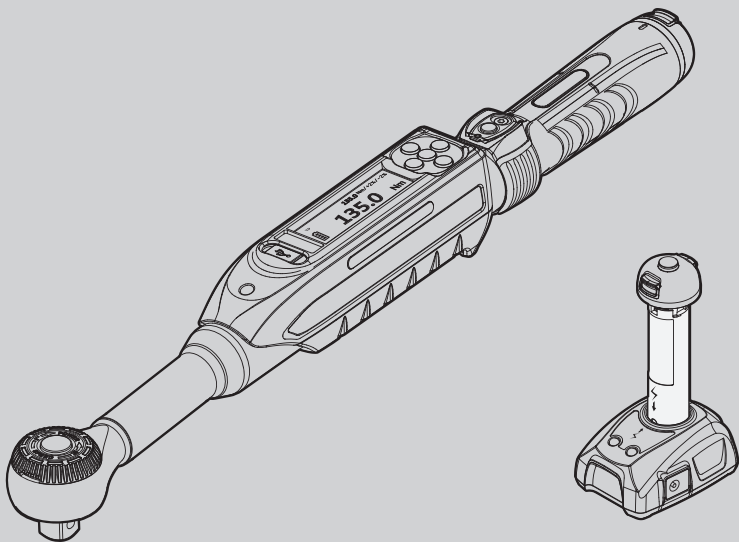


# Power Speed Digital Torque Wrench

## Original Instructions



**⚠ WARNING** READ AND UNDERSTAND ALL INSTRUCTIONS.  
Read all safety warnings and all instructions.  
Failure to follow all instructions and warnings listed below may result in  
electric shock and/or serious personal injury.  
READ AND SAVE ALL INSTRUCTIONS FOR FUTURE REFERENCE.

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## SAFETY NOTES


### Save These Important Safety Instructions


Please fully charge the lithium-ion battery powered power tool before first use.

Before using the battery and charger, read this operator's manual and all labels on the battery pack, charger and power tool.

 **CAUTION!** Specialist technical knowledge and/or suitable training is required for the use and repair of this tool. This device was developed and manufactured according to the DIN EN ISO 6789 IEC62133, IEC62841 technical norms and standards valid at the time and is considered to be operationally reliable. Nevertheless, the tool set can present a danger when it is not used as intended or in an inappropriate way by non-qualified personnel. All persons using or maintaining this tool must carefully read and understand these operating instructions before commencing work.

 This torque wrench has been developed to enable the controlled tightening and loosening of screw connectors with right and left handed threads. Every torque wrench is calibrated for torque as per DIN EN ISO 6789 and for angle gauges as per factory settings, and delivered with a serial number, operating instructions and certification. For intended use of the torque wrench, it is essential that all safety and other information in these operating instructions is adhered to.


 Always keep these operating instructions together with your tool at all times. If the operating instructions have been mislaid or made unusable, please contact your specialist dealer or service center for replacement.

 **CAUTION!** To reduce the risk of injury charge power tool lithium-ion batteries only in power tool lithium-ion charger. Other types of chargers may cause personal injury or damage. The charger need to be used with the adaptor which is provided by power tool. A charger that may be suitable for one type of battery may create a risk of fire when used with another battery. Do not wire a battery pack to a power supply plug or car cigarette lighter. Doing so will cause batteries to be permanently disabled or damaged.

**Use power tool lithium-ion batteries only in power tool.**

Use with other tools may result in a risk of damage, electric shock or personal injury.

### General Safety Warnings

 **WARNING** Read all safety warnings, instructions, illustrations and specifications provided with this power tool. Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury. Save all warnings and instructions for future reference. This operator's manual contains important safety and operating instructions for power tool, lithium-ion battery pack and battery charger. The term "power tool" in the warnings refers to your mains-operated (corded) power tool or BATTERY-operated (cordless) power tool.

#### 1) Work area safety:

- a) Keep your work area clean and well lit. Cluttered benches and dark areas invite accidents.
- b) Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust. Power tools create sparks which may ignite the dust or fumes. Avoid dangerous environments. Do not charge battery pack in rain, snow, damp or wet location.
- c) Keep children and bystanders and visitors away while operating a power tool. Distractions can cause you to lose control. This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the tool.
- d) (For EU Market) This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision. If the supply cord is damaged, it must be replaced by the manufacturer or its service agent or similar qualified person in order to avoid a hazard.

