

- General type
- Bluetooth type

## Digital Anemometer Instruction Manual



(bluetooth version only) Please scan the QR code to download "Anemometer" App from Google Play.



(bluetooth version only) iOS version: scan the qr code to download the "Anemometer" App

Attention: Anemometer App only supports android 5.0 and iOS 9.0 or above

Standard: Q/HTY 003-2018

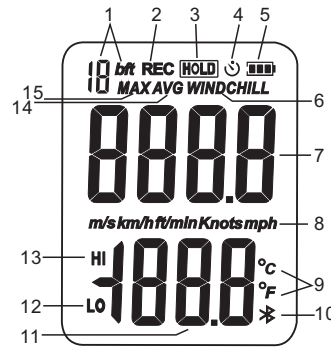
Version: 82/82B-EN-00

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### A. FUNCTION

1. Simultaneously measure wind velocity and temperature
2. Switch among max/average/current wind velocity
3. Two temperature units: °C/°F
4. Five wind velocity units: m/s, Km/h, ft/min, Knots, mph
5. Beaufort scale
6. Holding data
7. LCD backlight display
8. Manual/Auto powering off
9. Wind chill indication
10. Low battery indication
11. Bluetooth function (For the bluetooth version only)
12. Record data

### B. LCD DISPLAY



1. Beaufort scale
2. Recording data
3. Holding data
4. Auto powering off
5. Power
6. Wind velocity value
7. Wind velocity unit
8. Wind velocity unit
9. Wind temperature units
10. Bluetooth function (For the bluetooth version only)
11. Wind temperature value
12. Low wind velocity
13. High wind velocity
14. Average wind velocity
15. Max wind velocity

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### C. Operation Instruction (App is just for the bluetooth version only)

1. Turn on/Backlight/Turn off: Press "ON/OFF" button to turn on anemometer. After 1s of full screen image enters measurement interface; LCD will show current wind velocity and temperature. Short press "ON/OFF" button to turn on or turn off backlight, long press "ON/OFF" button to turn off anemometer.
2. Auto power off: Short press "ON/OFF" button, anemometer will power off automatically after 10 mins of no operation and no wind velocity, long press button when turning it on will not end in auto powering off.
3. Switch wind velocity units: short press "UNIT" button to switch among m/s, Km/h, ft/min, Knots, mph.
4. Switch temperature units: long pressing "UNIT" button to switch between °C and °F
5. Switch among data holding/max value/average value: short press "MAX AVG" button to switch among data holding/max value/average value.
6. Recording data: after turning on anemometer, long press "REC" button to enter into data recording interface, the upper part of which will show group number of data, and the lower part will indicate how many groups of data can be recorded. With this interface still on, short press "UNIT" button to start or stop recording data. After the setting is ready, press "MAX AVG" button to return to measurement interface. REC icon flashes during data recording. If the group number of data reaches top, REC will stop flashing, so will data recording.
7. Query recorded data: when anemometer is on, long press "MAX AVG" button to enter into data recording interface, then long press "MAX AVG" button to enter into data checking interface. The lower part of LCD shows the group number of data, the upper part displays recorded wind velocity. Short press "UNIT" button to query backward and forward, and press "MAX AVG" to change direction of query. When "-" does not show, short press "UNIT" button to switch data backward. When "-" appears, short press "UNIT" button to switch data forward. Long press "MAX AVG" button to return to measurement interface.
8. Delete recorded data: long press "MAX AVG" button to enter into data recording interface, and long press "UNIT" button until CLR appears on LCD screen, which means the recorded data have been deleted.
9. Turn on/off Bluetooth radio: when anemometer is on, long press "UNIT" button or "MAX AVG" button to turn on/off Bluetooth radio. If radio is on, Bluetooth icon will flash. Connect Bluetooth through APP, Bluetooth icon stops flashing when the connection is successful.
10. Sampling of average wind velocity: take the average value of

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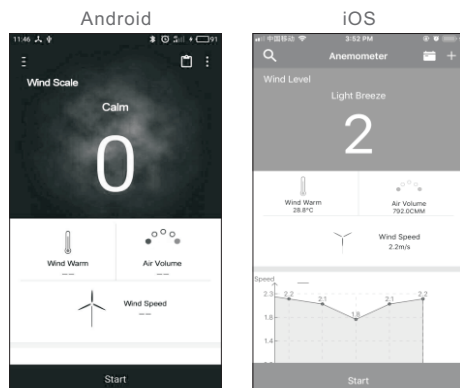
- 20 samples, and the frequency of sampling is 0.5s.
11. Wind chill indication: during measurement, if wind temperature is below 0°C, wind chill icon will light up on the screen.
12. Interval of data recording: the default interval is recording data every 10s, which the interval can be revised through APP, the range of which is 1s~120s.
13. Direction on data recording: every group includes one wind velocity value and one wind temperature value. Anemometer can record 999 groups of data at most. Recorded data can be read through APP. Wind velocity unit is m/s, wind temperature unit is °C.
14. Blocking auto power off function: in cases of data recording, Bluetooth radio, or connecting to APP, auto power off function will be blocked.
15. High or low wind velocity alarm: when wind velocity is over high value or lower than low value setting, HI or LO icon will flash. The alarm value of high and low wind velocity can be set through APP.

