NovaTork®

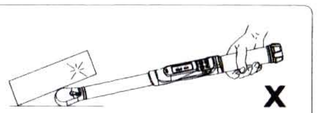
INSTRUCTIONS

EJ Model

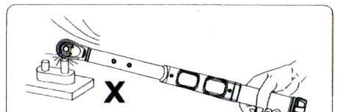
Electronic Torque Wrench

Overview

1. Electronic torque wrench is a precision instrument. It is only used to tighten screws, bolts and nuts to the required torque, and should be kept properly.



Do not use it as a crowbar or as a substitute for a ratchet wrench.



Do not use a torque wrench as a hammer.

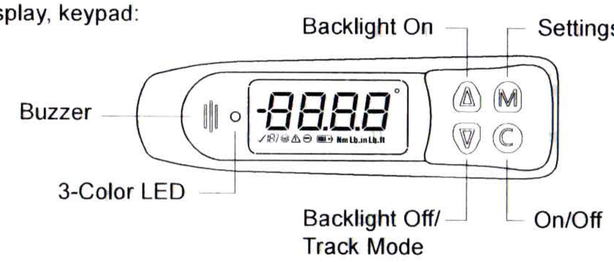
2. Do not apply torque in excess of the maximum capacity of the wrench. Apply load on the grip only, hold the grip from middle, and do not use any handle extension bars (a piece of pipe put over the grip). Head holder torque wrench should be used with appropriate drive heads. If using special heads, please set torque as formula on page 4.

3. Do not disassemble the wrench by yourself. Incorrect disassembly and installation may damage the internal structure and make the torque wrench unusable.

4. Key features

- Accuracy: CW±2%, CCW±3% from 10% to 100% of capacity.
- Units: Nm, Lbin, Lbft.
- Modes: Peak, Track.
- Peak value hold function for Peak mode.
- Target torque can be set.
- LED light and buzzer alarming.
- Can be operated continuously with automatic reset.
- Backlight for dark working condition.
- Torque error% display function.
- Battery level display.
- 2 Minutes automatic shutdown function.
- 3 Pcs AAA batteries, easy replacement.

- Display, keypad:



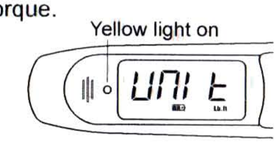
How to Set

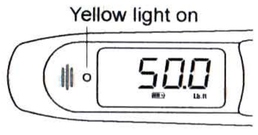
1. Power On

- Press C to power on while no load.
- Display shows as last used, you can start to use it.

2. Settings

- The order of settings is always: Unit→Torque.
- Press M into settings menu, yellow light on, display shows "UNIT". Press △ or ▽ key to select unit. Press M to confirm and enter torque setting.





- Display shows torque value, press △ or ▽ key to adjust, press and hold to get faster. Press M to confirm, then press C to quit, yellow light off. Display shows the target torque value and unit.

3. Backlight

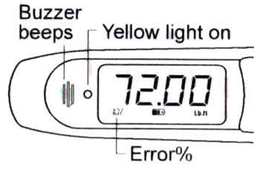
- Pess △ key for 3 seconds, turn on backlight.
- Press ▽ key for 3 seconds, turn off backlight.

How to Use

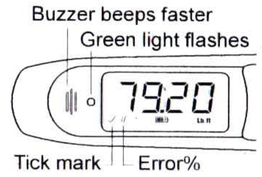
1. Peak Mode

[For example, target torque is set to 80 Lb.ft]

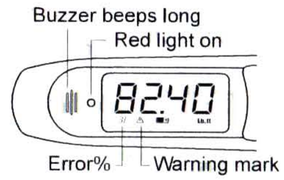
- When the applied torque is within -18% of the preset torque, the error% starts to show.
- When the applied torque is within -10% of the preset torque, yellow light turns on and buzzer beeps. Slow down applying torque.



