



Operating Manual

for Battery Torque Wrench

WEDCX series

The torque can be adjusted up to 4000Nm. The WEDCX series battery torque wrench with the latest gearbox design is more powerful and lighter.



Content

Important Safety Notice	3
Digital tool System Security	3
Safety Matters of Lithium Battery Pack	4
¹ General Information	5
1.1 System Components	5
1.2 Detailed Description	5
1.2.1 Torque Range	5
1.2.2 Battery Description	5
1.2.3 Environmental Description	6
2. Battery Torque Wrench	6
2.1 Overview of Battery Torque Wrench	6
2.1.1 Trigger Key	7
2.2 Screen Guide	7
2.3 Lithium Battery Pack	8
2.3.1 Insert and Remove the Lithium Battery	8
2.3.2 Check Charging	8
2.4 Battery Charger	8
2.4.1 Battery Charging	9
2.4.2 Charging Error	9
3.0 LCD Displaying Panel	9
3.1 Home Screen	10
3.1.1 Torque Value	10
3.1.2 Working Status	10
3.1.3 Unit	11
3.1.4 Mode	11
3.2 Mode Setting	11

Operating Manual for battery Torque Wrench

3.2.1 Torque Value Increase or Decrease	11
3.2.2 Gear Shift	11
3.2.3 Default Value Switch	11
3.3 Preset	12
3.3.1 Value for Unscrew	12
3.3.2 Default Value	12
3.3.3 Number of Cycles	12
3.4 Unit Setting	13
3.5 About this Machine	13
3.6 Switch between Chinese and English	13
3.7 Calibration	13
3.7.1 Calibration	13
3.7.2 Maximum Value and Minimum Value	13
4.0 General Operating Instruction	14
4.1 Reaction Arm	14
4.1.1 Installation of reaction arm	14
4.1.2 Height of Reaction Arm	15
4.1.3 Reaction Arm	15
4.1.4 Touching Point	16
4.2 Operating Procedure	17
5.0 Error	17
6.0 Contact WREN	18

Operating Manual for battery Torque Wrench

Important safety notice

WREN battery torque wrench is safe and reliable. Failure to follow the precautionary measures and instructions outlined below may result in injury to tools, operators, and personnel present.

WREN is not responsible for any such injury.

The intended use of battery torque wrenches is for commercial and industrial bolt tightening.

Please do not operate the battery torque wrench until you have read and understood this manual and noticed the safety tips displayed in the battery torque wrench system and the entire manual.

Only qualified personnel trained in the safe operation of battery torque wrenches can attempt to install and operate battery torque wrenches.

Improper operation and use can cause serious or fatal injuries.

Digital tool system security

Do not try to disassemble or repair the battery torque wrench, this will invalidate the warranty. If there is a malfunction, damage or the tool does not operate normally, please contact our company.

Technical support (see section 6.0-contact us)

Only store and use battery torque wrenches in a compliant environment. Please refer to Section 1.2.3-Environmental Specifications.

Do not operate an battery torque wrench in a flammable and explosive environment, including but not limited to: flammable liquid, gas or dust. Battery torque wrenches produce sparks that can ignite these substances.

Do not expose the battery torque wrench to a humid environment. Water will damage the battery torque wrench and increase the risk of electric shock.

After a long period of use, the battery torque wrench will heat up. It is recommended to use short and medium time intervals to cool down to prevent operator injury or damage to the battery torque wrench.

During the operation of the battery torque wrench, wear goggles to ensure that the human body is kept away from the contact point between the moving parts of the wrench and the reaction arm.

Do not exceed the maximum torque of the battery torque wrench, which will damage the tool, and no warranty service is provided.

Operating Manual for battery Torque Wrench

The battery torque wrench has been calibrated. The calibration must be carried out under the guidance of our staff. Improper calibration will reduce the torque accuracy and damage the tools and bolts.

Safety matters of lithium battery pack

This battery torque wrench can only use the supporting lithium battery pack. Using other batteries will damage the tool.

Lithium battery packs can only be charged on the matching battery charger. If you use an incompatible charger, it will cause damage to the lithium battery.

Keep the lithium battery pack away from any metal objects. If metal objects come into contact with the battery, it will short-circuit the battery and cause injury to the operator and the battery.

Do not expose the lithium battery pack to a humid environment, as this will cause damage to the lithium battery and increase the risk of electric shock.

Do not use defective or deformed lithium batteries. Do not try to open the battery, do not short-circuit the battery, otherwise it will damage the battery and the operator.

