

IST-16WA SERIES

## IST-16WA SERIES QUALITY INSPECTION TORQUE WRENCH OPERATION MANUAL



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EN -- Please scan the QR code or visit the website for operation manual.

IT --- Scansiona il codice QR oppure visita il sito web per il manuale d'uso.

CZ -- Pro návod prosím naskenujte QR kód nebo navštivte webovou stránku.

ES -- Por favor, escanee el código QR o visite la página web para ver el manual de instrucciones.

FR -- Veuillez scanner le QR Code ou visiter notre site web pour accéder aux manuels d'utilisation.

DE -- Bitte scannen Sie den QR-Code oder besuchen Sie die Website für die Bedienungsanleitung.

PT -- Para aceder ao manual de instruções, por favor, faça a leitura do código QR ou visite o nosso site.

MN-IST-16WA Series-E

**Attention**

1. Over-torque (110% of Max. torque range) could cause breakage or lose accuracy.
2. Do not shake violently or drop wrench.
3. Do not use this wrench as a hammer.
4. Do not leave this wrench in any place exposed to excessive heat, humidity, or direct sunlight.
5. Do not use this apparatus in water.(not waterproof)
6. If the wrench gets wet, wipe it with a dry towel as soon as possible. The salt in seawater can be especially damaging.
7. Do not use organic solvents, such as alcohol or paint thinner when cleaning the wrench.
8. Keep this wrench away from magnets.
9. Do not expose this wrench to dust or sand as this could cause serious damage.
10. Do not apply excessive force to the LCD panel.
11. Apply torque slowly and grasp the center of the handle. Do not apply load to the end of handle

**QCT Mode**

Please don't use QCT mode, thank you

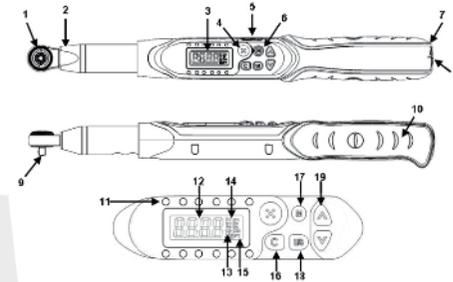
Note: If you choose the wrong mode, please press the **U/S** key until it appears after 0000 Long press the **U/S** key again to re-enter the setting interface operation.

**Optional accessory**

**OPTIONAL ACCESSORY**

Calibration cable	IST-W-CABLE
Interchangeable head	refer to sample booklet

**Description**



**Structure:**

- |                               |                                    |
|-------------------------------|------------------------------------|
| 1. Interchangeable head style | 11. LED Indicator                  |
| 2. Connecting slot section    | 12. Torque Value                   |
| 3. LCD Display                | 13. Pre-setting Index              |
| 4. Buzzer                     | 14. Units(Nm, ft-lb, in-lb, kg-cm) |
| 5. Communication Port         | 15. Peak/Track Mode                |
| 6. Buttons                    | 16. Power/Zero Reset/Clear Button  |
| 7. Battery Compartment        | 17. Pre-set Switch Button          |
| 8. BatteryCap                 | 18. Unit/Setting Button            |
| 9. Ratchet Driver             | 19. Up/Down Button                 |
| 10. Anti-slip Handle          |                                    |

**Main features:**

- Retighten the tightened bolts to measure the torque, read the torque value when the looseness is detected again
- Three measuring modes:
  - Angle mode: rotation angle can be set, when turning to the angle, 2 LED lights blinking and buzzer beeping, capturing torque values
  - Maximum value display mode: capturing peak torque values
  - Real-time value display mode: real-time tracking of torque values
- Unit: N.m, in.lb, ft.lb, kg.cm
- With audible and visible alarm, 9 preset usage modes
- In angle mode and maximum value mode, upper and lower tolerance limits can be set to determine pass or fail by LED lights
- Clockwise and count-clockwise operation
- Memory of 50 results
- Enter power saving mode after 2 minutes
- Non-slip grip handle
- With overload record (once the torque reaches 110% of the maximum range)

