

DIGITAL TORQUE METER

User's MANUAL

Before using this product, please read the instructions carefully, which will help improve the efficiency of your use of this product

I .About Digital Torque Tester

Digital Torque torque meter is designed and manufactured for a variety of measurement tester kind of wisdom. Mainly used for measuring and testing a variety of electric screwdriver, pneumatic size screwdriver, torque screwdriver and torque wrench torque; correcting electric screwdriver, pneumatic screwdrivers, torque screwdrivers and torque wrenches, torque cap torque to conform need; you can also measure the torque other tools, such as: a variety of fixtures. The torque meter simple operation, high accuracy, full-featured, easy to carry, suitable for a variety of industrial products and service enterprises.

II .Features

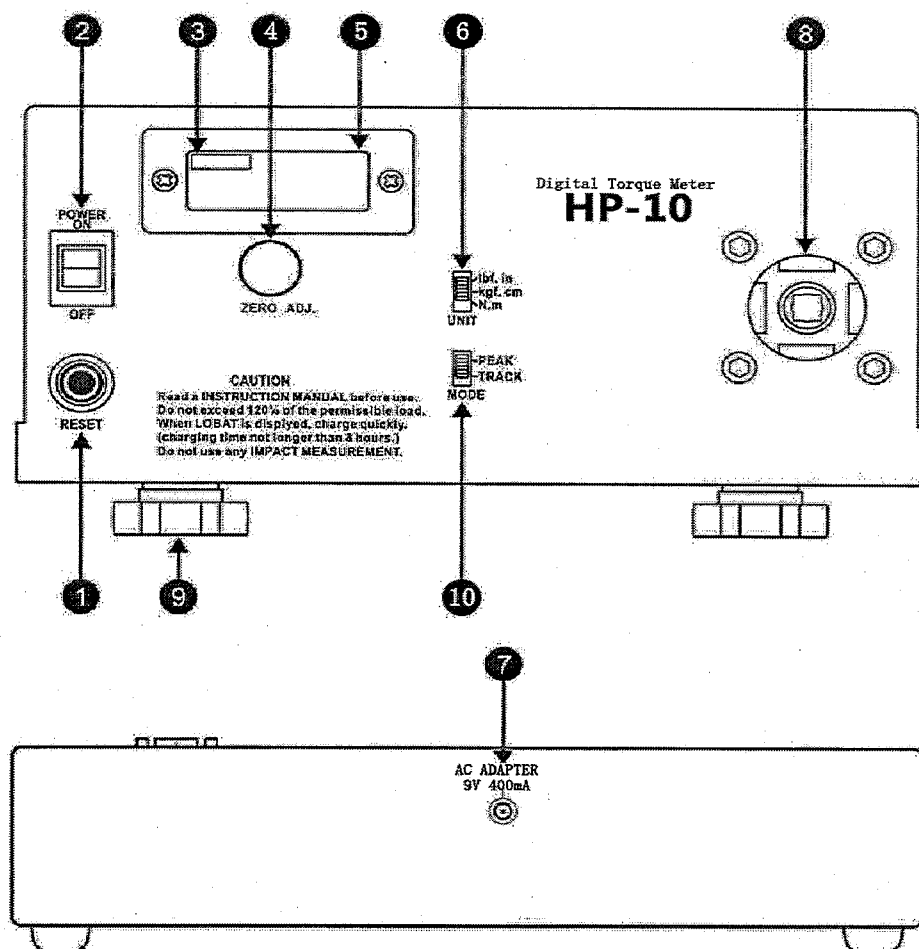
- 1、The unit can easily switch between Kg.f.Cm, Lbf.in, Nm.
- 2、A peak hold function.
- 3、Shows exactly lithium battery.
- 4、Environmental protection high-capacity lithium battery, security automatic charge control.
- 5、Durable and reliable mechanical buttons for easy operation.
- 6、High sampling imported chips, high stability.
- 7、Custom sensors, mechanical better performance, more precision, more durable high.

