



Digital Torque Wrench Manual



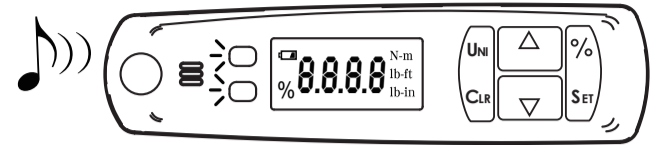
DIGITAL TORQUE WRENCH MANUAL

WARNING:

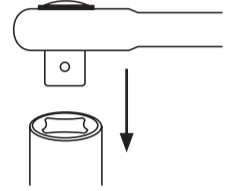
- Read this manual completely before using the digital torque wrench.
- Always turn the wrench on so the applied torque is measured.
- Do not press any key while torque is applied.
- Never use the digital torque wrench to loosen fasteners.
- Do not use extensions, such as a pipe or an iron tube, on the handle of the wrench.
- Do not apply load to the endcap. Grasp the center of the handle while applying torque.
- Over torquing can cause breakage.
- For personal safety and to avoid wrench damage, follow good professional tool practices.
- Do not use sockets or accessories showing wear or cracks, they may lead to injury.
- Use the correct size socket for the fastener.
- Be sure all components, including all adaptors, extensions, drivers and sockets are rated to match or exceed the torque being applied.
- Make sure that the wrench capacity matches or exceeds each application before proceeding.
- Verify the calibration of the wrench if you know or suspect its capacity has been exceeded.
- Observe all equipments, systems and manufacturer's warnings, cautions and procedures when using digital torque wrench.
- Make sure the direction switch is fully in the correct position.
- Adjust your stance appropriately to prevent a possible fall.
- Wear safety goggles, user and bystanders.
- Periodic recalibration is necessary to maintain accuracy.
- Do not use on live electrical circuits.
- Electrical shock can cause injury. Rubber handle is not insulated.

USAGE

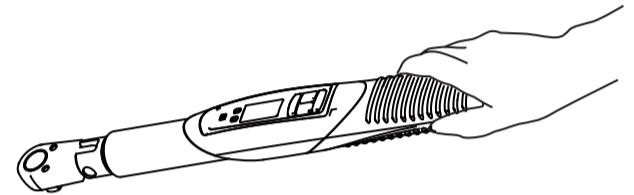
- Make sure torque wrench isn't being used while turning unit on.



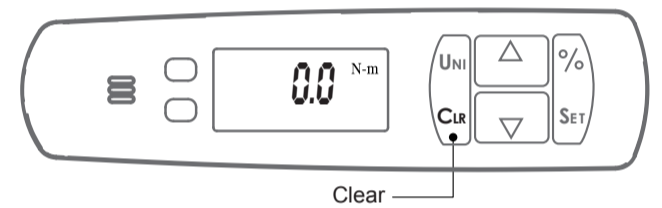
- Use correct size of the socket to load on the socket driver.



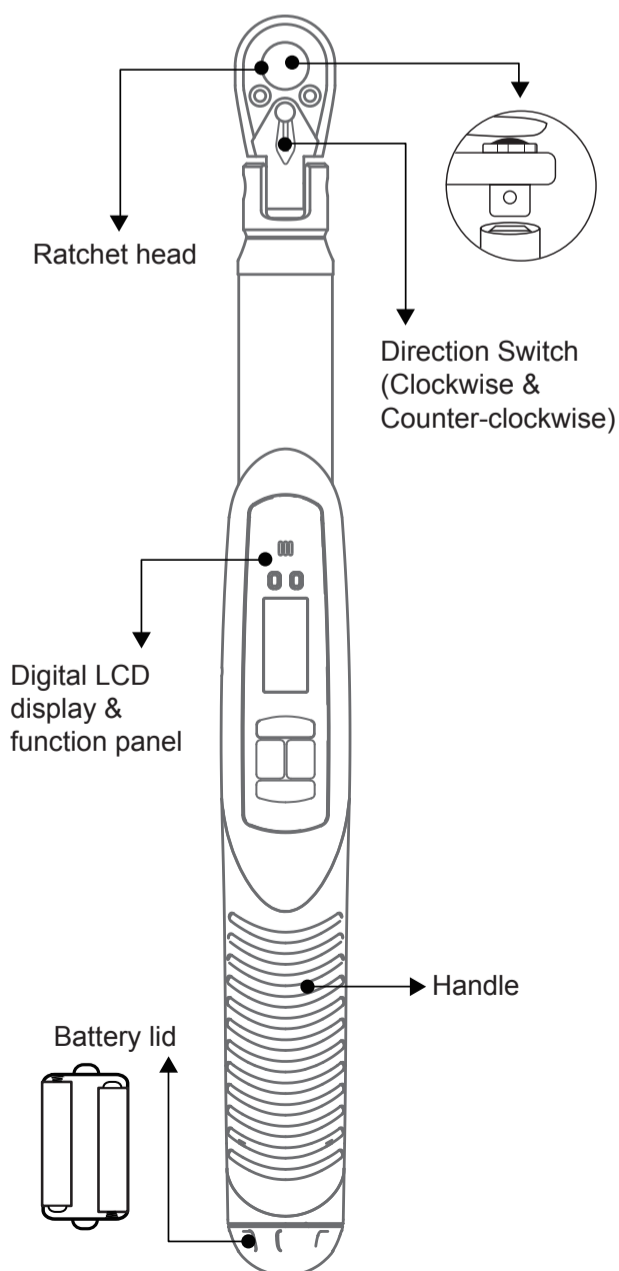
- Apply steady force and hold as close to horizontal to the socket as possible:



- Press **CLR** every time before a new test.

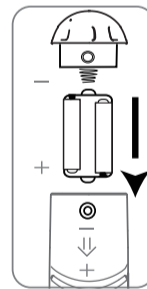
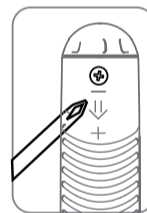


OVERVIEW



BATTERY

- 1 Unscrew the battery lid of the handle with a PH2+ screwdriver.
- 2 Follow polarity instructions on battery holders and install included six AAA batteries.
- 3 Close battery lid and tighten screw.

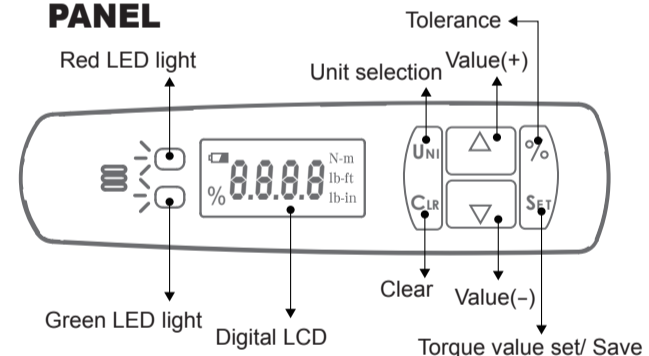


NOTE In order to maintain the best accuracy please "Restart" the torque wrench after installing the battery.

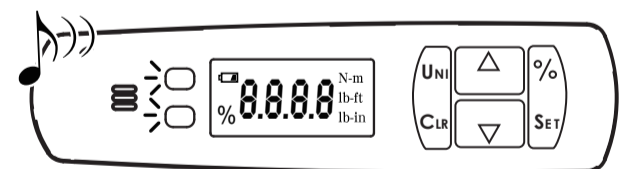
ABOUT THE BATTERY:

Install included "AAA" batteries with the correct polarity (+/-) indicated on the battery holder. Remove batteries if the wrench will not be used for a long period of time. Use only new batteries and do not mix-and-match brands or old and new batteries.

DIGITAL DISPLAY & FUNCTIONAL PANEL



- Power on: Press any key for 3 seconds.

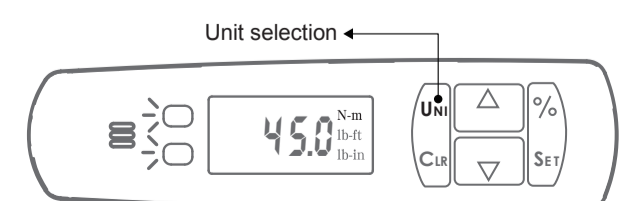


NOTE Damage to the torque wrench may occur if the unit is turned on while force is applied to the wrench.