### D. Technological Parameters

A. Wind velocity measurement				
Unit	Measurement range	Resolution	THRESHOLD	Accuracy
m/s	0-30	0.1	0.3	±5%±0.1
ft/min	0-5860	19	60	±5%±20
knots	0-55	0.1	0.6	±5%±0.2
km/h	0-90	0.3	1	±5%±0.4
mph	0-65	0.2	0.7	±5%±0.2
B. Wind temperature measurement				
Unit	Measurement range	Resolution	Accuracy	
°C	-10°C~+45°C	0.1	± 2°C	
°F	14°F~113°F	0.18	± 3.6°F	
Battery	Three 1.5V AAA			
Temperature sensor	Negative Temperature Coefficient Resistance			
Operation temperature	-10°C~+50°C (14°F~122°F)			
Operation humidity	Less than 90%RH			
Storage temperature	-40°C~+60°C (-40°F~140°F)			
Current consumption	About 7mA for backlight, 15mA for starting Bluetooth (For the bluetooth version only)			

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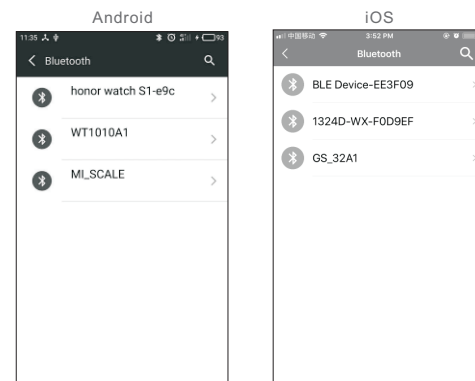
### E. Anemometer APP Operation Instruction (For the bluetooth version only)



#### Main interface of APP:

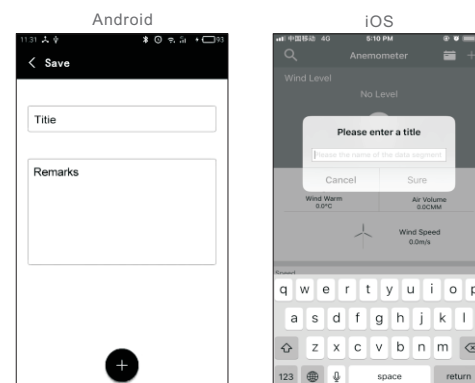
1. Touch the icon on the upper left of main interface to enter into Bluetooth interface, touch the first icon on the upper right to check stored file list, touch the second icon on the upper right to open operation menu.
2. The upper part of main interface displays real-time measured wind scale. The lower part shows three parameters of wind temperature, wind flow and wind velocity. Trend curve of wind speed will be drawn real time. Wind flow needs to be set in the settings interface, the default area of wind flow is 0.
3. When Bluetooth is connected, touch starting button to start recording real-time measurement data. Measurement frequency is 500 ms. If Bluetooth is not connected, Bluetooth interface will pop out.

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#### Bluetooth interface:

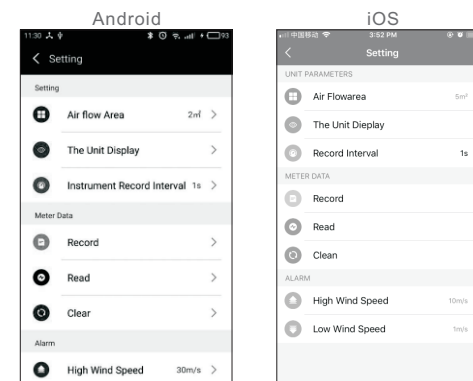
Touch the upper right icon on Bluetooth interface to start searching for Bluetooth match, the search time is 5s, when Bluetooth match appears, connect anemometer with APP.



#### Android Storage interface:

Clicking saving on operation menu to enter into saving interface. All saved data is real-time measured. The title of data cannot be blank, but remark section can be blank.

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#### Setting interface:

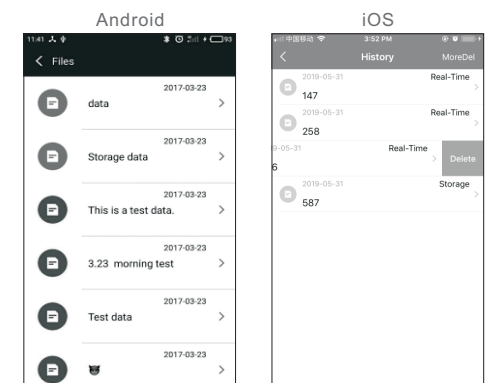
Setting interface can set area of wind flow and interval of recording. Measuring unit of anemometer can be switched through unit display function. Recording function can start recording mode of anemometer and save data in anemometer. Reading function can transfer data saved in anemometer to mobile phone. Click erasing to erase all saved data. Change alarm range by setting high and low wind velocity.



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Android Detailed information of files: The upper part shows curve of wind velocity, trend curve and average/max/min value of wind velocity. The lower part is for remark information. Click the upper right icon to export saved data in Excel sheets. The exported sheets are saved in Data folder of AnemoMates folder under phone's root directory.

iOS Detailed information of files: Display the wind speed and temperature data saved in the file in the form of a list. If the wind speed value exceeds the set high wind speed alarm value, the corresponding data column will turn red, which is convenient for customers to quickly check. In the real-time data group, the first term is the time, in the stored data group, the first term is the sequence number.



#### Android File list:

Click file list can refer to all save files. Grey icon means data transferred from and saved by anemometer. Blue icon means real-time measured data. File title and saving time can be shown on the file list. Click title to see detailed information, long press to delete file.

#### iOS File list:

Click the list of files to view the saved files. Those marked "real time" in the upper right corner are the data of real time measurement. Marked with the word "store" is the stored data read from the lower machine. The current file list shows the file title and file saving time, click to view the detailed data, and slide to delete and share. Click the "multi-delete" button in the upper right corner of the page to delete multiple files at the same time.

#### Specific Declarations:

Our company shall hold no any responsibility resulting from using output from this product as an direct or indirect evidence. We reserves the right to modify product design and specification without notice.



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