

# **Electronic Torque Wrench Operation Instruction**



# **Operation Instruction for Electronic Torque** Wrench

#### **Precautions:**

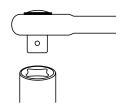
- Please read the operation manual of electronic torque wrench carefully before the use.
- Do not use it when it is shutdown.
- When applying a torque, do not press any button.
- Never loosen the screw and nut with an electronic torque wrench.
- Do not add an extension rod on the handle. For example: plastic pipe or iron tube
- Do not apply force at the end of handle. When applying force, hold the center of handle.
- The force beyond the maximum torque range will cause damage to the wrench.
- Follow the correct operating method of tools for your own safety and to avoid the distortion of wrench.
- Do not use the sleeves and accessories that are damaged or cracked which may cause damage to the torque wrench.
- The sleeve of correct specification shall be used for the nut.
- Make sure that all parts, including the adapter and ratchet head, are able to withstand the torque you need before use.
- Make sure that the torque you want to apply meets the torque range of wrench before use.
- Correct this wrench when the applied torque exceeds the large torque value
- Please read the operation manual of electronic torque wrench carefully before the use and follow the process described in the manual.
- Make sure that the ratchet is switched to the correct position.
- Properly adjust the posture to avoid the falling.
- Operator and bystanders shall wear the safety glasses to protect their eyes.
- Correct it regularly to ensure the accuracy of wrench.
- Do not use electronic torque wrench on live items
- Plastic handle is not insulated and may cause electric shock
- Do not dismantle the wrench by yourself except for installing the battery. Otherwise, the warranty service will be invalid.

### Operation instructions of electronic torque wrench

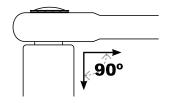
- First confirm that the electronic torque wrench is not stressed, and then press [ CLR ] Key 3s to start the machine



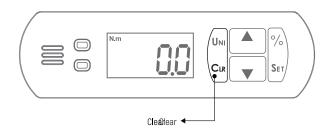
- Install the sleeve of correct specification on the electronic torque wrench.



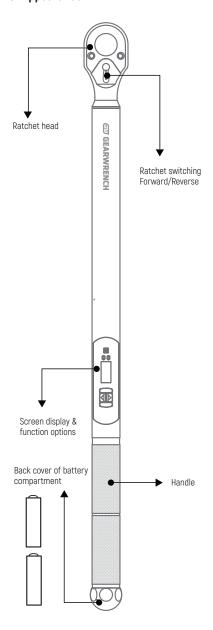
- Make sure that the tightened object is perpendicular to the electronic torque wrench.



- Press [CLR] to clear before each use

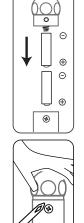


# **Description of Appearance**



Please install two 2AA alkaline batteries as shown in the figure.

1) Loosen the screws with the PH2 screwdriver.



2) Follow up the instruction to install 2AA (Alkaline) batteries.

3) Finally tighten the screws



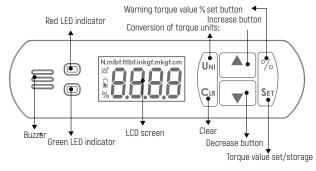
please restart the torque wrench after the battery is replaced to maintain the best accuracy.

# **About Battery**

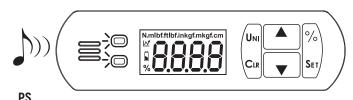
Only use 2AA alkaline battery. The incorrect battery may cause the damage or leakage of battery or the damage or malfunction of torque wrench. The electrolyte will damage the equipment and other objects. Please follow the instructions below:

- Install the battery correctly along the positive and negative (+/ -) directions indicated on the instructions
- If the wrench is stored for a long time, be sure to remove the battery.
- A battery of same type shall be used.
- Replace the exhausted battery as soon as possible.
- Never attempt to charge the alkaline battery.

## Screen display & function options



-Press (CLR) for 3s to power on



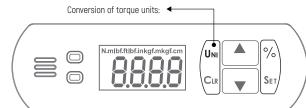
Be sure to power on without stress. Otherwise the electronic torque wrench may be damaged

## Power off -

Auto: Without stress and with "0" on screen, the system will automatically shut down if no key is pressed within 10 Minute. Manual shutdown: without the force applied, press and hold (CLR) for 6s to shut down.