- Power off:
 - (1). Automatic: Without applying torque, the unit will turn off after 90 seconds when the display indicates "0".
 - (2). Manual: Without applying torque, press **CLR** button for 5 seconds

SWITCH UNITS

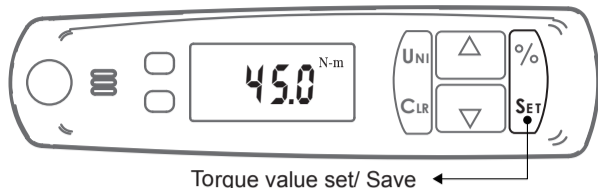
- 1 Press **UNI** to select the torque measurement unit.
- 2 3 torque units: N-m → lb-ft → lb-in



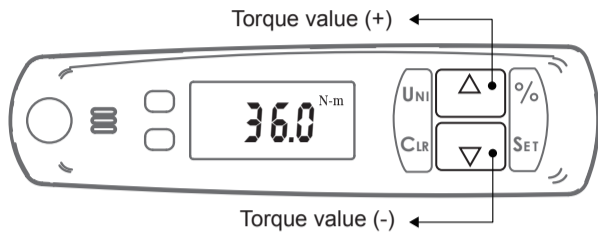
■ SET TORQUE

Definition: Set the target or maximum torque value.

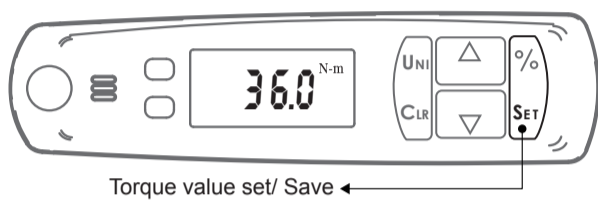
- Without applying torque, press **SET** to enter torque value setting mode.



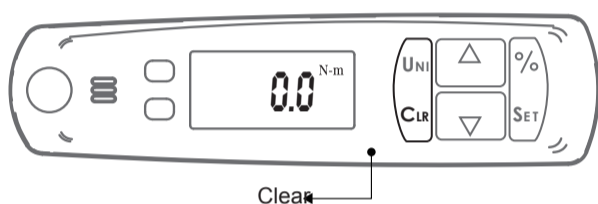
- Press **▲** or **▼** to change the target torque value.



- When the target torque value is reached, press **SET** to save the value.



NOTE Exit: Press **CLR** to leave without saving.



NOTE Auto-Exit: If the unit is inactive for more than 6 seconds the last value is not saved.

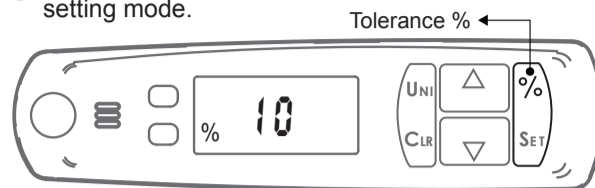
■ SET TOLERANCE %

Definition: Calculate the alert torque value.

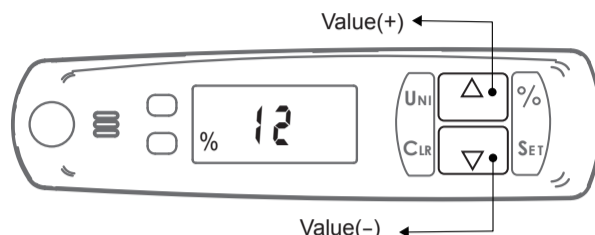
Formula: Alert torque value = Target torque value x (1 - Tolerance %)

Tolerance range: 5% ~ 50%

- Without applying torque, press **%** to enter tolerance setting mode.



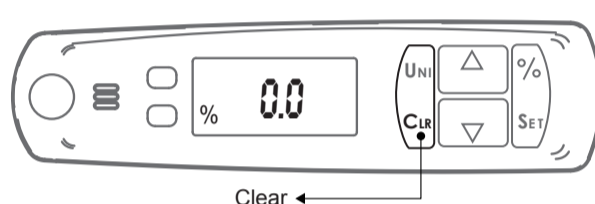
- Press **▲** or **▼** to change the tolerance value.



- When the desired tolerance value is reached, press **%** to save the value.



NOTE Exit: Press **CLR** to leave without saving.

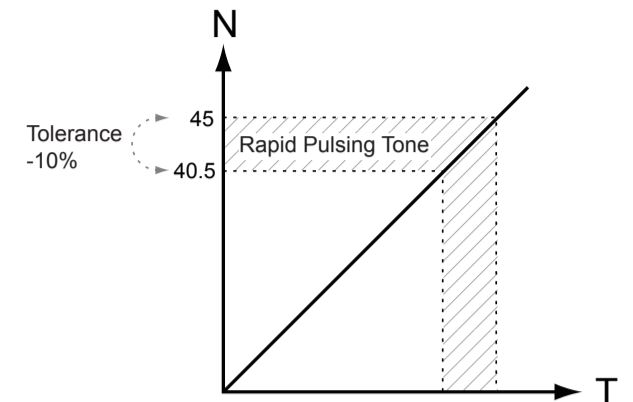


NOTE Auto-Exit: If the unit is inactive for more than 6 seconds the last value is not saved.