III .Performance

Performance Type	HP-2	HP-10	HP-20	HP-50	HP-100
Range(Unit)					
Lbf.in	0.005~1.800	0.05~9.00	0.5~18.0	0.5~45.0	0.5~90.0
KGf.cm	0.005~2.000	0.05~10.00	0.5~20.0	0.5~50.0	0.5~100.0
N.m	0.0005~0.20	0.005~1.000	0.05~2.00	0.05~5.00	0.05~10.00
Performance Type	HP-200	HP-250	HP-500		
Range(Unit)					
Lbf.in	1.0~180.0	1~180	1.0~450.0		
KGf.cm	1.0~200.0	1~250	1.0~500.0		
N.m	0.10~20.00	0.1~25.0	0.10~50.00		
Accuracy	±1%				
Sampling rate	500HZ				
Power supply	Lithium Battery :3.7V				
Charging time	>8 Hours				
Full power continuous use	45Hours				
Battery Life	≥500times				
Size	120mm x 230mm x 50mm				
Weight	2KG				
Charger	Input:AC 220V 50HZ Output:DC 9V 300mA				
Operating temperature :-10℃ — 40℃			Operating Humidity :35%RH — 65%RH		

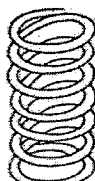
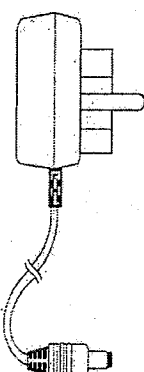
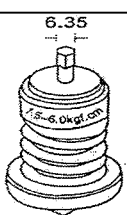
IV.Digital Torque meter Appearance

① (RESET SW)	⑥ (UNIT SW)
② (POWER SW)	⑦ (DC. IN)
③ (LOBAT DISPLAY)	⑧ (SOCKET)
④ (ZERO ADJUST SW)	⑨ (KNOB)
⑤ (DISPLAY)	⑩ (MODE SELECT SW)



V.Fitting

①HP Fitting

Type	Fitting		
	Buffer	Spring	Charger
HP-100 HP-50 HP-20	 Range:5.0-30.0Kgf.cm		
HP-10 HP-2	Range:1.5-6.0Kgf.cm		
HP-100 HP-50 HP-20	 Range:5.0-30.0Kgf.cm		
HP-10 HP-2	Range:1.5-6.0Kgf.cm		

②Charger:

Input: AC 220V-50HZ

Output : DC 9V-300mA

VI.Preparation and measurement methods

5-1 Measuring instruments installed in the measurement of large torque might yield it. Therefore, measuring instruments must be used to secure the foot appliance fixed it.

5-2 Setting the measurement mode has the following two kinds of modes to choose from.

- (1) "PEAK" Peak Mode: Displays the measured maximum torque value.
- (2) "TRACK" variable value Mode: Displays real-time torque value.

5-3 Measurement

- (1) Zero adjustment: Turn torque power, then measuring mode to "TRACK", this time a numeric display should be zero. If it is zero then press "zero switch [REST]" more than four seconds value to zero, then the measurement mode to "PEAK".
- (2) Prepare feel better measurement tools and interface, and start measuring the torque.
- (3) When measuring clockwise or completely locking up their own tools to stop or trip.
- (4) When the measurement is completed, the value on the display is the torque value of the measurements.
- (5) If the measure again, again before the measure by "zeroing switch" will display the information removed.
- (7) If the user needs to be cut to measure torque variation value change mode "TRACK"

VII.Charging

When the display "**LO**" indicates the torque meter is running low, the need for charging blinking. Please turn off the power or torque to random with charger, connect the power and torque meter properly correct charging hole can be charged.

VIII.Service Assurance

Failure of this product after purchase if defective due to production or transport processes generated within a year, the Company has an unconditional offer repair services; but in the case were excluded:

- ⊙ Improper use, repair or malfunction caused by the reorganization instrument.
- ⊙ After purchase due to fall and other accidents caused by the fault.
- ⊙ Due to natural disasters, pollution and abnormal voltage caused by a fault.

IX.Calibration Service

This product is done in the factory have switched reliable and consistent with international standards calibration accuracy, but in order to maintain the accuracy of torque, the torque meter should do regular check. The company also provides professional and standard tune repair service, only to ensure that the service was outside during the check additional fees.

X.Electric screwdriver with torque meter

1. The electric torque screwdriver adjustment

a. Rotary torque adjustment ring to increase or decrease the torque output.

Raised to a higher scale clockwise direction, representing an increase of torque; counterclockwise adjusted to a lower scale, representing decrease of torque.

b. The operation of electric screwdriver should be gradual, the first operational test small torque lock screw, if insufficient torque and then gradually increase the feeling of torque.

c. The relationship between electric screwdriver torque output and torque scale refer to "torque graph" user manual. Of torque locking screw to screw itself depends on the type, size and material composition of the material riveting.

d. When the lock is locked object attached to complete, depending on their compliance with quality standards after, then the torque meter to measure the correct torque of the electric screwdriver, if the lock attached conditions below standard, then adjust the electric torque screwdriver until the standard so far.

e. When an electric screwdriver with a torque meter to measure and record the good torque, the screwdriver to unscrew the lock ring housing front, put torsion fixing ring, so you can prevent abnormal changes in torque.

