# **WX01 Simple Weather Station Calibration**

#### Procedure

- 1. Upgrade the WX01 firmware
- 2. Set calibration command

### Step 1. Upgrade the WX01 firmware

• Connect your USB/Serial to TTL program cable

Open the WX01 case, locate ISP 4-pin socket Connect the serial to TTL cable to ISP socket according to wire alignment. \* *TX(on serial to TTL cable) to RX (on ISP socket)* \* *RX(on serial to TTL cable) to TX (on ISP socket)* \* *DC* +5V and GND

• Reflash the WX01 firmware on MS Windows platform

The name of firmware reflash program is 'wx01\_cali.exe'. Choose the serial port and click 'UPGRADE'.

#### Step 2. Calibrate the WX01

- Run 'WX01.exe'
- Click 'CHECK' to refresh the serial ports list, then choose the correct serial port which flash cable connected with.
- Then choose +/- and figures of the parameters which you like to calibrate.
- Click 'WRITE' to send calibration data to WX01

## Monitor the WX01 output data

You could run hyper terminal or any serial port tools to check WX01 output data. Just connect to the correct serial port which your reflash cable connected with. You will see the output data like:

c000s000g000t082r000p000h49b09957

It is according to APRS weather data format. The first 3 portion data are for the rain, wind speed and wind direction. You could not calibrate them. You could only calibrate temperature, humidity and air pressure.

this is temperature in Fahrenheit. But in the calibrate program, you could only calibrate by Celsius degrees.

h49 this is relative humidity, range from 0% to 99%

b09957 this is absolute air pressure. Due to the altitude of the weather station, it is necessary to calibrate this data according to your local situation.