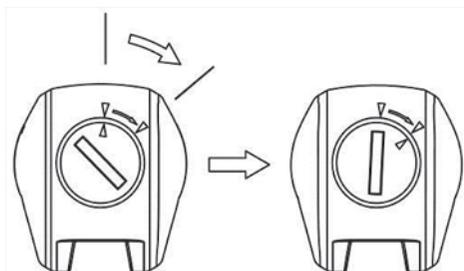
**Operation**

**1 BATTERY INSTALLATION**

- 1.Remove the battery cap.
- 2.Insert two AA batteries matching the -/+ polarities of the battery to the battery compartment.
- 3.Put on the battery cap and fasten it tightly.



Direction of Battery and Cap Installation



**2 AUTO POWER OFF**

The wrench will auto power off after about 2 minutes idle for power saving. Press **[C]** to power on the wrench again.

**CAUTIONS:**

During communication, the auto power-off function is disabled temporarily.

**3 POWER ON AND AUTO ZERO RESET**

- 1.To power on the digital torque wrench, please keep the ratchet head force free, and then press **[C]** to power it on.
- 2.During power on, a zero-reset for torque will be proceeds.
- 3.In torque mode, a default target value will show on LCD.



**ATTENTION:**

1. If **[Er0]** appeared during power-on, it means this wrench has been applied more than 110% of maximum torque.
2. if an external force is applied to the torque wrench during zero-reset, an initial torque offset error will occur. And an unstable force applied during zero-reset will cause an error displayed **[Er3]**, please keep Ratchet force free and stable, and do zero-reset again.
3. If **[Er4]** appeared, it means Angel ZERO RESET failed, please do angle ZERO RESET again.

**4 RESET THE WRENCH**

- 1.If the wrench does not function normally, please go through the reset process to reset the wrench.
- 2.To reset the wrench, loosen the battery cap then tighten it to re-start. After reset, remember to press to **[C]** power it up again.

**5 LOW VOLTAGE INDICATOR**

If the battery voltage is too low, the wrench will display a battery symbol. Please replace batteries immediately.



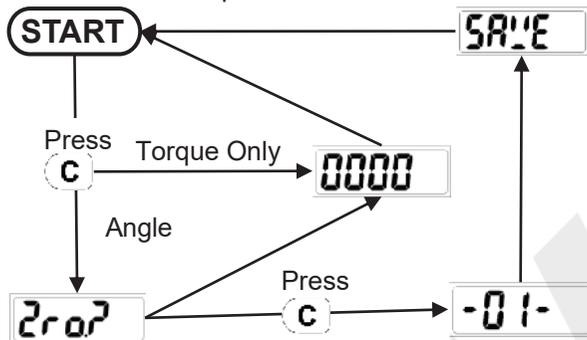
### 6 ZERO RESET

1. Better Zero-reset improves the measuring accuracy. To get higher accuracy, please do Zero-reset carefully before each measuring.
2. After power on, **C** button used for zero reset.
3. Usually press **C** to zero reset the digital torque wrench before measuring.
4. In torque mode, if an external force is applied to the torque wrench during zero-reset period, an initial torque offset error will occur.
5. Angle Zero-Reset: Important!!!

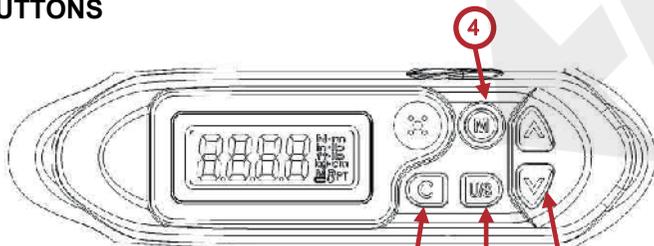
Put torque-angle wrench still horizontally on a table or workbench before Angle Zero-Reset.