## 2) Electrical safety:

- a) **Power tool charger plugs must match the outlet. Never modify the plug in any way.** Do not use any adaptor plugs with earthed (grounded) power tools. Unmodified plugs and matching outlets will reduce risk of electric shock.
- b) **Avoid body contact with earthed or grounded surfaces, such as pipes, radiators, ranges and refrigerators.**  
There is an increased risk of electric shock if your body is earthed or grounded.
- c) **Do not expose power tool to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.
- d) **Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts.** Damaged or entangled cords increase the risk of electric shock.
- e) **When operating a power tool outdoors, use an extension cord suitable for outdoor use.** Use of a cord suitable for outdoor use reduces the risk of electric shock.
- f) **If operating a power tool in a damp location is unavoidable, use a RESIDUAL CURRENT DEVICE (RCD) protected supply.** Use of an RCD reduces the risk of electric shock.
- g) **Charge in a well-ventilated area.** Do not block charger vents. Keep them clear to allow proper ventilation. Do not allow smoke or open flames near a charging battery cartridge. Vented gases may cause a risk of explosion.
- h) **Maintain charger cord.** When unplugging charger, pull plug rather than cord to reduce the risk of damage to the electrical plug and cord. Do not abuse the cord. Never carry charger by its cord. Keep cord from heat, oil, sharp edges or moving parts. Make sure cord will not be stepped on, tripped over or subjected to damage or stress. Do not use charger with damaged cord or plug. If cord is damaged, it must be replaced by the manufacturer or service agent. Damaged cords may create a fire. Unauthorized replacement or repair may cause a hazard.
- i) **Do not use an extension cord unless it is absolutely necessary.** Using the wrong, damaged or improperly wired extension cord could result in the risk of fire and electrical shock. If an extension cord must be used, plug the charger into a properly wired 16 gauge or larger extension cord with pins that are the same number, size and shape as the pins on the charger. Make sure that the extension cord is in good electrical condition.
- j) **Charger is rated for 100-240V AC only.** Charger must be plugged into an appropriate receptacle.
- k) **To reduce risk of electric shock, always unplug charger before cleaning or maintenance.** Do not allow water to flow into plug.
- l) **Unplug charger when not in use.** Remove battery pack from unplugged charger.
- m) **Do not disassemble charger.** Incorrect reassembly may result in the risk of electric shock, fire or exposure to battery chemicals. If it is damaged, take it to a service agent.
- n) **Do not short circuit.** A battery pack will short circuit if a metal object makes a connection between the positive and negative contacts on the battery pack. Do not place a battery pack near anything that may cause a short circuit, such as coins, keys or nails in your pocket. A short circuited battery pack may cause fire and personal injury.
- o) **Use only recommended attachments.** Use of an attachment not recommended or sold by the battery charger or battery pack manufacturer may result in a risk of fire, electric shock or personal injury.

## 3) Personal safety:

- a) **Stay alert, watch what you are doing and use common sense when operating a power tool.** Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication. A moment of inattention while operating power tool may result in serious personal injury.
- b) **Use personal protective equipment. Always wear eye protection.** Protective equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.
- c) **Prevent unintentional starting. Ensure the switch is in the locked position before connecting to power source and/or inserting battery pack, picking up or carrying the tool.** Carrying tools with your finger on the switch or inserting the battery pack into a tool without the switch locked invites accidents.
- d) **Remove any adjusting key or wrench before turning the power tool on.** A wrench or a key left attached to a rotating part of the power tool may result in personal injury.
- e) **Do not overreach. Keep proper footing and balance at all times.** This enables better control of the power tool in unexpected situations.
- f) **Dress properly. Do not wear loose clothing or jewellery. Keep your hair, clothing and gloves away from moving parts.** Loose clothes, jewellery or long hair can be caught in moving parts. Be aware of entanglement of the moving parts of the tool with loose clothing, neckties, long hair, jewelry, watches, etc. This could cause body parts or objects to be drawn into the moving parts of the tool, causing a hazard.
- g) **If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used.** Use of dust collection can reduce dust-related hazards.
- h) **Do not let familiarity gained from frequent use of tools allow you to become complacent and ignore tool safety principles.** A careless action can cause severe injury within a fraction of a second.

#### 4) Power tool use and care:

- a) **Do not force power tool. Use the correct tool for your application.** The correct tool will do the job better and safer at the rate for which it is designed.
- b) **Do not use power tool if switch does not turn it on or off.** Any tool that cannot be controlled with the switch is dangerous and must be repaired.
- c) **Disconnect battery pack from tool or place the switch in the locked position before making any adjustments, change accessories, or storing the tool.** Such preventive safety measures reduce the risk of starting the tool accidentally.
- d) **Store idle power tool out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool.** Power tool is dangerous in the hands of untrained users. Store the torque wrench in the packaging materials in a clean and dry location.
- e) **Maintain power tool and accessories. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's operation. If damaged, have the power tool repaired before use.** Many accidents are caused by poorly maintained power tool.
- f) **Keep cutting tools sharp and clean.** Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.
- g) **Use the power tool, accessories and tool bits etc. in accordance with these instructions, taking into account the working conditions and the work to be performed.** Use of the power tool for operations different from those intended could result in a hazardous situation.
- h) **Keep handles and grasping surfaces dry, clean and free from oil and grease.** Slippery handles and grasping surfaces do not allow for safe handling and control of the tool in unexpected situations.
- i) **Hold the power tool by insulated gripping surfaces, when performing an operation where the fastener may contact hidden wiring. Fasteners contacting a "live" wire may make exposed metal parts of the power tool "live" and could give the operator an electric shock.**
- j) **When using power tool with Lithium-ion batteries, usage must halt and the batteries must be charged immediately when LCD window shows "Low Batt."** (low voltage protection). This is in order to prevent damage and ensure product lifespan.
- k) **Clean the tool regularly with a dry cloth.** Do not use oil, gasoline, paint thinner, water, metal, water chemicals, flammable materials or other corrosive liquid, all of which may damage the tool.

