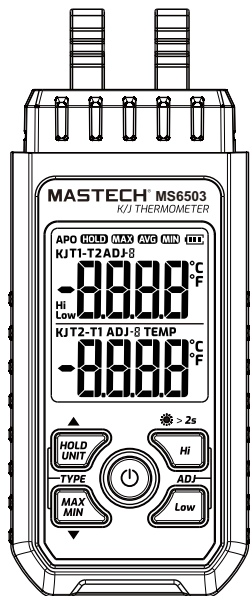


# MASTECH®

## MS6503

### Digital Thermometer User Manual



Specifications are subject to change without notification.

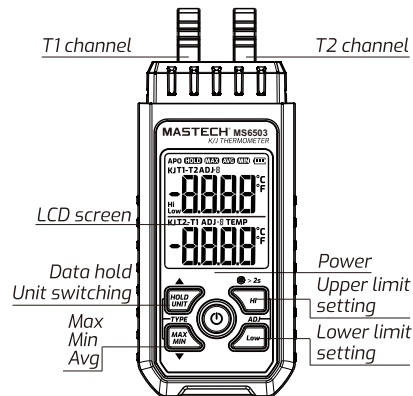
Thank you very much for your patronage and choosing our products. Before you use this product please read this manual carefully as it will familiarize you with the correct operating procedure of our MASTECH product.

**△ Notice:** Before using this instrument, please read this manual carefully;  
Improper operation may cause harm to users. Please follow the instructions and pay special attention to the insulation around the connector to avoid electric shock or personal injury.

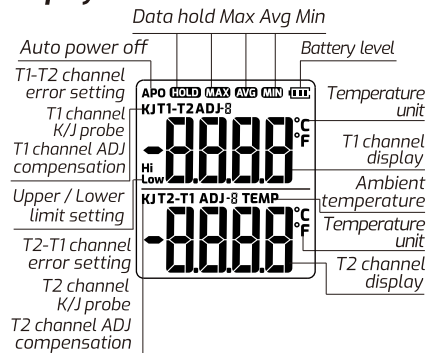
### Product Feature

- Support both K/J probes for temperature measurement;
- °C/°F temperature unit switching;
- With data hold, max/min/avg measurement function;
- Auto power off and cancel auto power off function;
- Hi, Low alarm limit setting function;
- With backlight and color backlight alarm function;
- Low battery indication function;
- With thermocouple temperature compensation to optimize the test accuracy.

### Panel Instruction



### Display



### Specification

Model	MS6503	
Type	Dual channel	
Temperature difference	↓	
Range	K-type: -200°C~+1372°C (-328°F~+2501°F)	
	J-type: -200°C~+1372°C (-328°F~+2501°F)	
Accuracy	±0.2% +0.7°C	
Resolution	(-100~-200°)1°C/°F;	
	(-99~-999.9°)0.1°C/°F; (≥1000°)1°C/°F	
Ambient temp.	Range	-
	Accuracy	-
Display	4 digits, max 9999	
Upper limit alarm	Default value: 1300°C	
Lower limit alarm	Default value: -200°C	
ADJ compensation	-9~+9°C	
Sampling rate	1 time/s	
Auto power off	10 mins (can be canceled manually)	
Working environment	-10~50°C, max 80%RH, indoor altitude<2000m	
Storage environment	-10~50°C, max 70%RH (battery removed)	
Product size	152 x 55 x 33mm	
Screen size	37 x 41mm	
Weight	Approx. 125g (battery not included)	
Power	3 x 1.5V AAA (R03/LR03)	
K type thermocouple probe	Random configuration probe Measurement range: -20°C~200°C (accuracy: ±2.5%) MS6503(2pcs)	

### Button Function Description

**○** : Power button, long press to turn-on and tap to turn-off;

**▲** : Under the Hi/Low menu, uses for adding data, long-press to increase;

**▼** : Under the Hi/Low menu, uses for deducting data, long press to decrease;

**HOLD**: Data hold, tap to turn on and turn off the data hold function;

**MAX/MIN/AVG**: Short-press to cycle among the maximum value, minimum value, average value and the real-time value;

**UNIT**: long press to switch the temperature unit °C/°F;

**Hi** indicates over upper limit alarm setting: short press once to enter, adjust the alarm value by pressing the **▲/▼** key, and press again to exit the setting;

**Low** indicates over lower alarm value setting: short press once to enter, adjust the alarm value by pressing the **▲/▼** key, and press again to exit the setting;

Press **☀** > **2s** to turn on the backlight, long press again for **2s** to turn off the backlight, the backlight has no automatic shutdown function, and it will automatically turn off after automatic shutdown;

**HOLD+MAX/MIN** long press together to switch K/J probe;

**Hi+Low** long press together to adjust the ADJ compensation value, and long press again to exit the adjustment;

**T1-T2** long press the screen to display the T1-T2 error value, and T2 channel displayed normally ;

**T2-T1** long press the screen to display the T2-T1 error value, and T1 channel displayed normally.

**Note**: The recorded data will be saved to avoid lost after power-off or replace the battery.

### Measurement Method

- Press **○** to turn on the meter;
- Insert the probe into the right channel, and put it into the object to be measured;
- Check the measured value on the LCD display;
- Refer to the function description of each button, press the function button to enter each measurement function;
- Measuring done, press the power button to turn it off.

### Warm notice:

When moving the meter from one environment to another, please wait for moments for the meter to stabilize.

### Auto Power Off and Cancel Auto Power Off

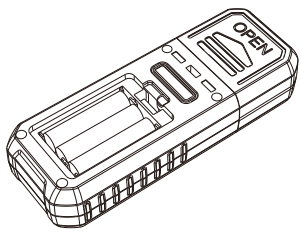
- The auto power off function switches on by default , the screen shows the APO symbol when turning on the meter. Only if you stop using it for 10 minutes will it trigger the automatic power off mode;
- If you need to cancel the automatic shutdown function, press **HOLD** and **POWER** button to turn on the meter, the APO symbol will not appear and the automatic power off function is canceled. The auto power of function can be restored as long as restart the meter;

- When the meter turns on the auto shutdown function, the display screen shows the APO symbol, APO symbol will disappear once canceled the auto shutdown function.

### Battery Replacement

- When low battery appeared, the battery level shows empty, indicating that the battery needs to be replaced;
- Replace the 3pcs AAA batteries by removing the battery compartment cover, please pay attention to the battery polarity when placing the battery into the compartment;
- Ensure that the compartment cover is securely fastened when finished.

**Remark**: when the battery is lower than about 3.7V, the battery low voltage prompt.



### Maintenance

- Do not measure for a long time under high temperature and high humidity environment;
- Regular calibrated is needed to maintain the accuracy of the device;
- Please remove the battery if not used for a long time;
- If your device does not work properly, and the repair requirements was confirmed by the manufacturer or dealer. The user should provide a text failure description and packing list , and the packaging should be well cushioned and protected.



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