![MegaSig logo]

WT 105 Medium Programmable Wind Noise Source
User Manual

Table of contents

1.   Hardware Description

1. Power Supply & Communication Wiring
    a)   220V AC Equipment Power Supply
    b)   WT105 can be connected through DB9 Serial Cable

Fig 1.1

2. Operating Instructions
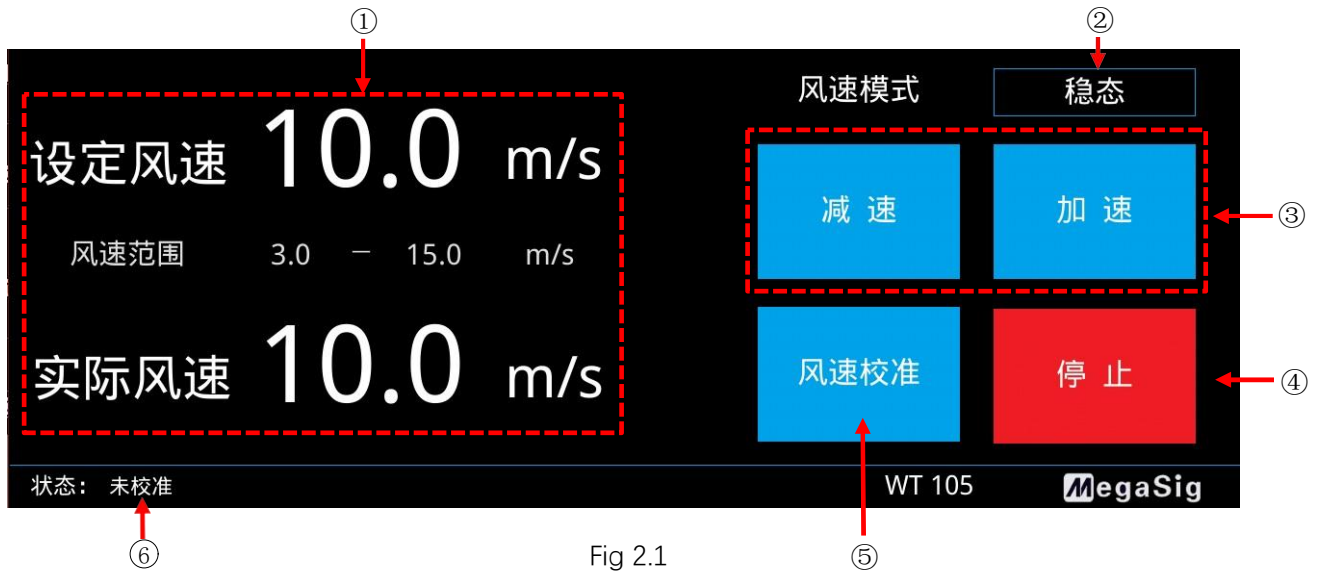
1. Touchscreen Operation

Operation Interface Introduction：

Fig 2.1

① Device parameter display window
② Wind speed mode selection menu bar, click on it and the following menu pops up

1）Steady state

2）Random fluctuation

3）Circular fluctuation

3）Custom fluctuation

Fig 2.2

1）Steady-state: The output airflow wind speed of the device is stable to the set wind speed.

2）Random fluctuation: Based on the set wind speed, random fluctuation of a specific range are carried out, and the maximum change is within 1m/s.

3）Circular fluctuation: Based on the set wind speed, according to Positive Deviation Fluctuation - Set Wind Speed - Negative Deviation Fluctuation - Set Regular Cyclic Fluctuation of Wind Speed with a 1-second interval.

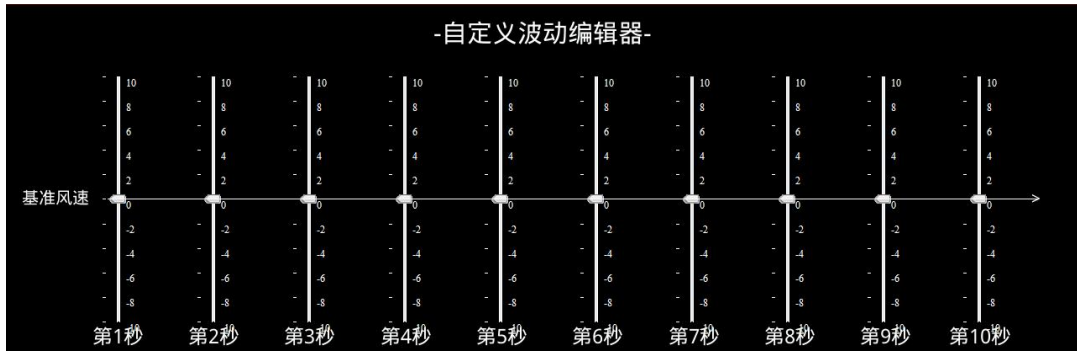4) Custom fluctuation: Based on setting the wind speed, edit the fluctuation law in the following interface.

-自定义波动编辑器-

第1秒　第2秒　第3秒　第4秒　第5秒　第6秒　第7秒　第8秒　第9秒　第10秒

基准风速

Fig 2.3

③Adjust button for setting wind speed.

④Fan stop/start control.

⑤Calibrate the wind speed. After placing the anemometer in the position closest to the air outlet, press the button to re-calibrate the wind speed setting.

⑥Display whether the wind speed calibration has been performed.

2. **Program Controlled Operation**

DB9 Interface Description

The program control operation is performed by connecting to the DB9 interface of the WT105. The serial communication parameters are as follows:

Baud Rate	9600
Data Bits	8
Parity	None
Stop Bits	1.0
Flow Control	None

Program Control Instruction List

Note: '\r\n' means carriage return and line feed, Hex is 0D0A

Name	Send	Feedback	Remarks
Fan Running	>SET_MOTION_RUN\r\n	Success: OK\r\n	
Fan Stopped	>SET_MOTION_STOP\r\n	Success: OK\r\n	
Read Wind Speed	>GET_SPEED\r\n\r\n	Current Wind Speed: 3.000000m/s\r\n	
Set Wind Speed	>SET_SPEED:3.0\r\n\r\n	Success: OK\r\n	Wind speed: set within the range, Accuracy is 1.0
Read Custom Fluctuation Data	>GET_WIND_DATA\r\n	Success: OK\r\n[0][1][2]-[9]	[0]-[9] is the hex decimal of the value of the custom fluctuation, the range of the fluctuation value is 0-0x14, in Value bit 0x0a
Write Custom Fluctuation Data	>SET_WIND_DATA\r\n	Success: OK\r\n	Send >SET_WIND_DATA After returning "success", enter the write data mode, send [0]-[9] as 10 data, the data range is 0-0x14, reply "Success" ends
	[0][1][2]-[9]\r\n (Hex)	Success: OK\r\n	

Set the Wind Speed Mode to Steady State	>SET_WIND_1 \r\n	Success：OK\r\n	
Set the fan speed mode to Random fluctuation	>SET_WIND_2 \r\n	Success：OK\r\n	
Set the fan speed mode to Cyclic fluctuation	>SET_WIND_3 \r\n	Success：OK\r\n	
Set the fan speed mode to Custom volatility	>SET_WIND_4 \r\n	Success：OK\r\n	