#### 5) Battery tool use and care:

- a) **Recharge only with the charger specified by the manufacturer.** A charger that is suitable for one type of BATTERY pack may create a risk of fire when used with another BATTERY pack.
- b) **Use power tool only with specifically designated BATTERY packs.** Use of any other BATTERY packs may create a risk of injury and fire.
- c) **When BATTERY pack is not in use, keep it away from other metal objects, like paper clips, coins, keys, nails, screws or other small metal objects, that can make a connection from one terminal to another.** Shorting the BATTERY terminals together may cause burns or a fire.
- d) **Under abusive conditions, liquid may be ejected from the BATTERY; avoid contact. If contact accidentally occurs, flush with water. If liquid contacts eyes, additionally seek medical help.** Liquid ejected from the BATTERY may cause irritation or burns.
- e) **Do not use a BATTERY pack or tool that is damaged or modified.** Damaged or modified batteries may exhibit unpredictable behavior resulting in fire, EXPLOSION or risk of injury.
- f) **Do not expose a battery pack or tool to fire or excessive temperature. Exposure to fire or excessive temperature may cause explosion.**
- g) **Follow all charging instructions and do not charge the BATTERY pack or tool outside the temperature range specified in the instructions.** Charging improperly or at temperatures outside the specified range may damage the BATTERY and increase the risk of fire.
- h) **Do not burn or incinerate batteries.** Batteries may explode, causing personal injury or damage. Toxic fumes and materials are created when batteries are burned.
- i) **Do not crush, drop, or damage batteries.** Do not use a battery pack or charger that has received a sharp blow, been dropped, run over, or damaged in any way leading any danger (e.g., pierced with a nail, hit with a hammer, stepped on).
- j) **Battery chemicals cause serious burns.** Never allow contact with skin, eyes, or mouth. If a damaged battery pack leaks battery chemicals, use rubber or neoprene gloves to dispose of it. If skin is exposed to battery fluids, wash with soap and water and rinse with vinegar. If eyes are exposed to battery chemicals, immediately flush with water for 20 minutes and seek medical attention. Remove and dispose of contaminated clothing.
- k) **Store your digital torque wrench in a cool, dry place.** Do not store digital torque wrench where temperatures may exceed 60°C (140°F) such as in direct sunlight, a vehicle or metal building during the summer.

l) Recommended ambient temperature range for tool and battery use and storage, and the recommended ambient temperature range for the charging system during charging:

- Charging temperature: 0°~40°C (32°~104°F)
- Discharging temperature: -20°~60°C (-4°~140°F)
- Storage temperature: < 35°C (< 95°F) (best 23°C/73.4°F)
- Relative air humidity: < 90% (best < 65%)

m) For use only with battery pack: EWEB022800

n) For use only with battery charger: EWEB02CR01

#### 6) Service:

a) **Have your power tool serviced by a qualified repair person using only identical replacement parts.** This will ensure that the safety of the power tool is maintained.

b) **Never service damaged BATTERY packs.** Service of BATTERY packs should only be performed by the manufacturer or authorized service providers.

**Tool service must be performed only by qualified repair personnel.** Service or maintenance performed by unqualified personnel may result in a risk of injury.

**When servicing a tool, use only identical replacements parts.** Follow instruction in the maintenance section of this manual. Use of unauthorized parts or failure to follow Maintenance Instructions may create a risk of shock or injury.



## Wrench Safety Warnings - performing operation

**Hold the power tool by insulated gripping surfaces, when performing an operation where the fastener may contact hidden wiring or its own cord. Fasteners contacting a "live" wire may make exposed metal parts of the power tool "live" and could give the operator an electric shock.**

## Safety Standard Information

Federal Communications Commission (FCC) Statement  
15.21

You are cautioned that changes or modifications not expressly approved by the part responsible for compliance could void the user's authority to operate the equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation of the device.