If liquid comes out of the battery, avoid contact. Once in contact, rinse immediately with water. If it gets into eyes accidentally, rinse immediately with water and seek medical attention. Liquid from the battery may cause irritation or burns.

The battery pack cannot be disposed of with conventional waste products. Please contact us or your dealer to return the battery.

Operating Manual for battery Torque Wrench

1. General information

WEDCX series battery torque wrenches are used in working environments with limited power and air supply, with high power, wide application and strong reliability. The latest single/double speed gearbox design is applied, with stronger functions and lighter weight.

The torque is adjustable up to 4000Nm.

1.1 System Components

- Gearbox Assembly
- 18V/5.2AmpLithiumBatteryPack
- Battery Charger
- Reaction Arm and Circlip
- Operating Manual
- Tool Box

Note: Additional parts may be delivered with the battery torque wrench

1.2 Detailed Description

1.2.1 Torque Range

Tool Type	Square Drive inch	Torque(Nm)		Rotating speed RPM
		Min	Max	
WED07CX	3/4"	200	700	13
WED07-2CX	3/4"	200	700	37
WED14CX	3/4"	300	1400	6
WED14-2CX	3/4"	300	1400	18
WED20CX	1"	400	2000	4
WED20-2CX	1"	400	2000	16
WED40CX	1"	800	4000	2
WED40-2CX	1"	800	4000	13

Precision $\pm 5\%$, Repeat accuracy $\pm 3\%$

1.2.2 Battery Description

When using an battery torque wrench, please confirm that all batteries meet the following specifications.

Operating Manual for battery Torque Wrench

Battery Output	
Voltage	18 VDC
Current	30 A
Charging Time	60 min
Charger Voltage	
Input	115 VAC/230 VAC
Output	12 - 18 VAC
Charger output current	2.5 A

Sheet1.2.2: Battery Description

1.2.3 Environmental Description

Notice! The battery torque wrench can only be used if it meets the following storage environment and operating specifications.

Temperature Range	° C	° F
Working Temperature	0-35	32-95
Charging Temperature	0-50	32-122
Contributing Temperature	-25-70	-13-158
Humidity	10% to 90% Without Cooling	
Impact	10G , DIN IEC 68-2-6/29	
Shock	1G, 10-150Hz DIN IEC 68-2-6/29	
Required Operating Conditions	<ul style="list-style-type: none"> - Non-flammable gas environment - Dry place 	

Sheet1.2.3: Environmental Description

2. Battery Torque Wrench

The following is an overview of the battery torque wrench, display, battery pack and charger.

2.1 Overview of the Battery Torque Wrench

Battery Torque Wrench (Drawing2.1-1) Activated by the positive and negative switch trigger. The battery pack is installed at the bottom of the handle.

1. Trigger lock-control the direction of rotation and prevent accidental triggering.
2. Trigger- trigger switch
3. Lithium battery pack-see section 2.3-Lithium battery pack
4. Battery release button-refer to 2.3.1-insert/remove lithium battery pack.
5. LCD screen-status display, menu access and control



Figure 2.1-1: Battery Torque Wrench

2.1.1 Trigger Lock

The trigger lock is only used when the motor stops running. The trigger lock can control the forward and reverse rotation of the motor and disable the trigger. It is recommended to adjust the trigger lock to the locked position when the wrench is not used.

Right side	=	tight
Left side	=	loosen
In the middle	=	locked



2.2 Screen Guide

The buttons are located at the bottom of the screen. Contains "▲", "▼", and "M" three buttons. The "▲" and "▼" keys are used for menu navigation and value increase or decrease. The "M" key is used to confirm options and enter.



Drawing2.2-1: Display Screen and buttons

Note: When pressing the button, keep pressing for one second to ensure that the button is activated.

Operating Manual for battery Torque Wrench

2.3 Lithium Battery Pack

Notice! Battery torque wrenches can only use the matching lithium battery pack. Using other batteries will damage them and cause personal injury.

Keep the lithium battery pack away from any metal objects. If a metal object is used to connect the battery, it will short-circuit the battery and cause injury to the operator and the battery.

The lithium battery powers the battery torque wrench motor and the liquid crystal display. In order for the battery torque wrench to be in the best working condition, confirm that the battery is fully charged and in good condition before use. Under optimal conditions, the battery can cycle approximately 100 feet of torque at 50% of the maximum torque.

