

# **Digital Torque Meter**

## **Instruction Manual**

## 1. Overview

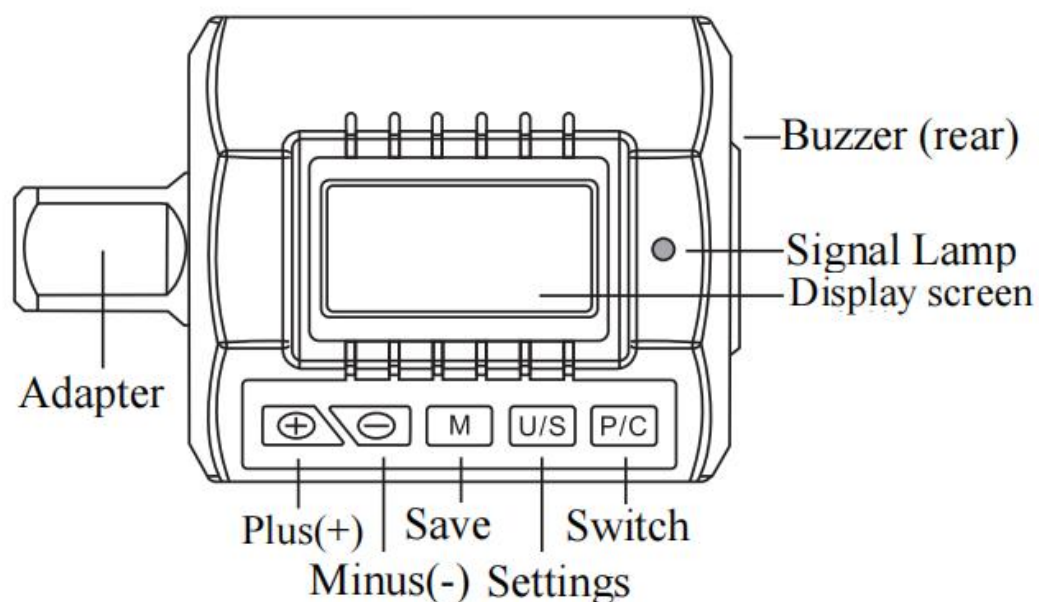
Digital torque meter is a torque monitoring instrument with ratchet hand, which is used for all kinds of fastening and disassembly control. it has the functions of simple operation, easy to carry, multi-unit conversion, sound indication, adjustable forward and reverse, etc., which is widely used in automobile, bicycle, all kinds of mechanical maintenance and other industries.

## 2. Functional features

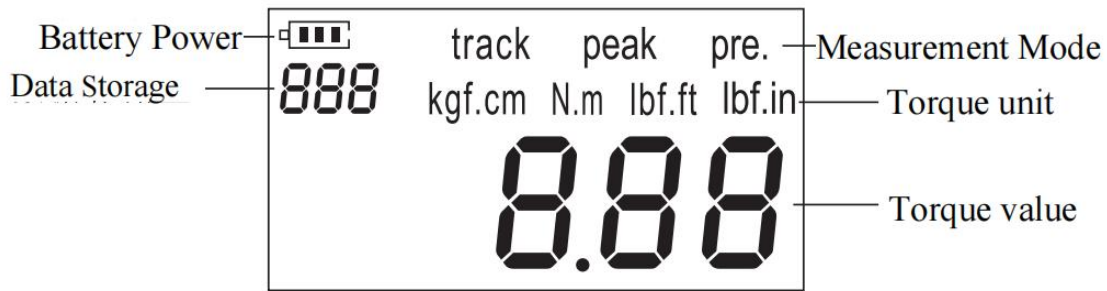
- Error: 2% clockwise, 2.5% counterclockwise, positive and negative, improve work efficiency.
- Four torque units: kgf.cm, N.M, lbf.ft, lbf.in.
- Acousto-optic alarm: effectively provide the accuracy and safety of operation.
- Backlight function: it is convenient to read data clearly at night or when the luminosity is insufficient.
- Multi-mode operation: real-time mode, peak mode, preset mode.
- Power supply: 2 pcs AAA batteries.
- Automatic shutdown: automatic shutdown without operation for 2 minutes to avoid excessive power consumption.