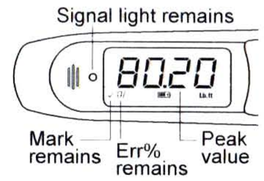
- When the applied torque is within ±2% of the preset torque, green light flashes and buzzer beeps faster. A "✓" mark appears on the screen. Stop applying force.



- If the applied torque exceeds +2% of the preset value, red light turns on and buzzer beeps long. A "⚠" mark appears on the screen. Stop applying force at once!



- When the torque is released, the screen will remain showing the maximum applied torque, the error%, mark and light color. So that user can easily see the result.

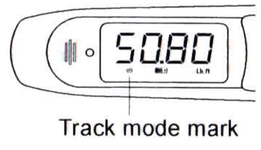


- Reset to Zero:

When you apply force again after the torque is fully released, the wrench will automatically reset to zero, the light will be off and the test will start again. Or you can press C key to reset manually, the display will show the target torque value and unit again.

2. Track Mode

- While in Torque mode, press ▽ key for 1 second, "◎" mark pops up, indicating you've entered Track mode.



- In Track mode, the value displayed varies with the applied torque. The value will drop to zero as the torque is released.
- Press ▽ key for 1 second again, "◎" mark disappears, exit Track mode.

3. Power Off

- Press C for 3 seconds to shutdown manually.
- After 2 minutes of non use, automatic shutdown.

4. Battery Replacement

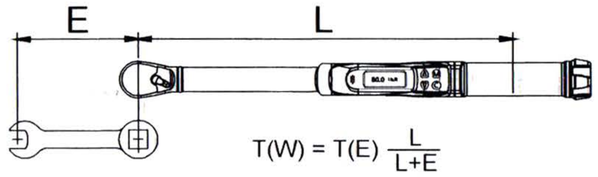
- When the battery capacity on the screen is insufficient, unscrew the back cover and replace the batteries in time. When the battery capacity is exhausted, display shows "- - - -", the wrench can not work any more.
- This wrench requires 3 pcs AAA batteries. Pay attention to the positive and negative poles, and tighten the back cover.

5. Zero the Wrench When Changing Direction

- When you change the direction of testing (CW changes to CCW, or CCW changes to CW), after the wrench is full loaded and unloaded, you need to press the "C" key and the ▽ key together for 4 seconds to zero the wrench. The screen displays "- 0 0 -", indicating that zeroing is done.

Calculations When Using Non-Standard Plug-in

When using a torque wrench with an extended head (as shown in the figure below) will cause the applied torque to be different from the actual required torque value. Therefore, the target torque value set on the wrench should be calculated according to the following formula.



$$T(W) = T(E)\frac{L}{L+E}$$

T(E) - Torque required by extension

T(W) - Torque set on the wrench

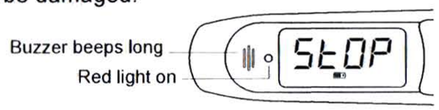
（If the non-standard plug-in is more commonly used, you can buy our electronic torque wrench with coefficient function. Please consult the supplier for details.）

Maintenance

- When not in use, put the wrench in the specified box to prevent damage and dampness.
- Remove the batteries if it won't be used for a long period.
- To clean the exterior, use a clean cloth to dip a small amount of alcohol, and do not use other solvents.
- Except that the ratchet mechanism can be cleaned regularly with adding a little lubricating oil, do not lubricate the other parts.
- The torque wrench should be re-calibrated periodically, at least once a year. It is necessary to verify after abnormal use or after 5000 times of use. Users can determine calibration interval according to their own frequency of use.

Warnings

- ***Do not overload the wrench.*** If the applied torque exceeds 10% of capacity, display shows "STOP", you MUST stop or the wrench will be damaged.



- When using large torque or defective fasteners, sockets, as well as the wrench itself, may suddenly break causing you to lose balance, fall, or suffer other trauma. Be sure you have stood firm and have a good balance. If necessary, add some protections to ensure safety.