Note: Operating torque, battery condition, aging degree and operating temperature will affect the actual torque cycle times.

2.3.1 Insert and remove the lithium battery

Insert lithium battery:

1. Confirm that the trigger is in the off position.
2. Align the battery with the slot at the bottom of the handle.
3. Slide the battery into place.
4. Test whether the battery is in place and try to slide its position.

Remove the lithium battery:

1. Press the battery release button.
2. Slide the battery out from under the handle.

2.3.2 Check Charging

Check Battery Charging

1. Press the red "charge" button of the battery

The four green indicator lights will light up. If all the indicators are on, the battery is fully charged. If no indicator light is on, the battery is exhausted and needs to be charged. (Refer to 2.1.1-Battery charging)

2.4 Battery Charger

Notice! Lithium battery packs can only be charged on the matching battery charger. If you use an incompatible charger, it will cause damage to the lithium battery.

The charging status of the battery charger is used to remind the operator that it is charging, charging is complete or there is a fault.

Operating Manual for battery Torque Wrench

2.4.1 Battery Charging

Note: The charging temperature range

is 0°C-50°C (32°F-122°F) charging:

- 1.1. Insert the charger plug into the socket. The red warning light is on for one second and the green status indicator is on for one second
- 2.2. Align the battery with the charger card slot.
- 3.3. Slide the battery into place.
- 4.Note: When charging, the green status light will flash.

When the battery is fully charged, the green status light will stop flashing and stay on. Before removing the battery, the charger will switch to the hold mode to ensure that the battery has the maximum power.

Remove the battery

1. 1. Slide the battery out of the charger.
2. 2. Check whether the battery is fully charged.
(Refer to 2.3.2: Check charging)

2.4.2 Charging Error

The red warning light is always on:

The battery is not charged because its temperature is not within the charging temperature range. When the battery temperature is within the required range, the red warning light will turn off and charging will begin.

The red warning light flashes:

The battery may not be in the correct position on the charger. Remove the battery and insert it again. If the red warning light continues to flash, it means that the battery is defective, and immediately remove the battery.

If the problem persists, contact our WREN for technical support (refer to 6.0-Contact Us) or contact your dealer.

- 3.0 LCD Display The LCD display screen may be damaged when it is subjected to mechanical shock or any force applied to the module.

caution

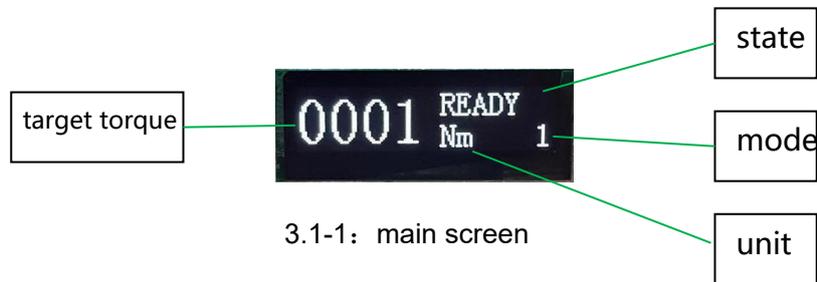
Operating Manual for battery Torque Wrench

The LCD display can be damaged by humidity, water and high temperature. Such situations should be avoided. Wipe it clean and keep it dry during the storing

The digital controller contains a LCD screen. This screen has many functions. The following describes some of the functions and how to operate them.

Refer to 2.2-Screen Navigation to understand the key usage methods mentioned in this section.

3.1 Main screen The main screen serves as the battery torque wrench control center. Displays target torque, torque unit.



3.1.1 Torque

Different modes have different definitions:

mode1: show torque

mode2: show speed

mode3: value switch

“▲”increasing the value, one click +1, holding +10, long holding +100

“▼”decreasing the value, one click +1, holding +10, long holding +100

3.1.2 Working state

2 working states: “RUN” and “READY”

RUN:Runningstatus,pressthe trigger to showRUN

READY:shutdown for stand-by

3.1.3 Unit

different units in different models

mode1:

Nm、Ftlbs、KGFM。 mode

2: Grade。

3.1.4 Mode

mode3: Nm。

3 modes: 1、 2、 3。

You can set the buzzer notification function on this screen, .