## 3. Product components

[Torque Meter Body]



[LCD]



## 4.Specifications

Model	30	30	135	135	200	340
Minimum Graduation Value	0.01 N.m	0.01 N.m	0.1 N.m	0.1 N.m	0.1 N.m	0.1 N.m
Maximum Operating Range	0.9-30N.m	0.9-30N.m	4-135N.m	4-135N.m	6-200N.m	10-340N.m
Connector	1/4	1/2	3/8	1/2	1/2	1/2
Torque Accuracy	2% clockwise; 2.5% counterclockwise					

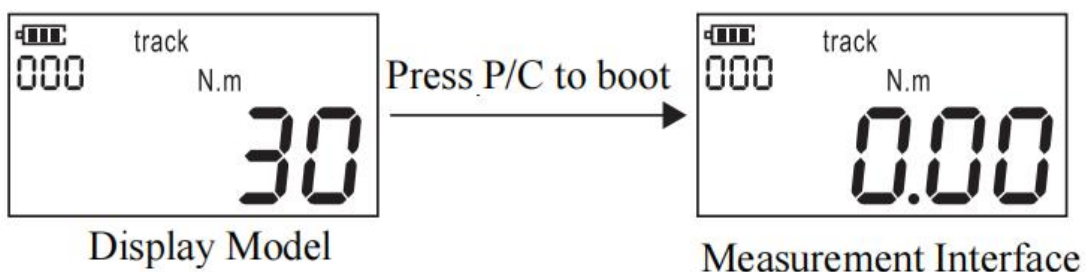
**PS: About the torque meter (30N.M and 135N.M) ,there are two different configurations.**

## 4. Specifications

### 5. Operating instructions

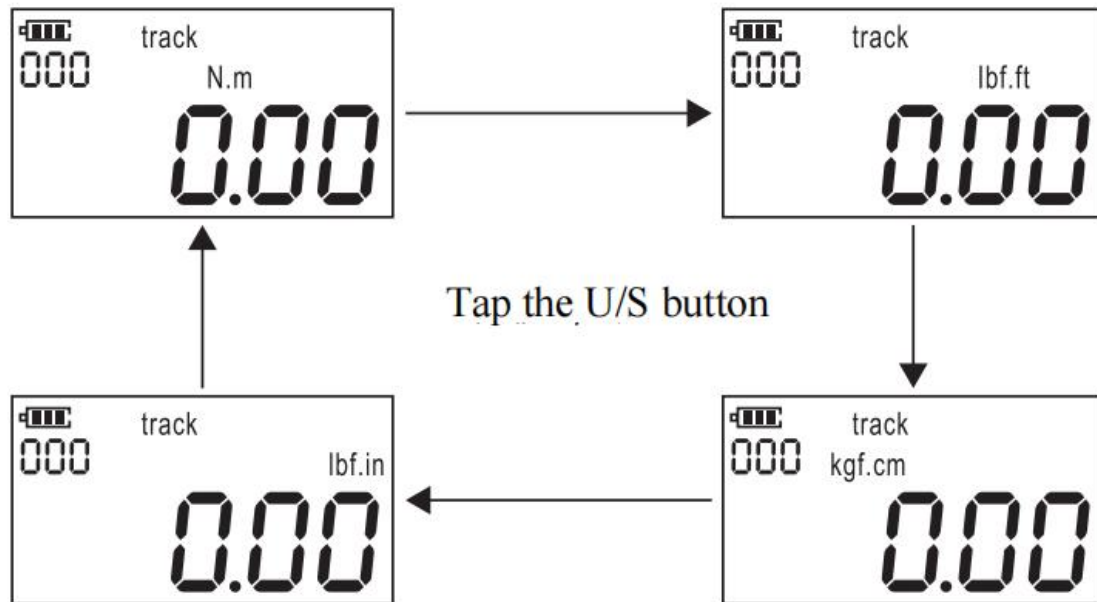
#### 5.1. Starting Up

Short press the P/C button to turn on the device. After the start, if the battery display is insufficient, it will shut down automatically and it can be used normally after replacing the battery.



## 5.2 Unit switching

In the power-on state, please press the U/S button to switch between the four engineering units.



## 5.3 Working mode switch

In the measurement interface and there is no torque value, press the M button to switch (track) real-time mode/(peak) peak mode/(pre) preset mode.

### A. Real-time mode (track)

The force applied by the tool will increase gradually from the minimum measured value. When a force is applied, the on-screen torque value will change as the user applies different forces; the reading will increase as the force increases, and decrease as the force decreases. When the user unloads the force, the screen display will return to 0.

## B. Peak mode (peak)

After setting a preset value (assumed value is 5N.m), the force applied by the tool will increase gradually from the minimum measured value. When the force is applied continuously, the on-screen torque value will always display the maximum torque value when the user exerts a different magnitude of force; when the user unloads the force, the on-screen display will record and lock the maximum torque value during the force application process, which is the peak torque. This value will be flashing, press the P/C button to clear the peak torque. Maybe, if it needs to be measured again, the user can directly reload the applied force to update the locked peak torque without clearing and resetting.