#### Note:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

## IMPORTANT SAFETY RULES FOR TORQUE WRENCH

1. Before each use, check the torque wrench for full functionality. Do not use the tool if its functionality cannot be ensured or if damage is detected. If the tool is used when it is not in full working order, there is a risk of severe personal injury and property damage.
2. The torque wrench must only be used if it is in good working condition. If the device does not work properly, it must be removed from service and inspected.
3. Use only sockets and other accessories specifically designed for use on wrenches and drivers. Other sockets and accessories might shatter or break causing injury.
  - Use only appropriate Square Drive Sockets.
  - To attach a socket or other accessory, align the accessory with the drive square and push Quick Release Button to match the protruding square end of the torque ratchet to the square hole of the socket you selected, attach it firmly onto the tool.
  - To remove the accessory, push Quick Release Button pull the accessory off the drive anvil.
4. Make sure torque wrench direction lever is fully engaged and in the correct position. Before using the tool, check that the insert and/or the insert tool holder used are seated firmly. Position the tool so that it cannot slip from the screw connection. Otherwise, there is a risk of personal injury and/or property damage.
5. Damaged accessories can cause injury. Inspect accessories to ensure a snug fit on fasteners to prevent slippage. Ensure the accessories being used are rated for the torque being applied.
6. Do not push the tool handle when gaining leverage. Adjust your stance and pull on the tool handle to prevent a possible fall while applying torque.
7. Never use extensions, such as a pipe, on the handle of the tool. This could cause damage to the tool or personal injury due to slippage.
8. Never use this wrench as a lever tool, clamping tool, impact tool or use a cheating bar under any circumstances. Improper use that is not compliant with the safety instructions, or overloading of the torque/rotation angle wrench can lead to incorrect measurements and/or to a failure of the system, as well as death or severe harm to personnel and property. The warranty is also not valid in these circumstances.
9. Over-torquing can cause damage. Do not flex the head of the tool for leverage. Excessive force on the tool in anyway will cause permanent damage.
10. Do not use this tool as a hammer. Impacts could damage the tool and will make it inoperable.
11. Apply torque slowly and firmly grasp the handle of the tool. Do not apply pressure to the end of handle. This may result in damage to the tool.
12. Always hold the torque wrench at the center of the handle.
13. Check that the tool capacity matches or exceeds the use of the application before proceeding. Failure to do so may result in damage to the tool. The maximum permitted load for torque wrench may not be exceeded in either direction of operation, also adhere to the maximum permitted load for the insert or plug tool used. These may be lower than the possible release torque of the torque wrench. The use of home-made specialized tools can be source of danger. Failure to comply can result in personal injury and/or material damage.

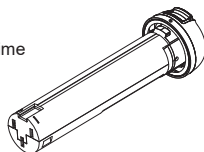
14. Do not overload the tool. This will result in the tool being uncalibrated and requiring service at a service center. The torque wrench can be overloaded during use and break as a result. This might cause **SERIOUS INJURY** or **DEATH**.
15. Always ensure the ratchet Forward/Reverse toggle is fully engaged. Misuse of this function will cause damage to the tool.
16. Always verify the calibration of the tool if its capacity has been overloaded or dropped. Never use the torque wrench if it has been dropped, has struck against other objects or objects have fallen on the torque wrench.
17. Always release the torque wrench **IMMEDIATELY** when the warning "Exceeds Maximum Permitted Load" displays on the LCD window with red warning light and a continuous high-frequency buzzer sounds to indicate the tool is overloaded past its maximum value. In order to ensure the accuracy of the tool, it should be recalibrated before it is used again.
18. Do not drop the tool. This could result in serious damage and may leave the tool inoperable.
19. Check the torque wrench for damage prior to **EVERY** application.
20. Always check the torque wrench for the correct torque and rotation angle setting prior to every torque tightening.
21. Never use a damaged torque wrench.
22. Always position the torque wrench and socket extension on the screw connection at a 90° angle.
23. This tool is not waterproof and can be damaged when submerged in liquids.
24. After use put the torque wrench back in the packing materials in a clean and dry location to protect against corrosion.
25. Keep this tool away from magnets.
26. In order to guarantee precision, all torque wrenches require regular maintenance and calibration. Always use tested and calibrated torque wrenches only.
27. Have the torque wrench calibrated on a regular basis. According to DIN EN ISO 6789, the minimum calibration interval requirement for a torque wrench is one year or 5,000 load cycles (whichever occurs first). A firm's own specification or quality requirement for screwing applications can also lead to considerable shorter calibration intervals.
28. Never neglect recalibrating the torque wrench. Improper calibration can cause the torque wrench to be damaged.
29. An uncalibrated torque can cause screw connections to fail, which can cause **SERIOUS INJURY** or **DEATH**.
30. Calibration should **ONLY** be implemented by authorized specialists, an accredited calibration laboratory or the manufacturer.
31. Always use common sense and be cautious when using tools. It is not possible to anticipate every situation that could result in a dangerous outcome. Do not use this tool if you do not understand these operating instructions or you feel the work is beyond your capability; contact authorized agent or a trained professional for additional information or training.
32. All safety equipment must always be within reach and should be checked regularly. Familiarize yourself with the operation of the torque wrench and undergo training for working with the tool before starting work. Before use, carefully check that all programmed settings are correct. The quality of your work will be dependent on these settings.
33. Caution! Specialist technical knowledge and/or suitable training is required for the use and repair of this tool.
34. All safety warning and operating instructions on the device must be observed, and always be in an easily legible condition. Damaged descriptions, labels or stickers as well as the display cover must be immediately replaced.
35. Never modify the tool. For safety reasons, any modification to the torque wrench is strictly forbidden. Do not remove safety devices and/or housing parts, never operate the tool if a protective cover is missing or if not all of the safety devices/guards are fitted and in perfect condition.
36. If the lithium battery is not inserted for a long time, recording may stop. So it is recommended to check whether the date/time information is correct before use.
37. Only use the tool in locations prescribed and governed under the current regulations relating to the working environment.
38. Any claims against the manufacture and/or its authorized agents because of damage caused by improper use of the tool are invalid.
39. Any personal injury or material losses caused by improper use of the tool are the sole responsibility of owner.
40. Any modification to the device and/or improper use will result in immediate exclusion from warranty and liability