3.2 Mode setting

Press M to enter the main menu. Press“▲”“▼”to switch the mode,press“ M”to confirm the choice and back to main menu。



3.2.1 Increase/decrease the torque

“▲”“▼”can increase or decrease the torque, unit can be chosen



3.2.2 Speed switch

Divide the torque range into 0-99 grades, unit in Gradeonly



3.2.3 Default switching

Press "▲" and "▼" to select the preset value, and press "M" to enter the editing of the preset value.



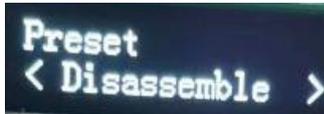
3.3 Preset

The preset value interface defines the disassembly value, preset value, and number of cycles.



3.3.1 Disassembly value

Disassembly value is locked on the maximum torque and is non-editable.



3.3.2 Preset

Using the "▲" and "▼" to select the corresponding preset value, press "M" to enter the editing mode, and holding "M" to exit the interface after setting

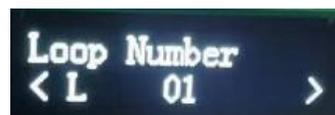
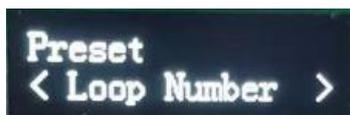


Caution!

Note: The preset value is in Nm only and cannot be set to exceed the maximum rated torque!

3.3.3 Cycle number

The number of cycles ranges from 01 to 10. Holding M to exit this screen, .



Note: In mode 3, the preset number of work interface cycles is the same as this.

3.3.3 Quit

Operating Manual for battery Torque Wrench

Press“ M”to back to the main menu

3.4 Unit setting

Enter the unit setting function, press“ M”to enter the unit setting , press“▲”“▼”to choose the unit, press “ M”for confirmation and back to the main menu.



3.5 About the machine

All kinds of information about the machine can be queried in the menu ,including serial number, maximum torque, minimum torque, model, factory date, use times.

3.6 Chinese/English switch

Switch Chinese/English in this mode



3.7 Calibration

Caution

All Settings on this mode must be performed under the guidance of engineers of our company. Generally, users do not need to use this mode. Enter a six-digit password to enter the calibration mode.

3.7.1 Calibration

Contact us

3.7.2 Maximum/Minimum torque

4. General operating instructions

Caution Only trained and qualified personnel can operate this tool. This section describes how to use the reaction arm.

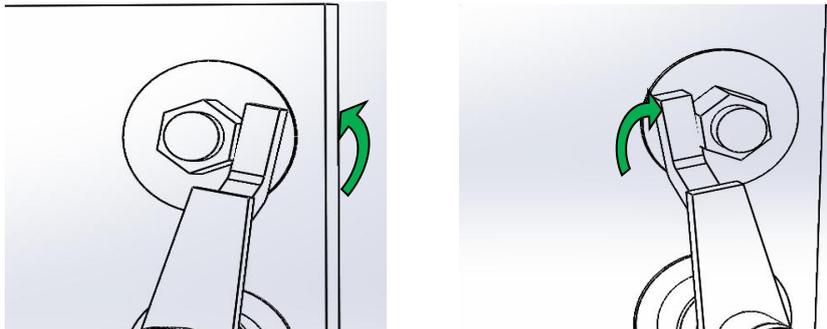
4.1 Reaction arm

Caution! Always keep your body away from the moving part and reaction arm of the battery torque wrench when using it. Otherwise could cause serious harm.

Make sure the reaction arm is firmly connected with the flange before operating the battery torque wrench.

4.1.1 Installation of the reaction arm

Make sure the reaction arm and circlip are securely installed together before operating the battery torque wrench, ensure that the reaction arm is in contact with a rigid contact point. Keep your body away from the reaction arm when using the tool.



Clockwise Counterclockwise

Keep your body away from the reaction arm

Caution! when using the tool.

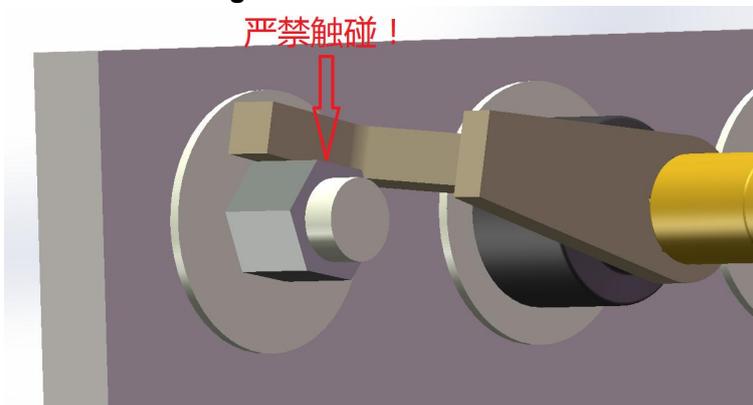


Figure 4.1.1-2: forbidden to touch

4.1.2 Height of Reaction Arm

Confirm that the highest point of the socket is consistent with the highest point of the reaction arm, as shown in Figure 4.1.2-1. The highest point of the reaction arm cannot be higher or lower than the highest point of the socket, as shown in Figure 4.1.2-2. Correct: The reaction arm is at the same level as the socket.

