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WT103 Digital Guassmeter

INSTRUCTION

Introduction

The Tasla meter is a special instrument used for inspecting & checking flux density ,which is also one of the most universally devices in the field of magnetic measurement.

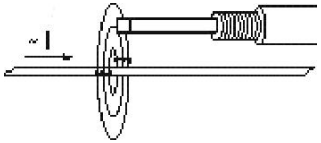
Model WT103 digital Tasla meter is controlled by the SCM, which is suitable for handle operation.It can be used to measure DC magnetic field and flux dencity.The device can be carried on one's person. It is characterized by its wide measuring range,simple operation and clear display. It is still added with the function of maintenance such as holding Measure Value/Peak Value, As mT or Gs unit of display can be change over, Measuring range of 200mT or 2000mT can be chose, and others that as resetting zero by key and so on. The power supply is four No. 5 dry batteries, which can be used for about 20 hours.Reality Working Domain:

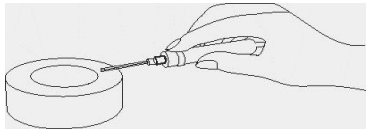
1) Magnetic field distribution of material surface
2) Working magnetic field produced fro some instrument that as iron-removing device,magnet-selecting machine, magnet chuck, magnet spool and demagnetizing coil
3) Leakage Magnetic iron-surface

The connecting cable of the probe shall not be kneaded or pulled forcibly, the probe bracket shall not be beaten or impacted and the probe lead wire and welding spot shall not be contacted with other conductor or in short circuit.

a) Illustration of measuring field (see right fig.)

As holding the sensor,(no staff guage side)torch the surface of measuring

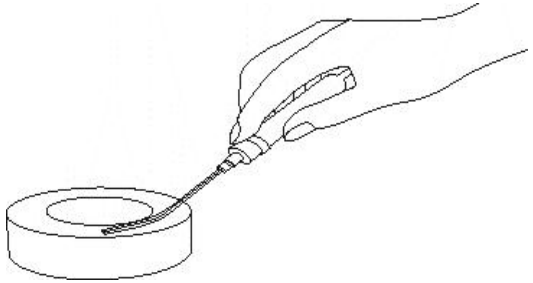




object lightly.

b) The worng method of holding the sensor:

No making the top of sensor to torch the surface of measuring object forcibly.(As the right Fig) So that it'll damage the sensor easily.



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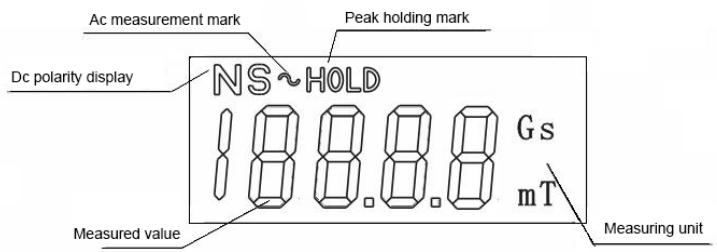
Screen of Display

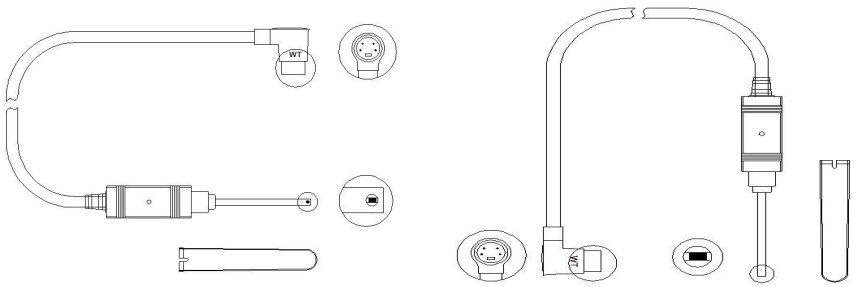
Liquid crystal display screen



Manipulation Procedure

1. Put the 6V battery to case which in the back of the instrument; If used the outer power, connect the terminal of the power to the socket which is in the side of the instrument and put another plug to electric supply.

2. Insert the Hall probe into the socket on the panel (according to the arrow
marked the sensor).

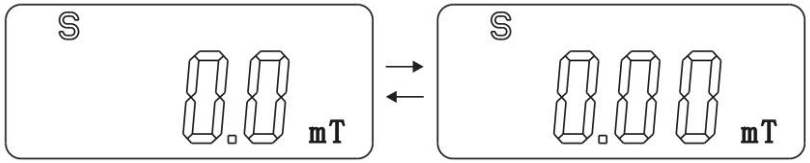


Transverse sensor Longitudinal sensor

Press the key of the Power On/OFF in the panel and the digital display screen 3.
should display zero.

4..Select a suitable measurement range

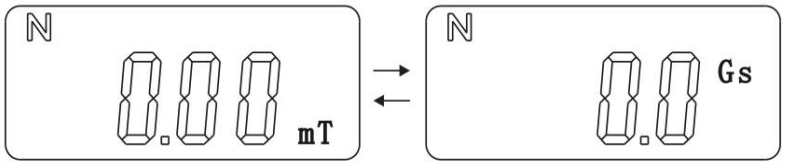
Press the key RANGE switchover again and again , the measurement range would be transformed within 0-200 mT or 0-2000 mT.