2. Use the torque meter (tools: torque, automatic electric screwdriver)

a. Select the appropriate model based on electric screwdriver torque needed to screw lock attached, refer to electric or electric screwdriver from subdirectories vector chart

b. Select the appropriate torque meter: HP-10 maximum torque can be measured for 10Kgf-cm, HP-100 can be measured maximum torque of 100 Kgf-cm; selection of torque spring seat (depending on the torque to be tested can be divided into four subject species, please refer to the following table).

c. Test steps: 1. Turn on the power switch. 2 measurement mode (MODE) is set to "TRACK". 3 unit switch is set to be tested units (Lbf-in; Kgf-cm; Nm).

d. Zero adjustment: View the status of whether the display value is zero, if not zero press switch (REST), the display zero (HP-50 needs to be adjusted to zero adjuster ZERO.ADJ).

e. Measurement mode (MODE) is set to "PEAK".

f. Electric screwdriver Arbors put the other end into the spring seat fitting end to start an electric screwdriver to start measuring the output torque electric screwdriver.

g. When the value of an electric screwdriver is displayed after measurement of normal and complete; the value on the display is the value of the output torque electric screwdriver.

h. After the completion of measuring electric screwdriver, loosen the spring seat is reversed, in order to prevent the spring seat elastic fatigue, according to the switch can continue to measure zero after clearing the screen (HP-50 does not need to release the spring seat, a test mode for direct hit the Lord).

i. The electric screwdriver to use the same types of different brands of torque (or torque of the spring seat) will produce different torque value of the error, the error caused by different sources, mostly spring characteristics of the spring seat. There are two or more

of the same workplace torque timing, and use should be regularly check the torque meter and its different characteristics than the spring of the spring seat is too large, if the difference is too large it should replace the entire set of new springs or spring seat.
j. Do not use the torque timing while charging, so as not to affect the accuracy of the test data.

XI. Buffer installation, inspection

1, The installation of the buffer

According to the need to test and choose the bearing and spring, then rotate counterclockwise, install the spring (as shown)

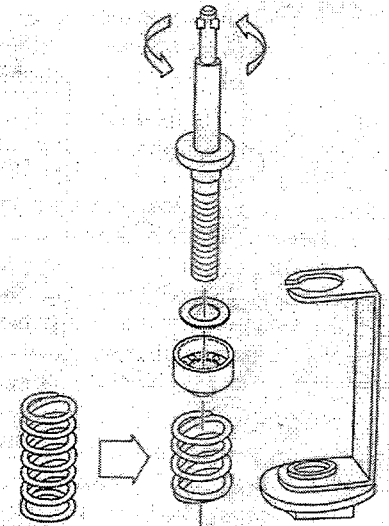
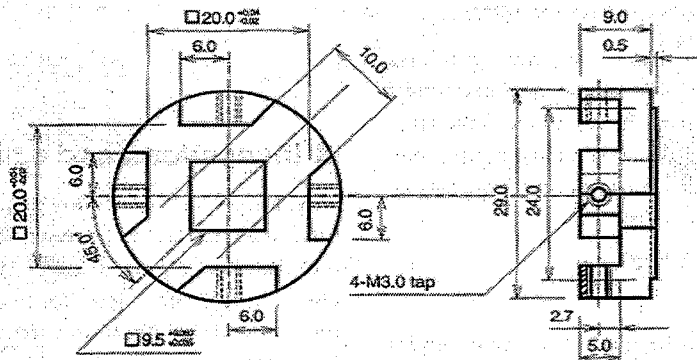
2, Inspection buffer

A, Before use to check the buffer, gathering dust, lack of grease or bearing wear seriously affect the accuracy of the torque test.

B, Regularly check bearing buffer, long-term repeated use of the buffer, the buffer will bearing wear, resulting in a smooth rotation of the buffer can not ultimately affect the accuracy of the torque testing.