In Angle mode, press **C** shows 2r0r°, press **C** again immediately starts Angle Zero-Reset; otherwise it will start torque Zero-Reset.

In case of successful Angle Zero-Reset, the value will be keep and saved, and recalled in next power on.

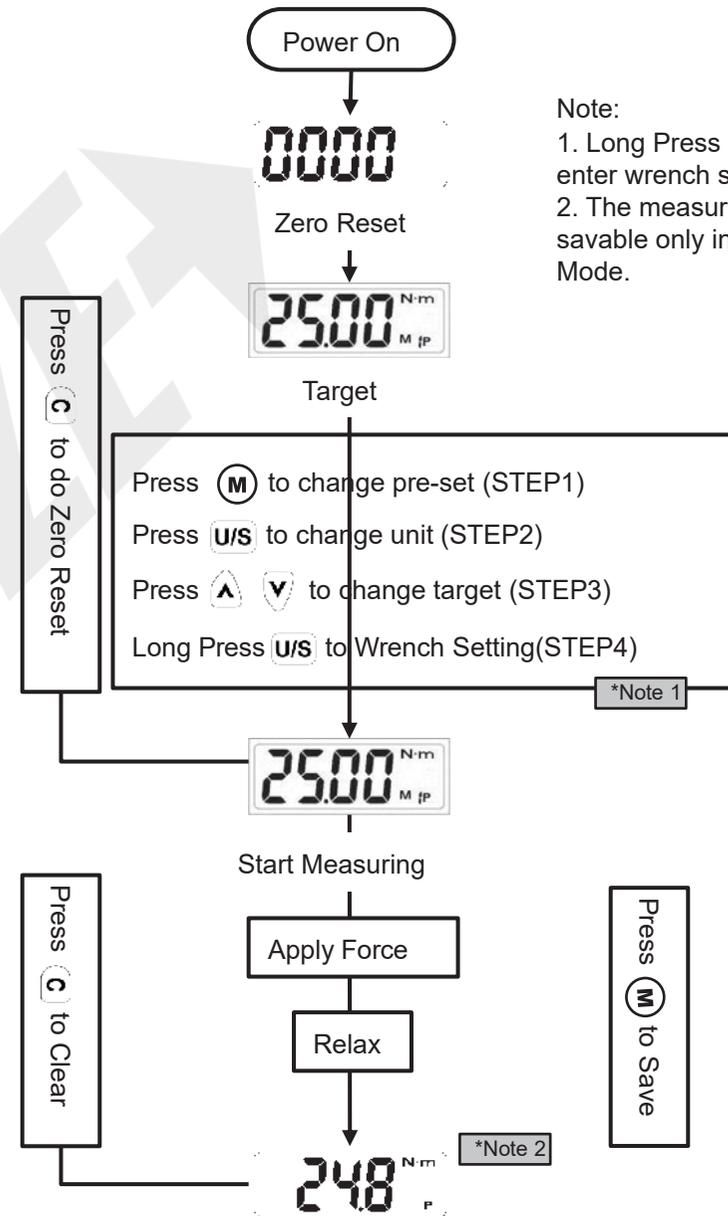


### 7 BUTTONS



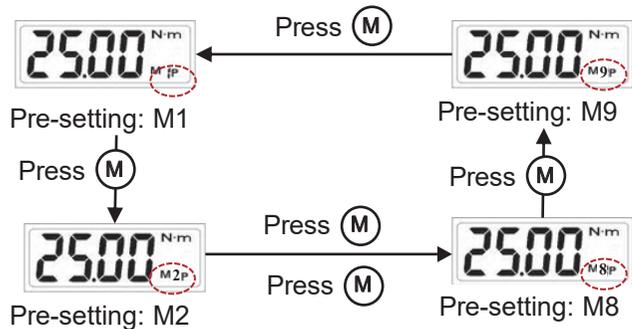
- 1 Power On/Clear
- 2 Unit Selection/Setting
- 3 Up/Down Button
- 4 Pre-Setting No.

