DEGSON

Sensor Test Box

DWT-2

User Manual

Thank you for choosing Degson sensor products. Please read this manual carefully before using the product.

- It is intended to be used by personnel with certain electrical knowledge.
- Before using this product, please read this manual carefully and use it correctly after fully understanding the product.
- For your convenience, please keep this manual properly so that you can refer to it at any time.

symbol

The following symbols are important reminders for this manual, please be sure to comply with the following,

	There is a risk of malfunction or fire. Please do not exceed the rated voltage when using.
	Do not use AC power as there is a risk of rupture.
	There is a risk of burns due to high temperatures.

All Instructions

To ensure your safety, please be sure to follow the following.

- Do not use in an environment with flammable or explosive gases.
- Do not use in an environment with water, oil, chemical droplets or contact with steam.
- Do not disassemble,repair,or modify this product without authorization.
- Do not exceed the rated voltage and current range during use.
- Do not use in environments beyond the rated value.
- Please pay attention to the polarity of the working power supply, otherwise the wires may be connected incorrectly.
- Please connect the load correctly.
- Do not short-circuit the load
- Do not use if the casing is damaged.
- When discarding, please treat it as industrial waste

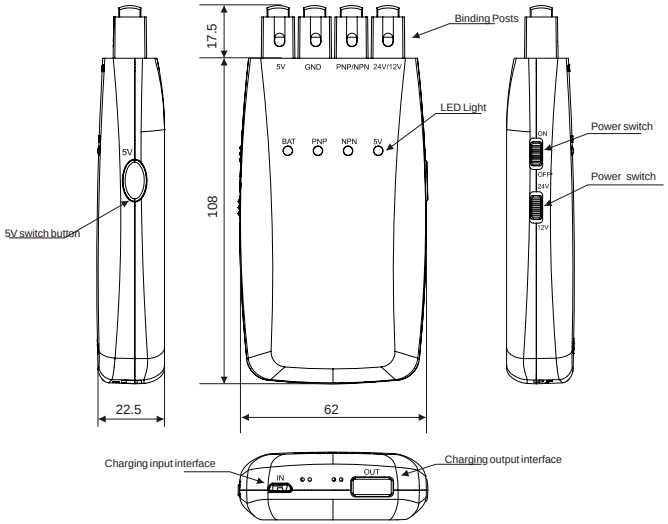
Confirmation of packaging contents

- Test Box one
- User Manual one
- Power adapter one
- USB cable one

Technical specifications

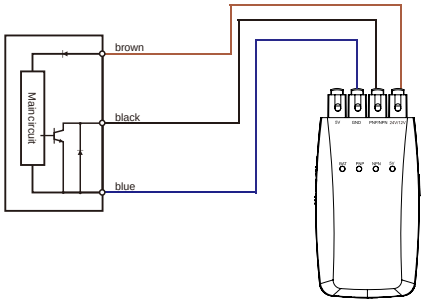
project	Specifications	Remark
Detection Type	NPN/PNP	Automatic identification
Output voltage	4.5~5.5V	Select 5V output
	11~13V	Select 12V output
	22~26V	Select 24V output
Output Current	≤0.55A	5V output
	≤0.5A	12V output
	≤0.25A	24V output
Battery capacity	2500mAH	
Charging time	2.5h	
Operating temperature	- 10~45℃	
weight	145g	
size	125*62*23mm	
Other Features	Silent mode, sleep mode, output short circuit protection	

Dimensions

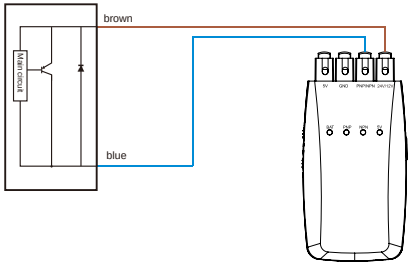


Instructions

Connect according to different products a) Three-wire system



b) Two-wire system



Power on

Slide the power switch to select 12V or 24V power supply according to product requirements.

Detection

Flip the power switch, and the test box will monitor the status of the sensor after it is powered on. If the sensor has an action output, the corresponding NPN or PNP light of the test box will light up, and the buzzer will sound at the same time.

Charge

When the BAT light of the test box is red, it means that the test box needs to be charged. During the charging process, the BAT light shows the charging status as follows:

Power	Battery Light	illustrate
0~75%	One grid, two grids	Red and green cycle light
75~100%	Three grid	Flashing red or green, depending on voltage selection
100%	full	Solid red or green, depending on voltage selection

Power status indicator

24V/12V

When the power is switched to 12V, the battery light will turn red, and when the power is switched to 24V, the battery light will turn green.

5V output switch, short press the 5V button, the 5V indicator light is on, the 5V output interface outputs 5V voltage, and the 24V/12V output is turned off; short press the 5V button again, the 5V indicator light goes out, the 5V output interface outputs 5V voltage off, and the 24V/12V output is turned off; the default is 24V/12V output. This function has no memory.

Instructions

Sleep Mode

When the test box is idle for more than 10 minutes, the test box will enter sleep mode to reduce power consumption. At this time, the 24V power supply will be turned off, and the BAT light will flash in a 2-second cycle to remind the user to turn off the power.The user can press the 5V button to wake up the system.

Powerbank Mode

In the shutdown state, press the 5V button, turn on the power button, the buzzer will sound twice, and the sleep function will be turned off. This function has no memory.

Silent Mode

Press and hold the 5V button for more than 3 seconds, the PNP and NPN lights will flash twice at the same time, and the test box will enter silent mode, and the buzzer function of the test box will be turned off. In silent mode,press and hold the 5V button for more than 3 seconds,the buzzer will sound twice, and the test box will enter normal mode At the same time, the test box will record the status and keep the last status when it is turned on next time.

Short circuit protection

When the test box detects a short circuit in the 24V range,the BAT light will flash quickly and the test box will enter short circuit protection state. The test box will not automatically return to normal state, and it can be restored to normal state by re-powering on. When the 5V gear of the test box is short-circuited,there is no surface phenomenon, the internal protection of the system is activated,and it can automatically return to normal after the short circuit is removed.

Power bank function

The test box can be used as a temporary power bank. Connect the USB cable and turn on the test box. At this time,the test box will charge externally.

Note: Since the current is relatively large when charging externally,it is not recommended to perform external charging and sensor testing at the same time.

Product Commitment

Degson sensor products undergo strict factory inspection. If a fault occurs, please contact the nearest Degson office and provide the fault details so that we can solve it as soon as possible.

Warranty

- The product warranty period is one year, starting from the date the product is shipped to the place designated by the purchaser.

Warranty coverage

(1) If a fault occurs during the warranty period stated above and caused by Takamatsu,Degson will repair the product free of charge.

However, the following situations are not covered by the warranty.

- Failures caused by improper operation or improper use under the conditions and environment specified in the operating instructions, user manual or technical requirements specially agreed upon between the purchaser and Degson.
- The failure is not due to a product defect but is caused by the design of the purchaser's equipment or purchaser's software
- Failures caused by modifications or repairs not performed by Degson personnel.
- Failures that can be completely avoided by properly repairing or replacing wearing parts in accordance with the operating instructions or user manuals.
- Failures caused by unforeseen changes in scientific and technological levels after the product is shipped from Degson
- Degson is not responsible for the warranty of faults caused by natural disasters such as fire, earthquake and flood, or external factors such as abnormal voltage.

(2) The warranty coverage is limited to the circumstances specified in Article (1).Degson shall not be liable for any indirect losses (equipment damage, loss of opportunity, loss of profits, etc.) or other losses caused to the purchaser by its equipment.