## Important Safety Instruction for Battery Pack

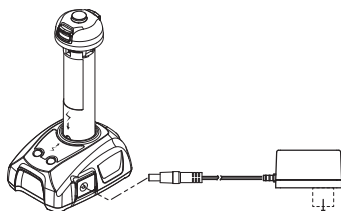
Failure to follow all instructions listed below may result in damage and lifetime decline of Lithium-ion battery pack.

**Please fully charge the lithium-ion battery powered power tool before first use.**



1. Do not expose your battery pack or cordless tools to water or rain, or allow them to get wet. Do not use in a hyperbaric environment. Do not use oil or solvents to clean or lubricate your battery pack. This plastic casing will become brittle and crack, causing a risk of injury.
2. Store battery pack at room temperature away from moisture. Do not store in damp locations, where corrosion of terminals may occur. Permanent capacity loss and damage can result if the battery pack is stored for long periods of time at high temperatures (Over 35°C / 95° F).
3. To reduce the risk of injury or explosion, never burn or incinerate a battery pack even if it is damaged, dead or completely discharged. When burned, toxic fumes and materials are created.
4. Do not modify the battery pack or charge it with other chargers may cause personal injury or damage.
5. If an unusual smell, color or amount of heat occurs when battery pack is being charged or stored, stop using it immediately and take it to service agent.
6. Always dispose of your battery pack according to local regulations. Contact a recycling agency in your area for recycling locations. Even discharged batteries contain some energy. Before disposing, use electrical tape to cover the terminals to prevent the battery pack from shorting, which could cause a fire or explosion.
7. When using the digital torque wrench with Lithium-ion batteries, usage must halt and the batteries charged immediately when battery symbol on the display shows "empty" (low voltage protection). This is in order to prevent damage and ensure product lifespan.
8. When Lithium-ion battery pack are left unused for over 3 months, they must be charged before use in order to maintain their lifespan.
9. Lithium-ion battery pack must be charged periodically in order to maintain their lifespan.
10. When battery pack is not in uses, keep it away from other metal objects like: paper clips, coins, keys, nails, screws, or other small metal objects that can make a connection from one terminal to another. Shorting the battery terminals together may cause sparks, burns, or a fire.

## Important Safety Instruction for Battery Charger



Plug type is different for each country.

### **⚠ WARNING**

Charge only digital torque wrench Lithium-ion battery pack only in digital torque wrench Lithium-ion battery charger. Other types of batteries may cause personal injury and damage. To reduce the risk of electric shock, do not allow water to come into contact with the plug.

### **⚠ WARNING**

To reduce the risk of injury, always unplug the charger and remove the battery pack from the charger before performing any maintenance. Never disassemble the battery pack or charger. Contact a service agent for ALL repairs. To reduce the risk of injury and damage, never immerse your battery or charger in liquid or allow a liquid to enter the housing.

1. Do not expose the charger to rain or damp. There is an increased risk of an electric shock if water penetrates the charger.
2. Use the voltages indicated in the technical specifications to recharge the digital torque wrench Lithium-ion batteries. There is a risk of fire and explosion if you do not.
3. Keep the charger clean. There is a risk of electrical shock if it is dirty.
4. Check the charger, cable and plug before use each time. Do not use the charger if you detect any damage. Do not open up the charger itself. Have it repaired by qualified technical staff using original spare parts only. There is an increased risk of electric shock from damaged chargers, cables and plugs.
5. Always unplug charger before cleaning or maintenance to reduce the risk of electric shock. Do not allow water to enter the housing. Cleaning cannot be performed using oil, gasoline, paint thinner, water, metal, water chemicals, flammable materials or other corrosive liquid, all of which may damage the tool.
6. Store the charger in a cool, dry place.
7. Pull on the plug to disconnect it from the power source. Do not pull on the cord.
8. Do not place the charger near any heat source. As general practice, it is best to unplug charger when not in use.
9. Do not use the charger on easily flammable surfaces, such as paper or textiles, or in flammable surroundings. There is a risk of fire due to charger heating up during charging.
10. Make sure that the charger cord is positioned where it will not be stepped on, tripped over or otherwise subjected to damage or stress.
11. Suitable charging environment in order to avoid any damage or reduction of battery lifespan:
  - Charging temperature: 0°~40°C /32°~104°F
  - Discharging temperature: -20°~60°C /-4°~140°F
  - Storage temperature: < 35°C /< 95°F (best 23°C/73.4°F)
12. When Lithium-ion batteries are left unused for over 3 months, they must be charged before use and charged periodically in order to maintain their lifespan. Do not use an extension cord unless it is absolutely necessary. The use of an improper extension cord could cause the risk of fire, electric shock or electrocution.
13. Using original spare parts only. There is an increased risk of electric shock from damaged chargers, cables and plugs.