■ EXAMPLE

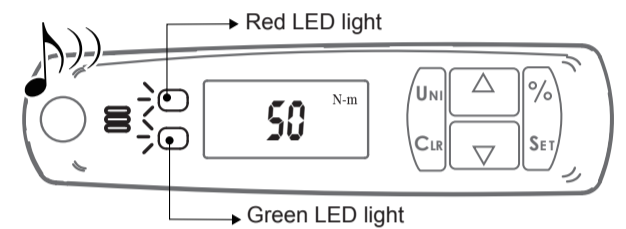
Condition: Torque value is set to 45 N-m, and the tolerance is set to -10%

An alert tone will occur at 40.5 N-m. There will be a rapid pulsing tone to indicate the torque value is approaching the target value (45 N-m). Besides, the lower alert tone will occur at 30.4 N-m (40.5N-m x -25%). There will be a 0.5 second tone to indicate the torque value is approaching to -10% target value (40.5N-m).

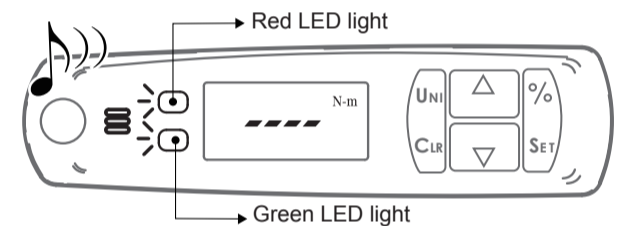


■ ALERT LIGHT & BUZZER (BEEP TONE)

- When applied torque reaches target torque value, the GREEN & RED lights will illuminate and the buzzer will continuously beep. The LCD will display the maximum applied torque for 15 seconds and then will indicate "0".

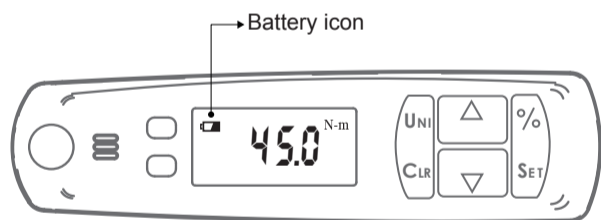


- When applied torque exceeds the wrench full-scale capacity, the GREEN & RED lights will illuminate and the buzzer will continuously beep. The display will read "----".

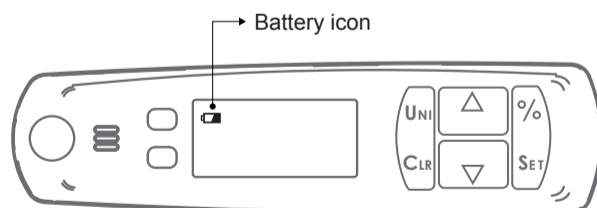


■ LOW BATTERY

- When battery capacity has 30% remaining, the battery icon on the display will flash. Replace batteries soon.



- When the battery capacity has only 10% left the battery icon will be displayed. The unit will not work and the batteries will need to be replaced.



■ TORQUE CONVERSION CHART

	lbf-in	lb-ft	Nm	kgf-cm
1 lb-in	1	0.083	0.113	1.152
1 lb-ft	12	1	1.356	13.83
1Nm	8.851	0.737	1	10.2
1 kgf-cm	0.868	0.072	0.098	1

■ MODEL

Driver Square	Nm	lbf-ft	lbf-in	Length mm	Kg	Driver
3/8"	10.0 135.0	7.4 99.6	89 1195	400	1.2	48 teeth, 7.5 action
1/2"	20.0 200.0	14.8 147	178 1780	570	1.6	48 teeth, 7.5 action

■ SPECIFICATIONS

Model	Digital Torque Wrench
Accuracy	CW±2.5% + 1 LSD / CCW±3% + 1 LSD
Direction	Clockwise / Counter-clockwise
Torque unit	N-m / lb-ft / lb-in
Battery	6 AAA (Alkaline) x 1pc
Operate Temperature	5 ~ 42°C, 40~107°F
Store Temperature	-20 ~ 50°C, -4~120°F