0～2000mT 0～200mT

5. Unit switch

Press the key(6) of conversion , the display unit would be transformed from mT to Gs

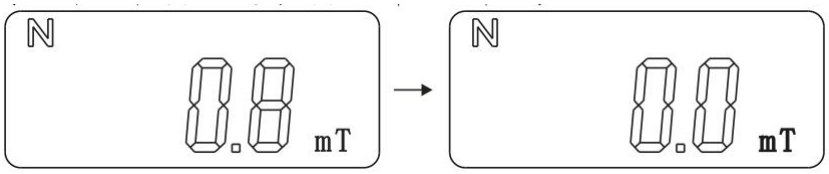


mT Gs

6. Reset zero

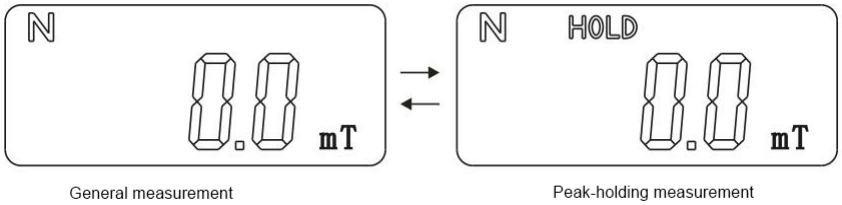
Keep the sensor far away from magnetic field as the state of holding .If the display screen should not show “000”.you must press the key(7) to adjust it to zero

Note: After change over the measurement range or transform the mode,you all need to reset zero



7. Measurement of Peak-value holding

Press the key(3) to change over normal measurement or Peak-value holding .



8. Loosen the cap of the Hall probe (see upper Fig).Place the effective position of Hall probe to touch on the surface of the resting material tightly (DC magnetic field) or at zone of measured magnetic field. The screen(2) will show the value of the magnetic field.

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9. Reset Peak-value holding

When kept the Peak-value holding , but need to measure new peak value and the forecast value will be lower forecast. Thus you could press the Reset button(7) to make it showing new peak value.

10. If finished measurement, the cap should screwed up. It may be better remove the battery from the case to prolong its time of use

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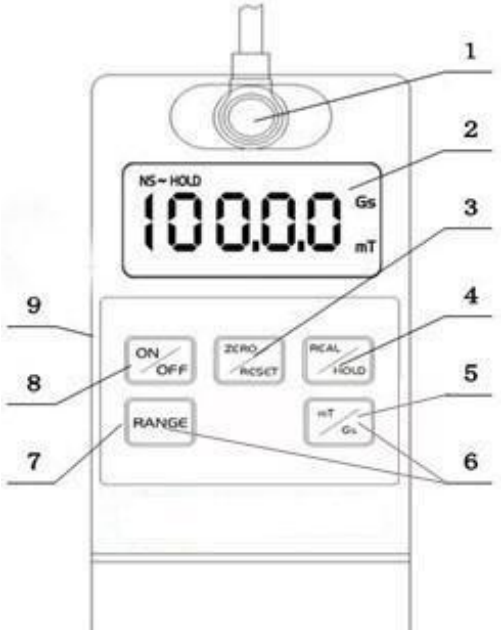
Main Technical Parameters

Rang: 0~200mT~2000mT
Accuracy: ±1% ±2%
Sensitivity: 0.01mT, 0.1mT
Temperature of environment: 5℃-40℃
Relative humidity: 20%-80%(no condensation)
Power Supply: Battery 6V, constant DC power
Dimension: 150mm×70mm×30mm
Weight: N.W: 500g G.W:900g
Display: 4½ LCD
Shape of the device:
1. Sensor Connecting
2. LED Screen
3. Zero/Reset Reading

4. Peak/Real Value Switch
5. DC/AC Switch
6. Range Changing
7. mT/Gs Unit Changing
8. Power On/Off
9. External power supply socket



Maintenance and Notes

1. As the status of measuring ,if the instrument could not be adjusted to the zero or no display value. You'll first check the power supply whether in the course of nature. Than check the probe whether normal or damaged. If the connecting wires were rupture you could connected it according to the right Fig. Such terminal 1,2 are current, No. 4 and No.5 are terminals of voltage.

If you don't find and damage in it , please send it to our company . It's maybe wrong within the circuits.

2. The probe can't burden force ,be cracked and squeezed.
3. While making the zero adjustment, the probe should be placed far away from the magnetic field for fear the measurement error.
4. The instrument is guaranteed to keep in good repair for 18 months except the porbe.
5. Do not use the instrument in unappropriate conditions.
6. If you find the value of testing were error in the status ofmeasurement, you could loosened the handle of the probe to adjust the screw of the resistance tinily.

If don't ensure that the instrument is operated correctly described below, there would be error or mistake.

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7. Don't attempt to repair, or disassemble, and any reconstruct this instrument.
8. Use onlu recommended power accessories.
9. Don't connect the terminals of the outer power supply reversely. the inner is plus, the outer is minus.
10. Don't drop this instrument or the probe down ground. It'll be damaged by strong vibration.
11. Do not allow hands or other objects with dirt to touch the probe.
12. Avoid using, placing or storing the instrument in places subject to strong sunlight or high temperature, so as to humidity, water, oil, rust air, vibration and others.
13. It would be used to temperature range or store up need to comply as appointment.
14. You should not moving the instrument rapidly between hot and cold temperature to avoid condensation.
15. Never place the instrument in close the machine generating strong magnetic field, such as magnet-charger, demagnetize coil, microwave oven, electric welding equipment electric motor and etc.
16. In conclusion, we suggest you to calibrate the instrument in time.