**READ AND SAVE ALL INSTRUCTIONS FOR FUTURE REFERENCE.**

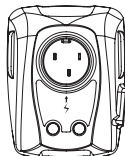
# Product description and specifications

## Symbology

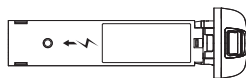
SYMBOLGY			
V	Volts	Hz	Hertz
---	Direct Current	A	Amps
~	Alternating Current	$n_0$	no load speed
□	Double Insulated	CE	CE approved
♻	Properly Recycle Batteries	WEEE	WEEE
BC	Charger Systems Efficiency Certified	ETL	ETL approved

## Description

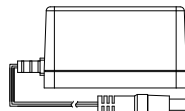
Power Speed Digital Torque Wrench (Power tool)



Battery Charger



Rechargeable Li-ion Battery Pack



Adaptor

Object	Model Number
3/8" Power Speed Digital Torque Wrench (5Nm-50Nm)	WA-E50-2-BW
3/8" Power Speed Digital Torque Wrench (13.5Nm-135Nm)	WA-E135-2-BW
1/2" Power Speed Digital Torque Wrench (22Nm-220Nm)	WA-E220-3-BW
Battery Charger & Adaptor	EWEB02CR01
Rechargeable Li-ion Battery Pack(2800mAh)	EWEB022800

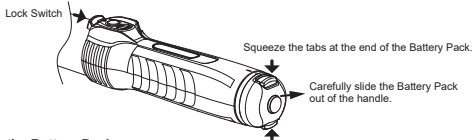
## Charging the Battery Pack with Battery Charger

Remove the battery pack from the tool for charging at a convenient time. The digital torque wrench batteries do not develop a "memory" when charged after only a partial discharge. It is not necessary to run down the battery pack before placing it on the charger.

- You can "Top-Off" your battery pack's charge before starting a big job or an expected long period of use.
- The only time it is necessary to charge the digital torque wrench Lithium-ion battery pack is when the battery pack has reached the end of its charge. Power to the tool will drop quickly. The battery pack will need to be charged immediately.
- When using the digital torque wrench with Lithium-ion batteries, usage must halt and the batteries charged immediately when battery symbol on the display shows "empty" (low voltage protection). This is in order to prevent damage and ensure product lifespan.
- When Lithium-ion batteries are left unused for over 3 months, they must be charged before use in order to maintain their lifespan.
- Lithium-ion batteries must be charged periodically in order to maintain their lifespan.

### Removing the Battery Pack

- Move the Lock Switch into the locked position and remove the Battery Pack from tool.
- Squeeze the tabs at the end of the Battery Pack and carefully slide the Battery Pack out of the handle.

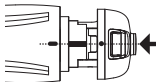


### Replacing the Battery Pack

- Squeeze the Battery Pack carefully and align correctly in order to snap into place.
- Refer to the markings on the handle and Battery Pack for correct alignment.

Replace the Battery Pack by carefully sliding it into the handle. Note that the Battery Pack must be aligned correctly in order to snap into place.

Refer to the markings on the handle and Battery Pack for correct alignment.



Note! The battery symbol on the display indicates the current battery state of charge. "Flat battery" is displayed if the rechargeable battery is drained.

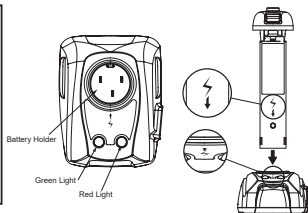
## How to Charge the Battery Pack

Align the battery pack with the bay and slide/insert the battery pack into the battery charger as far as possible.

The LED light will come on, either flashing or continuous.

- A fully discharged battery pack with an internal temperature in the normal range will charge in approximately 75 minutes (2800mAh).
- After charging is complete, the green indicator light will stay lit.
- The battery charger will keep the battery pack fully charged as long as it is left on the charger.
- If the indicator light does not come on, check that the battery pack is fully seated into the bay. Remove the battery pack and reinsert. If the indicator light still does not come on, contact a service agent.
- If the light continues to flash red & green at the same time on the charger, the battery pack may be excessively hot (40°C/104°F or more) or cold (0°C/32°F or less). Allow the battery pack to cool down, warm up, and then reinsert. If the problem persists, contact a service agent. Once the battery pack is within the acceptable range, normal charging will take place.