## C. Preset value mode (pre)

After setting a preset value (assumed value is 5N.m), the force applied by the tool will gradually increase from the minimum measured value. When a force is applied, the on-screen torque value will change as the user applies different forces; the reading will increase with the increase of the force, and decrease with the decrease of the force. When the user unloads the force, the screen display will return to 0.

### 5.4 Sound and light alarm function

The sound and light alarm function needs to turn on the buzzer function in advance.

Every time you press the button, a beep will sound. In the preset value mode, for example: when the preset torque value is 20N.m, the reading will increase from the minimum measured value once the user starts to apply force. When approaching 80% of the preset value (16N.m), the red LED light will start to flash and the buzzer will turn on. When the applied torque is close to the preset value, the red light will flash faster, and the buzzer will buzz faster.

When the applied torque reaches 100%, the preset value (20N.m), the red LED light will be on, and the buzzer will continue to sound. The sound of the LED and buzzer will be released as the torque weakens gradually. The working principle of the peak mode is the same as the preset mode.

### 5.5 Clear function

When there is a force value on the display, press the P/C button lightly to complete the reset.

### 5.6 Data storage

During the measurement process, once the torque value is generated, the current torque value can be saved by pressing the M button lightly. At this time, if the character "5ucc" appears on the display, it means that the torque value has been saved successfully. The three digits in the upper left corner of the display screen will display the number of data currently saved in real time.

### 5.7 Data View

In the non-operation measurement interface, long duration press the M button to view all the saved data, and then press the "+" button or "-" button lightly to view each group of saved data. When the viewing is completed, just tap the M button to exit and return to the measurement interface.

### 5.8 Data deletion

In the data viewing interface, tap the U/S button to select the mode of deleting data. "ALL" means all saved data will be deleted at once, and "ONE" means that the saved data will be deleted one by one starting from the last set of data (It is not feasible to select to delete, and the error code of "JEL" character will pop up). After selecting, tap the P/C button to delete the data.

### 5.9 Restore factory settings

The user can restore the tool to the factory setting state through this function. In the measurement interface, long duration press the U/S button to enter the system setting interface, and then press the U/S button lightly to select the "RSET" option. Finally, select the number 1 or 0 by tapping the "+" button. To restore the factory settings, select 1 and then tap the U/S button. At this point, the tool initialization is complete and it jumps back to the measurement interface. If there is no need to restore here, please select 0 and then tap the U/S button to exit the system setting interface, or you can tap the P/C button directly to exit with one button.

### 5.10 Buzzer on

In the measurement interface, long press the U/S button to enter the system setting interface, then press the U/S button lightly to select the "BUZZ" option, and then press the "+" button lightly to select whether to turn on the buzzer. If the buzzer is turned on, select character 1. If it is not turned on, select character 0. After setting, press the P/C button lightly to exit with one button.

### 5.11 Backlight function

In the measurement interface, long press the U/S button to enter the system setting interface, then press the U/S button lightly to select the "LTON" option, and then press the "+" button lightly to select whether to turn on the backlight function. If the backlight function is turned on, select character 1. If it is not turned on, select character 0. After setting, press the P/C button lightly to exit with one button.

## **6. Overload warning**

When the torque exceeds 120% of the full scale, the screen will display the "OLOAD" character. At this time, the torque meter will be in a suspended state. Please remove the torque first, and then press the P/C button to recover. (If an unrecoverable situation is encountered, please contact the manufacturer in time)

Do not use the torque meter over the range, that is, the torque value exceeds 120% of the full range. Long-term over-range may cause damage to the torque meter or loss of accuracy.

## 7. Maintenance and storage

7.1 Note: In order to maintain good accuracy, it is recommended to re-calibrate approximately once a year.

7.2 Excessive torque may cause damage or loss of accuracy (105% beyond the maximum torque range).

7.3 Do not shake the torque meter violently or drop the torque meter on the ground.

7.4 Do not place the torque meter in high temperature, high humidity or direct sunlight.

7.5 If the torque meter gets wet, wipe it with a dry towel immediately.

7.6 Do not put too much pressure on the LCD screen.

## 8. Random accessories

No.	Name	Qty
1	digital torque meter	1 pcs
2	7#Battery	2 pcs
3	manual	1
4	Certificate of conformity	1
5	Warranty Card	1
6	Desiccant	1 bag

PS: When the adapter size of the torque meter is 1/2" , the standard configuration is 2pcs adapters.

When the adapter size of the torque meter is 1/4" or 3/8",the standard configuration is 1pcs adapter.