### 8 MAIN OPERATION FLOW

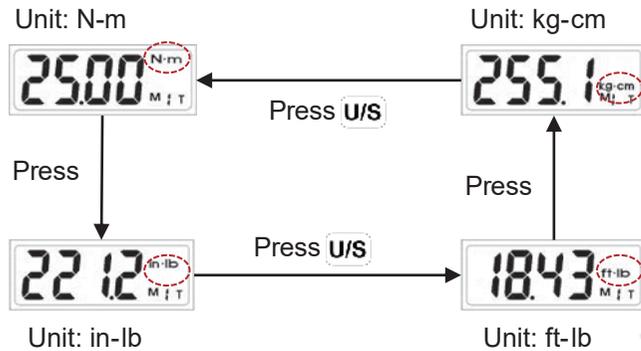


- Note:
1. Long Press **U/S** to enter wrench setup.
  2. The measurement savable only in Peak Mode.

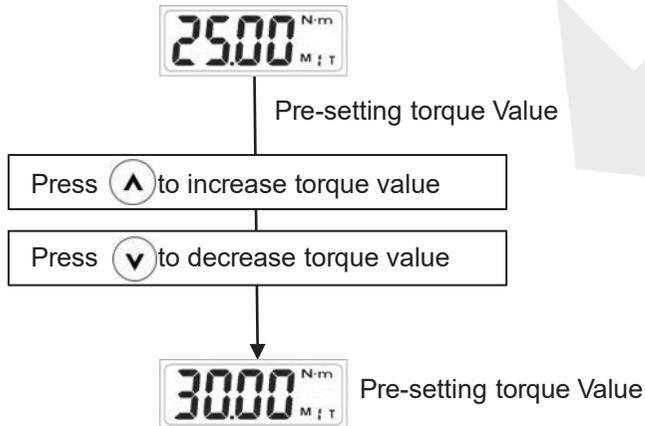
**STEP1: PRE-SETTING NO.**



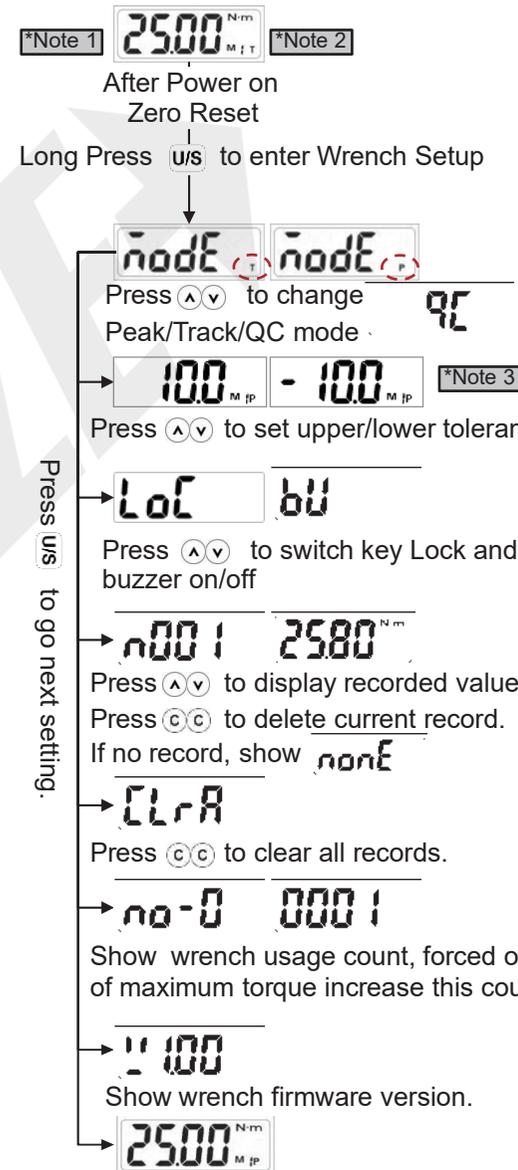
**STEP2: UNIT SELECTION.**



**STEP3: SET TORQUE VALUE**

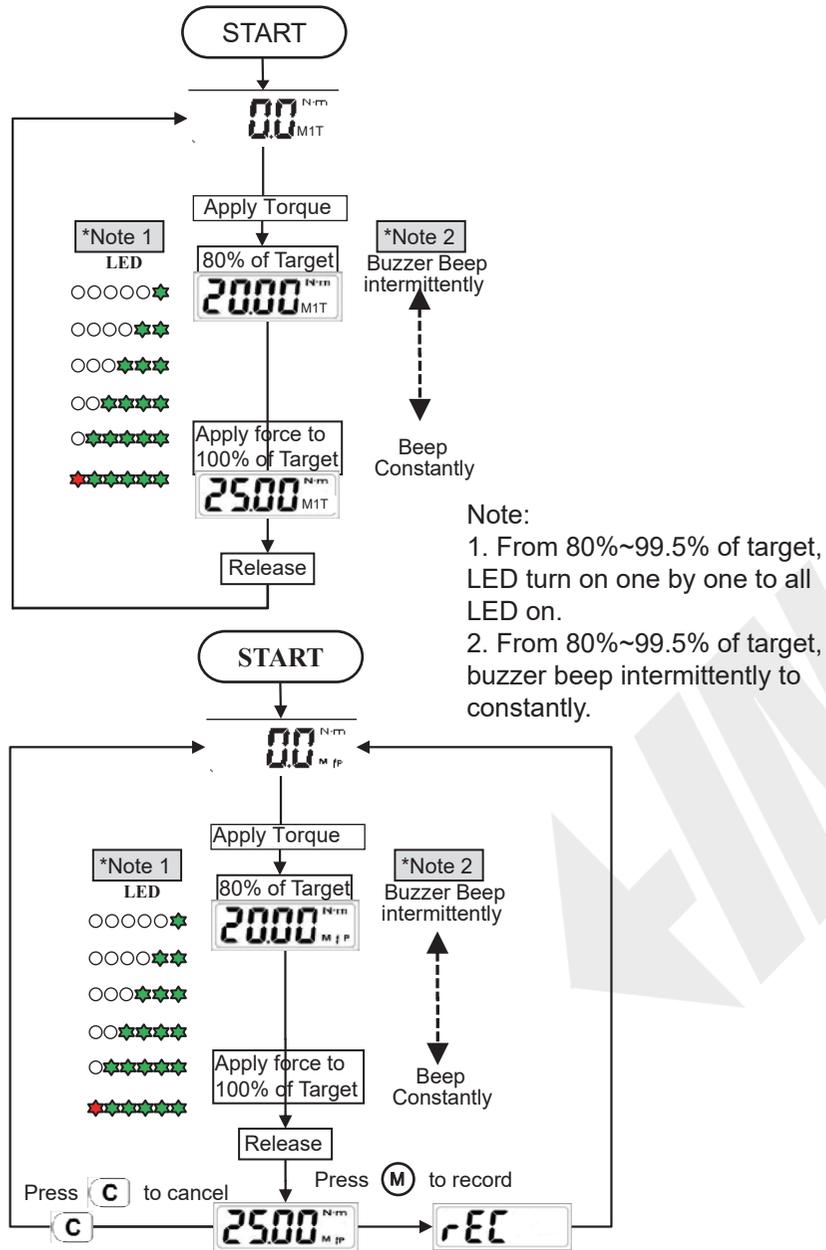


**STEP4: PEAK HOLD/TRACK MODE SELECTION (WRENCH SETUP)**

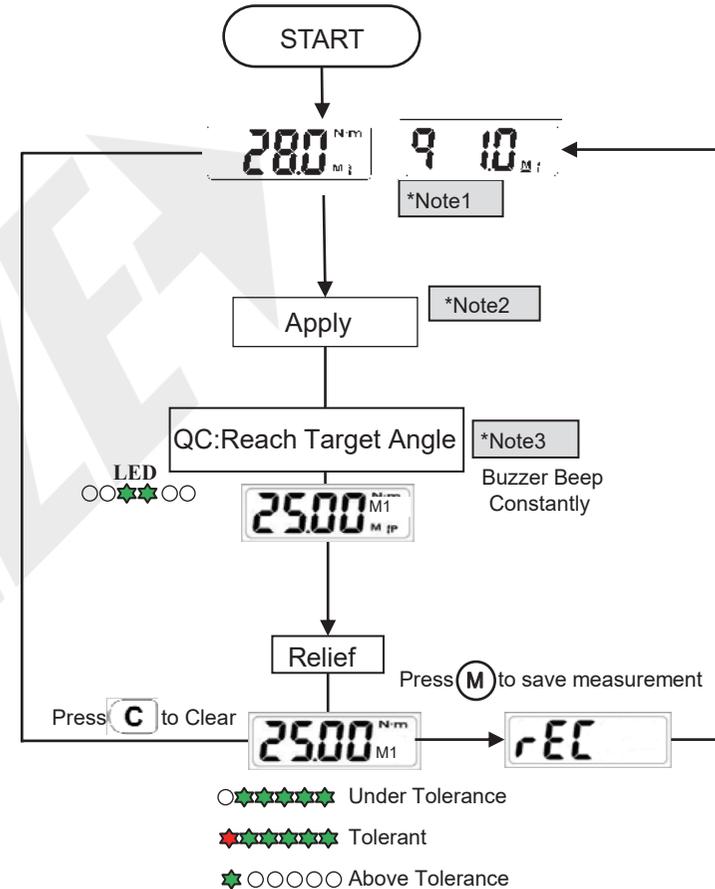


Note:  
 1. After Power on Zero Reset.  
 2. During measuring and before apply force.  
 3. The range can be 0%~20%, over 20% represented with "...", means no limitation; both set to 0% means no judgment, the P on LCD means percent.