Battery Charger Indicator Light	
Indicator Light	Status
Continuous Red	Stand by
Continuous Green	Battery Pack fully charged
Flashing Red	Charging
Flashing Red & Green	Not charging. Battery Pack temperature has exceeded discharge range. Charging will begin when battery reaches the correct charging temperature (0°~40°C (32°~104°F))



# Specifications

Power Speed Digital Torque Wrench			
Model	WA-E220-3-BW	WA-E135-2-BW	WA-E50-2-BW
Drive square	1/2" Drive (12.5mm)	3/8" Drive (10mm)	3/8" Drive (10mm)
No. of ratchet teeth	60	60	60
Overall length	530mm	450mm	410mm
Torque Display Range	10~220Nm	6~135Nm	2.5~50Nm
Torque measurement range (10% ~100% effective)	22~220Nm	13.5~135Nm	5~50Nm
Torque increment	0.1Nm	0.1Nm	0.1Nm
Torque Measurement Tolerance	Clockwise:±2% Counter-clockwise:±3%	Clockwise:±2% Counter-clockwise:±3%	5Nm Clockwise:±4% Counter-clockwise:±5% 10Nm Clockwise:±2% Counter-clockwise:±3%
Angle measurement range	1°~999°		
Angle measurement tolerance	±1°~±10° (Refer to the set angle measurement tolerance range table for details)		
Torque units	Nm · Kgm · Ft-lb · In-lb · Kg.cm		
Maximum torque in electric mode	1Nm	1Nm	1Nm
No-load speed (Tested at 3.6V)	200 /min	200 /min	200 /min
Weight	1207g +/-5%	1014g +/-5%	976g +/-5%
Recommended operating ambient temperature	-20°C~60°C		
Recommended charging ambient temperature	0°C~40°C		
Recommended storage ambient temperature	< 35°C		
Recommended operating ambient humidity	Relative humidity below 90%		
Battery voltage	DC 3.6V		
Charging time	75 minutes		
Battery capacity	2800mAh		
Memory capacity	5000 sets		
Transmission	Micro USB · Wireless communication(5.0) · WiFi(2.4G)		
International standards	ISO6789-1:2017(E) & ASME B107.300-2021		
Calibration standard	1 year or up to 5000 times of use		
Languages	Traditional Chinese, Simplified Chinese, English, German, Japanese, French, Spanish		

## Serial number and date code

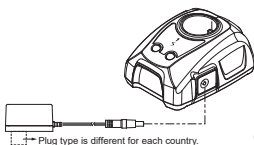
D 0 YY M XXXXX

- First code: B = Battery Pack, C=Battery Charger, D=Wrench.

- YY : last two digits of Gregorian calendar year. For instance, the AD year 2023 has the last two digits "23".

- M : month code. For instance, A=January, B=February, C=March...Etc.

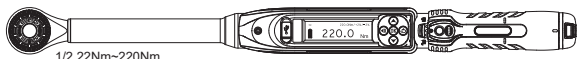
- XXXXX: manufacturing serial number



3/8 5Nm~50Nm



3/8 13.5Nm~135Nm

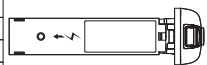


1/2 22Nm~220Nm

Battery Charger	
Input	DC 5V 2.0A
Output	DC 4.2V 2.0A

Adaptor	
Input	AC 100-240V 50/60Hz 0.5A
Output	DC 5V 2.0A

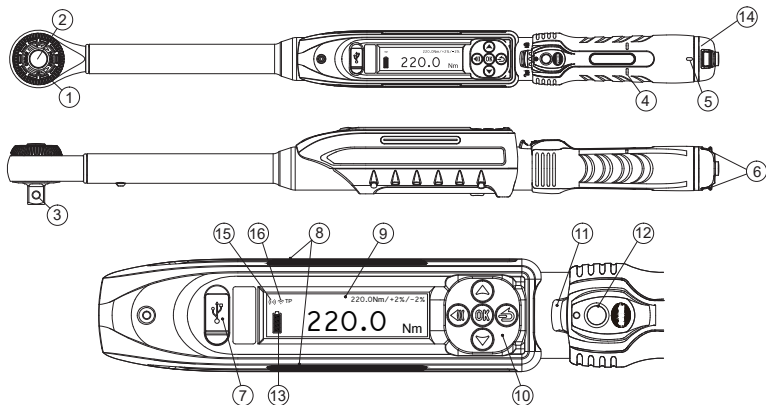
Rechargeable Li-ion Battery Pack	
Model	FPSD1A3
Rating	DC3.6V
Capacity	2800mAh




## Angle measurement tolerance range table

Effective angle range	Maximum tolerance
5~19°	±1°
20~29°	±2°
30~39°	±3°
40~49°	±4°
50~59°	±5°
60~69°	±6°
70~79°	±7°
80~89°	±8°
90~99°	±9°
100~999°	±10°

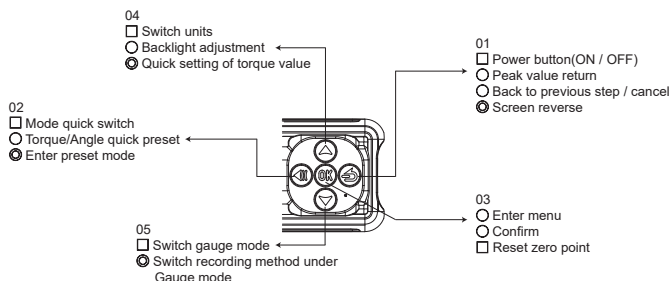
## Torque Wrench Description









1	Directional Disc	9	LCD window
2	Quick release button	10	Torque wrench control button
3	D Head	11	D head motor lock switch
4	Torque loading point	12	D head motor start button
5	Battery installation direction indication	13	Battery power indicator
6	Battery release button	14	Lithium-ion battery pack
7	Micro USB	15	Wireless communication
8	LED light	16	WiFi