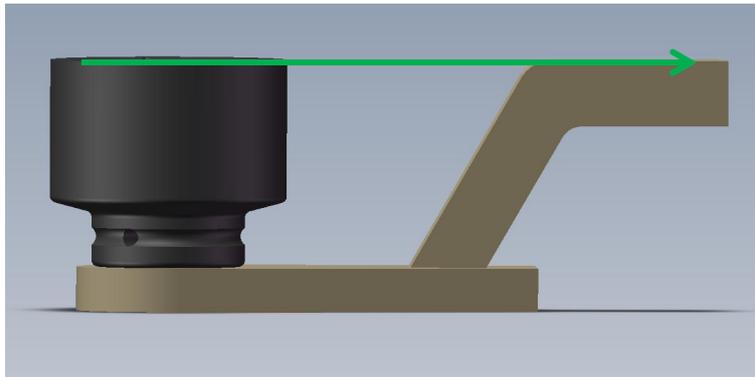


Figure 4.1.2-1: Correct Height

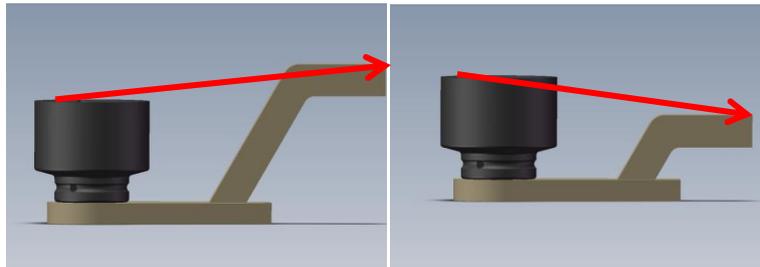


Figure 4.1.2-2: Error Height

Error: The reaction arm arm length is too short or too long. Improper use of the reaction arm will void the warranty and cause premature failure of the battery torque wrench.

4.1.3 Reaction Arm

Confirm that the reaction arm is aligned with the nut, as shown in Figure 4.1.3-1. The reaction arm cannot be longer or shorter than the nut, as shown in Figure 4.1.3-2



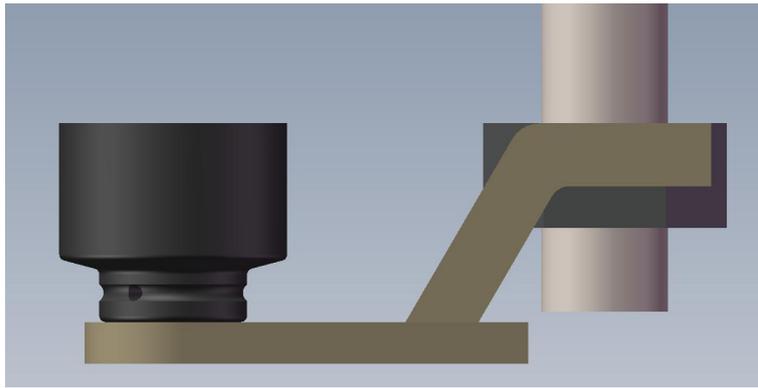


Figure 4.1.3-1: Right length

Error: The reaction arm is too long or too short.

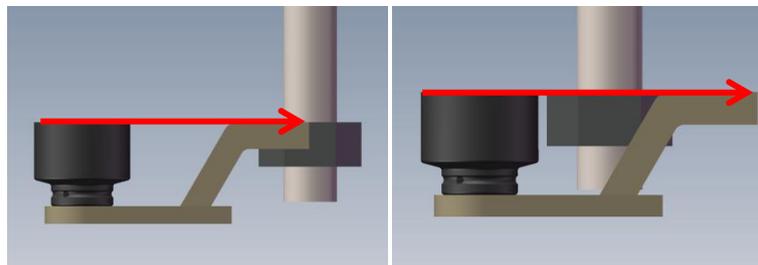


Figure 4.1.3-2: Error length

Contact WREN factory or distributor to customize the reaction arm.

