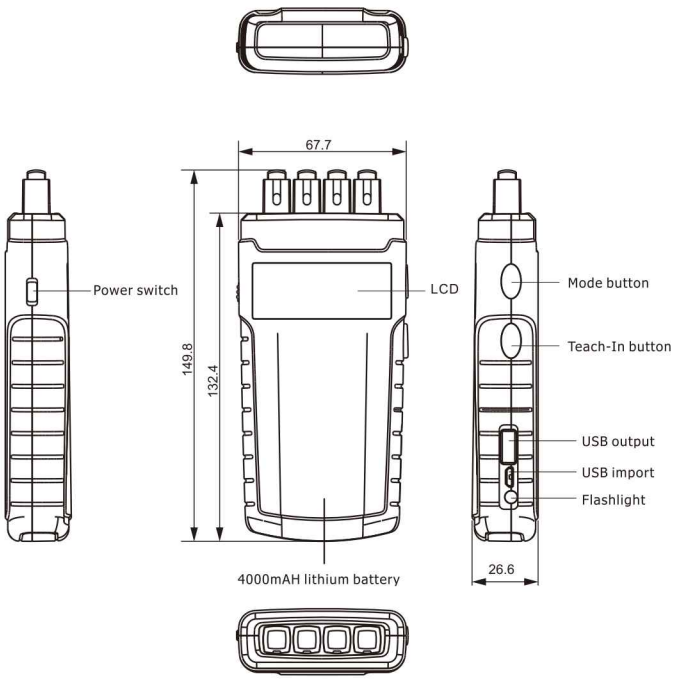
Analog Type

Basic features	Detection Type	NPN/PNP	Automatic Recognition
	Battery Capacity	4000mAH	
	Charging Time	9h	
Electrical data	Output Voltage	19V~24V	Brown Output Terminal
		4.8V~5V	USB Output Terminal
	Output Current	≤160mA	Brown Output Terminal
		≤500mA	USB Output Terminal
	Protection Circuit	Power Overcurrent Protection	
Environmental conditions	Operating Temperature	-10℃~+45℃	
Mechanical data	Other Features	Sleep Function,Silent Function,Flashlight	
	Dimensions	67.7x26.6x149.8mm	
	Weight	200g	
Special features	Measurement Range	0~10V	Voltage Mode
		0~20mA	Current Mode
	Measurement Accuracy	≤0.04V(Full Range)	Voltage Mode
		≤0.04mA(Full Range)	Current Mode
	Scan Cycle	22ms	Digital Mode
		140ms	Current Mode
		140ms	Voltage Mode
	Model	WD-1	

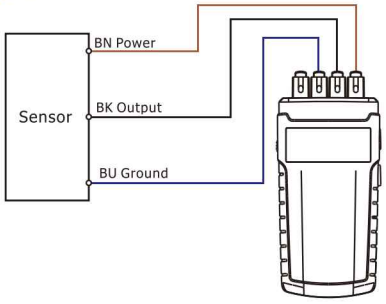
Dimensions

Unit: mm



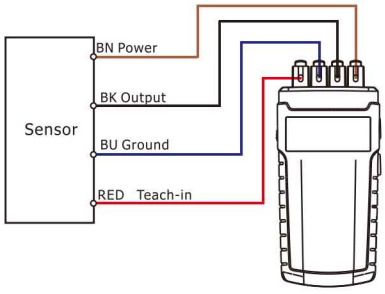
Circuit diagram

3–wire system:



Common measurement
1 Connect the terminals of the corresponding functions and turn on the power.
2.Select the corresponding measurement mode (voltage, current, digital).
3.The measurement results are displayed on the screen.

4–wire system:



Teach–in button
1 Connect the corresponding function terminals and turn on the power
2 Press the Teach–in button, the screen Teach–in area displays ON, then the red terminal will output high level, release the Teach–in button, the screen Teach–in area displays OFF, then the red terminal will output low level
3 Select the corresponding measurement mode (voltage V, current I, switch D)
4 The measurement result is displayed on the screen

Function description

1 Mode switching

Press the MODE button shortly to switch the test box in three modes: current (I), voltage (V), and switch (D). Customer can select the correct mode and connection according to the sensor type,the test result will be displayed on the screen, and the test box will store the current test mode, and will restore the previous state when it is restarted.

2.Battery

Battery status will be displayed on the upper right coner. The number of grids represents the remaining power. Grids flashing indicates that the power is insufficient and needs to be charged. The flashing during charging indicates the charging progress, when the charging is done, the whole grids will flash.

3.Sleeping mode

If the test box does not operate for more than 10 minutes, the test box automatically enters the sleeping state, the 24V power supply and the screen will be turned off, press the Mode button or the Teach-IN button, and the test box returns to the operable state.

4.Powerbank mode

Press the mode button in the off state, turn on the power button, the buzzer will sound twice, the sleep of the test box function will be invalid, the function has no memory, and the sleep function is enabled by default when it is turned on again.

5.Mute mode

Press and hold Teach-in for more than 6s, the buzzer will sound once, and the test box has entered silent mode. In the same operation, the buzzer will sound twice to indicate that the mute mode has been excited, and the test box will store the state, and will remain in the last state when it is turned on again.

6. Teach-in function

Press the teach button, the Teach-in (red) terminal will output a high level voltage, and the voltage logic will match the brown terminal voltage. When the button is released, the Teach-in (red) terminal will output a low level voltage, and the LCD will display the current Teach-in logic state.

7.Flashlight function

Press and hold the mode button for more than 2s, the light will be on, and the same operation can turn off the light.

8.Short circuit protection

When the output current is too high, short circuit protection will be inspired, and the screen will display 'SCP' during short circuit protection. After the short circuit condition is withdrawn, the test box will automatically return to normal state.