XII. Torque test head size

Here is the size chart torque test head:



XIII. Precautions

1. Do not overload torque test, be sure to test the torque in the torque tester's test range, otherwise it will lead to permanent damage to the sensor torque tester, a serious danger.
- 2 Do not knock or place objects on the LCD screen, to prevent damage to the LCD screen.
3. Do not use nails, sharp or pointed objects pressing the function key; but can not loosen the screws torque test head.
4. Do not use water, oil or other liquids spilled place torque tester, torque tester to be stored in a cool, dry place and no vibration, in order to ensure the stability and accuracy of the test data.
5. Do not disassemble the equipment is prohibited easily adjust electrical components inside the device.
- 6, The device is a precision calibration equipment should be in use and handling gently.

XIV. Security Warning

1. The workplace should be kept clean.

- ⊙ Messy work area and countertops likely to cause injury.

2. Note the workplace environment.

- ⊙ Do not use torque meter to rain or moisture.
- ⊙ Use of torque at normal room temperature (about 24 °C).
- ⊙ Workplace should be well lit.
- ⊙ Do not have a place in the use of flammable liquids or gases torque meter.

3. Keep children close.

- ⊙ In addition to operating personnel should avoid others near the workplace.

4. wearing appropriate.

- ⊙. Do not wear loose clothing or jewelry too, so as not to pull on the hook when operating tools.

5. caution.

⊙ Operating torque timing should be used with care, attention and workplace safety operation.

6. Firmly fixed fuselage body.

⊙ Should be used when measuring a large torque tools such as clamps or a vise to secure the screwdriver, so it would be more secure, but can be used both hands to operate screwdriver.

7. Do not exceed the load torque test.

⊙ If the test exceeds the load may cause damage or injury unexpected.

8. Do not disassemble, shock or vibration instruments.

⊙ Disassemble the instrument or instruments were excessive shock, vibration may cause damage to the instrument.

9. electric shock Warning !!

⊙ Do not touch with wet hands to avoid electric shock power outlet.

10. Use the dedicated charger.

⊙ Non-dedicated charger may damage the instrument, is more likely to cause a fire accident.

11. The appropriate charging.

⊙ Please charge voltage according to the instructions. Do not use a DC power supply or a generator charging, so will produce heat fire.

⊙ Charging time not more than eight hours, can cause overheating and overcharging battery leakage.

12. The battery should never be (fitted to the torque meter) discarded fire.

⊙ So can cause an explosion or release of toxic substances. (Discard the battery program should be properly handled or sent to specialized recycling in accordance with local law office)

13. If the following conditions should turn off the power.

⊙ When there is no charge or use.

⊙ Make repairs.

⊙ Situation may lead to other dangerous time.

14. The careful maintenance of torque.

⊙ Always check the spring seat, do not use deformed or broken joints, so that the operation of normal security.

⊙ Periodically check the wires and extension cords, replace the damaged wire.

15. The non-violent pull the cord.

⊙ Not carry instruments hanging wire, do not pull the cord to disconnect the plug.

⊙ Must not be placed next to the hot wire, greasy and have sharp edges items.

16. Check whether the loss of function due to damage caused by parts.

⊙ Before further use of the instrument, carefully check for damage, the ability to function properly.

⊙ Examination may affect the operation of any part is normal.

17. Requests to repair the instrument by a professional staff.

⊙ Do not modify this product.

⊙ Should repair at the dealer to buy the product, if the product repaired by non-professionals, may not work, or even cause injuries.

18. Use the dedicated or accessory.

⊙ Do not use outside the operating manual instructions or accessory.

☆ This product uses the microcomputer program auto-zero technique, long press 4 seconds to turn the auto-zero, zero knob for decorative use only!

HP Digital Torque Meters Test Report

CETIFICATE NO: 1003154

CALIBRATION CETIFICATE

Model No: HP-100

Range: 10N.m

Serial No: 19 15 4

DATE	2022.05.08
Tested by	QC PASS 04
Certifide by	QC PASS 05

Standard	Clockwise	Counterclockwise	Standard	Clockwise	Counterclockwise
Kgf.cm	Kgf.cm	Kgf.cm	N.m	N.m	N.m
10.0	10.0	10.0	0.98	0.98	0.98
20.0	20.0	20.0	1.96	1.96	1.96
30.0	30.0	30.0	2.94	2.94	2.94
40.0	40.0	40.0	3.92	3.92	3.92
50.0	50.0	49.9	4.90	4.90	4.89
80.0	80.0	79.9	7.84	7.84	7.83
100.0	100.0	100.0	9.80	9.80	9.80

Note:

- 1.The results relate only to the items calibrated.
- 2.This calibration certificate shall not be reproduced except in full, Without the written approval of our laboratory .