
W   0.00   E
SW   SE
S

Device information
Answer-output: 0HZ   Miscount: 0   Declination: 0.00°   Alarm lamp: ◆

HCM470Calibration setting interface ▼

Real Time Curve | Calibration settings | ?

Attitude angle data

Roll: 0.000°   Pitch: 0.000°   Yaw: 0.000°

Geomagnetic Judgment Threshold
Threshold: 0.44/1.4~ 0.44*1.4 ∨

Install mode
Horizontol ∨ Set

Declination
0.0°   Get

Calibration
● Horizontol   ○ Vertical upward
Default   Cal   Save

Tip: Preparing Horizontal mode calibration

N
NW   NE
W   0.00   E
SW   SE
S

Device information
Answer-output: 0HZ   Miscount: 0   Declination: 0.00°   Alarm lamp: ◆

HCM500/505/508 Calibration setting interface ▼

Real Time Curve | Calibration settings | ?

Attitude angle data

Roll: 0.000°   Pitch: 0.000°   Yaw: 0.000°
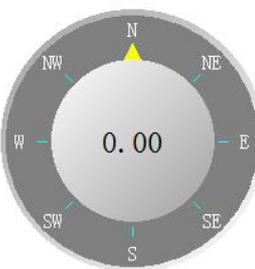
Setting Install mode
Horizontol ∨ Set

Getting Install mode
∨ Get

Declination
0.0°   Get

Calibration
Manual ∨ Set

Operation
Sample   Start   Stop   Save

Result
Sample: 0   X: 0%   Y: 0%   Z: 0%

N
NW   NE
W   0.00   E
SW   SE
S

Device information
Answer-output: 0HZ   Miscount: 0   Declination: 0.00°   Alarm lamp: ◆

HCM600/605 Calibration setting interface ▼


（2）3D model

3D dynamic display device attitude
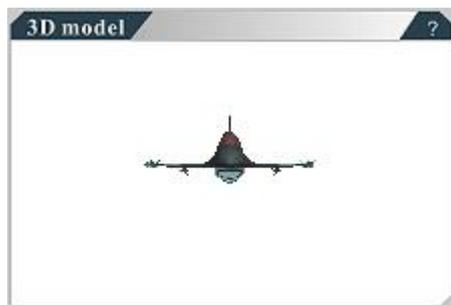
（3）Raw data

Serial data printing function。
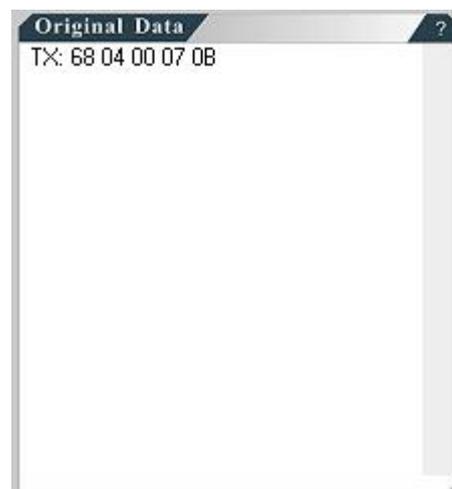
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