4.1.4 Touching Point

Confirm that the reaction point is in contact with the middle of the reaction arm foot. see drawing 4.1.4-2. Do not touch the back of the reaction arm foot. Right: The reaction point is touching the middle of the reaction arm.

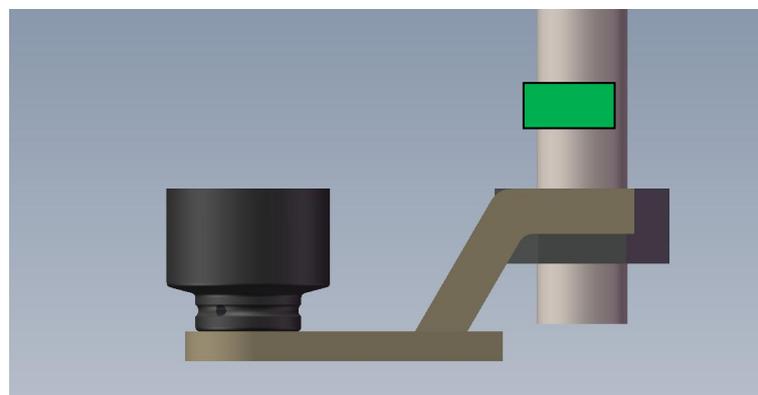


Figure 4.1.4-1: Right touching point

Wrong Operation: Reaction point is at the position showed in below Figure 4.1.4-2

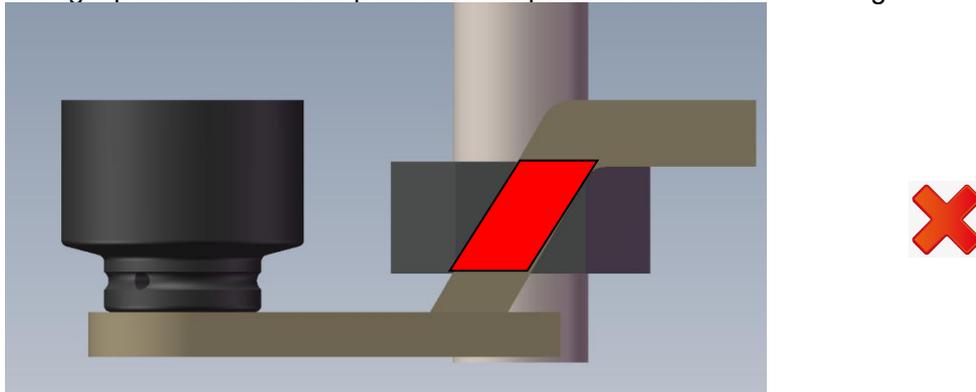


Figure 4.1.4-2: Error touching point

4.2 Operating Procedure

Torque Operation:

1. Fix the reaction arm to the battery torque wrench with a circlip.
2. Set target torque value by key“▲”“▼”
3. Put socket on square drive of battery torque wrench.
4. Turn on the switches for clockwise operation or counterclockwise operation at corresponding position.
5. Press the operating trigger and hold.

Note: If you want to stop at any time, just release the trigger.

After reaching the target torque, the tool will automatically stop, then release the trigger. After 3 minutes without any operation, the tool will automatically enter the sleep mode and save the parameters of the last operation. Press the trigger again to wake up the tool.

5.Message reminder

Reminder for right operation

When the buzzer is turned on, it has a reminder function. The buzzer will sound once when the tool is working: the operation is successful.

Reminder for error operation

- The buzzer sounds 4 times continuously, and the display shows an error message: The tool cannot reach the target torque value.
- The buzzer keeps ringing and the screen displays an error message: The tool exceeds the maximum current or the torque exceeds the maximum value.
- The buzzer sounds intermittently and the screen displays a low battery prompt: battery current is too low, stop operation immediately and replace the battery.



Operating Manual for battery Torque Wrench

6. Contact us

Hangzhou WREN Hydraulic Equipment Manufacturing Co., Ltd

Contact Phone: 0571-88114630

FAX: 0571-88110210

E-MAIL: info@wrenchina.com

Web: www.wrenchina.com

Address: No.24, Xingxing Road, Xingqiao, Linping, Hangzhou, China