## Conversion of torque units:

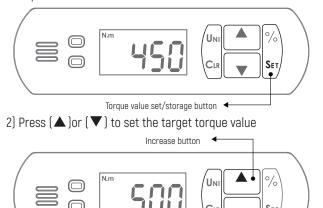
- -Press the (UNI) button to switch the torque unit
- -5 torque units: Nm, lbf-ft, lbf-in, kgf-m, kgf-cm



### Setting of torque value

Definition: the torque value that is expected to achieve or shall not be exceeded

1) Without the stress, press ( SET ) to enter the setting mode of torque value.



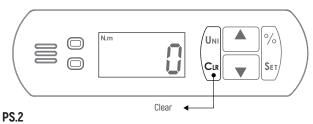
3) After the torque value is set, press ( SET ) button to save the settings.

Decrease button



#### PS.1

Exit: Press [ CLR ) to exit without saving



Auto exit: in case of no action for 6s, it will automatically exit without saving.

#### Warning torque value %

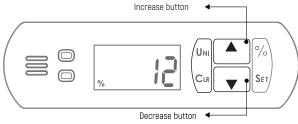
Definition: Calculate the warning toque value

Formula: warning torque value = target torque value X (1warning torque value) warning torque value 5% ~ 50%

1) Without the stress, press [%] to enter the setting mode of
warning torque value.



2) Press (  $\blacktriangle$  )or (  $\blacktriangledown$  ) to set the warning torque value %



3) After setting the warning torque value, press [ % ] key to save the set warning torque value %



#### PS.1

Exit: Press [CLR] to clear the set warning torque value % and exit without saving.

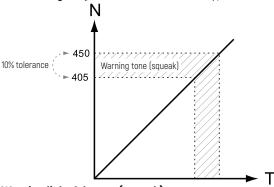


Auto exit: in case of no action for 6s, it will automatically exit without saving.

#### Example

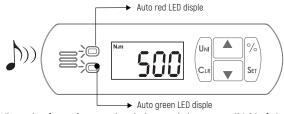
Condition: the torque value is set to 450Nm, and the warning torque value is set to 10%.

Warning toque value: in case of torque value X (1-warning torque value %]=450X(1-10%)=405Nm and operation torque at 405Nm, the buzzer will make a squeak sound. The closer to target value the force is, the more urgent the warning tone is, and the long beep will sound when the torque reaches 450 Nm.

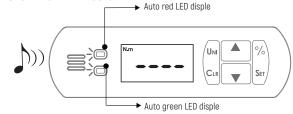


## Warning light & buzzer (squeak)

When the torque reaches the target value, the red LEDs will go on at the same time, the buzzer will issue a continuous long "beep" sound, and the screen will display the maximum torque value and return to "0" after 10 Minute.

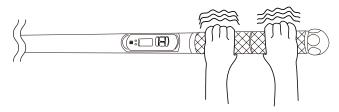


 When the force is completely beyond the upper limit of the specified value and the red LED will come on, the buzzer will make a continuous long "beep" sound and the display will show the " ---- " icon.



# Vibration function:

When the applied torque reaches the target value, the handle begins to vibrate. When the force application is stopped, the vibration will stop

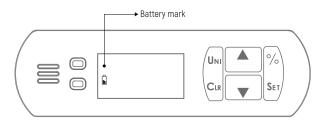


# Warning of low battery level:

1) With 30% of capacity left, the battery symbol on the screen will be displayed (electronic torque wrench is still available); please replace the battery as soon as possible to maintain the accuracy.



2) With 10% of capacity left, only the battery symbol will be displayed on the screen, and all the remaining subtitles will disappear. [Electronic torque wrench will be not available] Please replace the battery immediately.



## Torques Conversion Chart

	lbf-in	lbf-ft	Nm	kgf-cm	kgf-m
1 lbf-in	1	0.08333	0.11298	1.15212	0.01152
1 lbf-ft	12	1	1.35582	13.82550	0.13825
11 Nm	8.85075	0.73756		10.19716	0.10197
kgf-cm	0.86796	0.07233	0.09807	1	0.01
1 kgf-m	86.7962	7.23301	9.80665	100	1

# Specification

Product name:	Electronic Torque Wrench 85082,85085			
Torsion direction	clockwise/ counterclockwise			
Torque unit	Nm/lbf-ft/ lbf-in/ kgf-m / kgf-cm			
Accuracy	Forward +/-1.5%, reverse +/-2%			
Battery	AA Battery [Alkaline] x 2 pcs			
Working temperature:	5~42° C, Fahrenheit 40~107 °F			
Storage temperature:	-20~50°~C, Fahrenheit-4~120° F			