

SUZHOU TASI ELECTRONIC CO.,LTD.

Thanks for choosing the product of our company, thank you very much.

Before using our product, please read the instruction manual carefully which will show you the correct way to operate. We wish that will help you experience the excellent performance of our product.

I .FEATURES

- ◆ MCU embedded, and based on optoelectronic, semiconductor laser and other advanced technology, measuring RPM is accurate non-contact.
- ◆ Wide range of the measurement and high-resolution.
- ◆ Automatic measuring and manual measuring selection.
- ◆ The power of laser is of high and low selection to adapt the far and near distance.
- ◆ Automatic to record 50 sets of data, and the sampling interval time could be changed.
- ◆ Automatic to record the Max, Min and Average data.
- ◆ LCD light helping work in the dark.
- ◆ Auto shut off after 30 seconds without operation.

II .SPECIFICATIONS

- ◆ Display: 5 digits LCD, Max 99999
- ◆ Test range: 2.5RPM~59999RPM(TA8141)  
2.5RPM~99999RPM(TA8142)
- ◆ Resolution: 2.5~999.9RPM: 0.1RPM  
More than 1000RPM: 1RPM
- ◆ Accuracy: ±(0.05%+1d)
- ◆ Available distance: 50mm~500mm
- ◆ Sampling time: 0.5s(over 120RPM)
- ◆ Time base: Crystal Oscillator
- ◆ Operating temperature: 0~50°C
- ◆ Storage temperature: -20~60°C

1

- ◆ Battery: 2pcs AAA battery
- ◆ Power consumption: Laser in low power 25mA  
Laser in high power 40mA
- ◆ Size: 130(L) x 55(W) x 30(H) mm
- ◆ Weight: 115g
- ◆ Enclosure: Instruction Manual, batteries, reflecting tape marks.

III .DESCRIPTION AND FUNCTION(Fig.2)

1.LCD: 5 digits LCD, Max 99999(Fig.1)

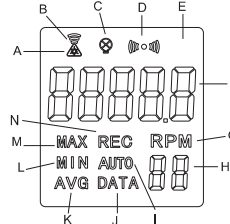


Fig.1

A	----Laser
B	----Laser power
C	----LCD light
D	----RPM measuring
E	----Battery low power
F	----The data of RPM
G	----Unit RPM
H	----Count of automatic measurement
I	----Continuous automatic measurement
J	----Data record function
K	----Average data of measuring
L	----Minimum data of measuring
M	----Maximum data of measuring
N	----Sampling of the data record

2

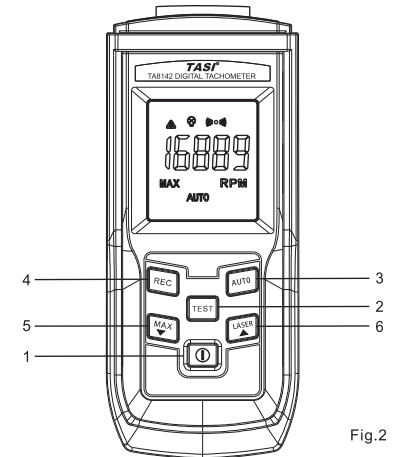


Fig.2

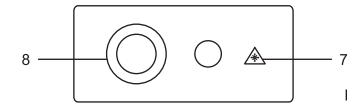


Fig.3

3

2.Power button:

Press button ① to turn it on. Long press ① more than 3 seconds to turn it off. Short press ① to light the LCD.

3.Manual measuring button:

Press button TEST to start measuring. Point the laser to the object to get the data. Stop pressing the button and you get the data hold.

4.Automatic measuring button:

Press button AUTO to start measuring and the sign "AUTO" will light. The meter will always keep measuring so you must press AUTO again to stop measuring and get the data you need.

5.Automatic data record button:

First press button AUTO to start Automatic measurement and then press button REC to start to record 50 sets of data. The sign "REC" will flicker and the lower right LCD will display the count of sets (Fig.4). After the record was over, the sign "REC" will vanish.

If you want to check the record data, first press AUTO to stop measuring, then press REC and the sign "DATA" will display. On the lower right of LCD is the current of the record data (from 1~50).(Fig.5) You can just press LASER to check back and press MAX to check forward.

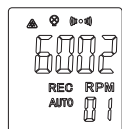


Fig.4

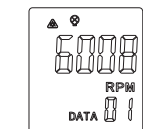


Fig.5

4

When you finished checking, press REC to exit.

The meter will react only if you have already recorded the data after you press REC. The data won't be lost after power off. But the data will lose if you move the batteries out, please be careful.

The record interval time can be set. Long press REC more than three seconds, the sign "DATA" will light. On the lower right of LCD is the count flickering to be set. For example, if you set the count 10(MAX 99), the meter will record once after every 10 sampling, finally 500 sampling but only 50 to be recorded, which will help analysis the RPM during the measuring time. Press LASER to add the count and press MAX to reduce the count, because the sampling time is constant, the more that count set, the longer time the record takes. When you finished setting, press REC to exit.

6.Max, Min and average data selection button:

Press MAX the sign "MAX" will light and display the maximum data of measuring. Press MAX again, the sign "MIN" will light and display the minimum data of measuring. Then press MAX again, the sign "AVG" will light and display the average data of measuring (every 10 sets of data). Press the MAX last time to exit.

7.Laser power selection:

Two options-high/low. The default laser power is low, the sign "▲" displaying. Press LASER to turn the high option. The sign "☼" displaying and laser power will get high. The laser power could also be set while measuring. As the MCU is computing at the same time, the reaction of the button pressing might be slow, so please press a little longer if necessary.

5

Low laser power is the priority selection. You may only select the high power when the reflection is not enough. Please your eyes from the laser when measuring.

8.Laser hole:

The laser emitter, be careful and don't point the laser to people's eyes.

9.Reflection receiving hole:

To receive the reflected laser and process the data to get the RPM.

IV .MEASURING PROCEDURE

- 1.Paste the reflecting tape mark to the measuring object.
- 2.Press ① to power on.
- 3.Press TEST to select manual mode, or press AUTO to select automatic mode.
- 4.Point the laser to the surface of the reflecting tape mark to get the data.
- 5.Press different function button to get other related data.
- 6.Measuring finished, power off.

V .MEASURING CONSIDERATION

1.Reflecting tape mark:

Cut down a piece of reflecting mark and paste it on every objects. Non reflective area must be bigger than the reflective area. If the object is over reflective itself. You need to paint or cover the black on it, then paste the reflecting mark. The object's surface must be clean and smooth.

6