9 TRACK MODE OPERATION / PEAK MODE OPERATION



10 QC OPERATION



**Specification**

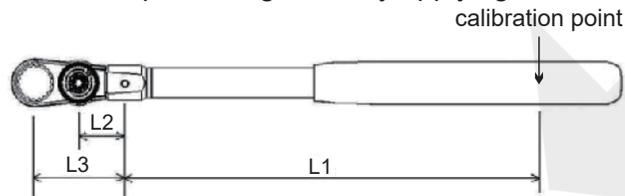
Code	IST-16W30A	IST-16W135A	IST-16W200A	IST-16W340A
Range	6~30N.m	27~135N.m	40~200N.m	68~340N.m
Accuracy	±2%			
	±3%			
Resolution	0.01N.m	0.1N.m	0.1N.m	0.1N.m
Socket size (A×B)	12×9mm	12×9mm	18×14mm	18×14mm
Arm length (L1)	272.7mm	287.7mm	381.2mm	501.2mm
Power supply	2×AA batteries			
Weight	1400g	1570g	2170g	2320g

**RATCHET HEAD (INCLUDED) SPECIFICATION**

Code of torque wrench	IST-16W30A	IST-16W135A	IST-16W200A	IST-16W340A
Square driver (D)	1/4"	3/8"	1/2"	1/2"
Length (L2)	29mm	29mm	40mm	40mm

**Conversion formula for head replacement**

If you want to use various types of heads other than the ratchet head included in this wrench, the torque setting value should be changed depending on the length of the head. Please refer to the following instructions to measure the length of the head you want to use and then calculate the final torque setting value by applying the formula.



$$D = D1 * (L1+L3) / (L1+L2)$$

D : Actual final torque

D1: Preset torque value

L3: Altered length of head

L2: Length of ratchet head attached to this wrench

L1: Length from ratchet contact to grip calibration point