**⚠** Before using the tool, press and hold  to open the torque display screen. Then start the torque tool operation. When the torque display screen is not turned on, this wrench acts as a general tool, and the electric motor can be used to quickly tighten or loosen the screw, but it should be noted that torque should not exceed the maximum torque range of the product (e.g.: If torque measurement range is 22Nm~220Nm, then maximum torque is 220Nm). Torque accuracy may be affected if the torque screen is not turned on, and overloading may affect the torque accuracy. In this case, the tool should be sent to your dealer for recalibration and inspection.

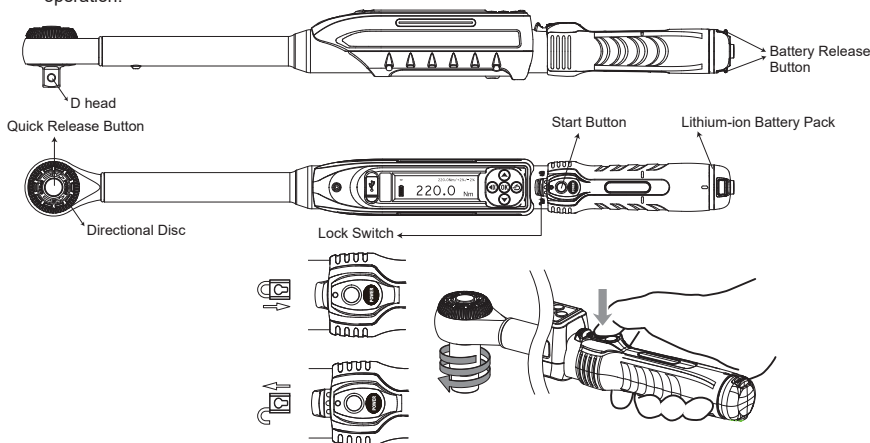
# Torque Wrench Button and Shortcut Description



	□ Long press	○ Single press	⊗ Double press
 Back/Power button	<ul style="list-style-type: none"> <li>• Torque Wrench Power Switch: long press to power on/off</li> </ul>	<ul style="list-style-type: none"> <li>• Return or cancel (setting screen): Use this key when any option needs to be returned or cancelled.</li> <li>• Peak Value return (Home Screen) : After operation, using this button to reset peak value back to zero for next operation.</li> </ul>	<ul style="list-style-type: none"> <li>• Screen Reverse: Quickly press this button twice at home screen to reverse the screen direction for convenient operation at different angles</li> </ul>
 Speed button	<ul style="list-style-type: none"> <li>• Mode quick switch: Press and hold for 2 seconds on the home screen to quickly enter the Mode mode.</li> </ul>	<ul style="list-style-type: none"> <li>• Torque/Angle Quick Setting: When using the Torque or Angle measurement mode, when reach target peak value, then press this button once to set the data as a target value.</li> </ul>	<ul style="list-style-type: none"> <li>• Enter preset mode: Quickly press 2 times at the home screen to enter "Preset" mode</li> </ul>
 OK button	<ul style="list-style-type: none"> <li>• Reset zero point (Please refer to "Torque Wrench Operation Instructions" at page 16)</li> </ul>	<ul style="list-style-type: none"> <li>• Access menu/Confirm: Press this button on the home screen to enter menu selection, or to confirm a setting.</li> </ul>	
 Up button	<ul style="list-style-type: none"> <li>• Switch units(home screen): Press and hold this key for 2 seconds at home screen to quickly enter the Unit Selection, use the up/down key to select the measurement unit, and press OK to return to home page after selection.</li> <li>• Long press to quickly adjusting value during setting</li> </ul>	<ul style="list-style-type: none"> <li>• Backlight brightness adjustment: Single press this button on the home screen to quickly adjust the brightness of the screen backlight.</li> </ul>	<ul style="list-style-type: none"> <li>• Quick setting of torque value: Quickly press this key twice at the home screen to directly adjust the target torque value and angle value with the up/down keys. Press the OK button to complete the setting.</li> </ul>
 Down button	<ul style="list-style-type: none"> <li>• Switch gauge mode(home screen): Press this button for 2 seconds on the home screen to quickly enter Gauge Mode for measurement operation.</li> <li>• Long press to quickly adjusting value during setting</li> </ul>		<ul style="list-style-type: none"> <li>• Quickly press 2 times to switch to the "Torque Mode" under the "Gauge Mode".</li> <li>• In the "Torque Mode" under the "Gauge Mode", double-click quickly to select the recording method: Peak / Follow / Track.</li> </ul>
 Speed + Back buttons	<ul style="list-style-type: none"> <li>• Long press (15 seconds): Reset the system (Reboot).</li> </ul>		

# Operating instructions

1. Please fully charge the lithium-ion battery powered power tool before first use. If the lithium battery is not inserted for a long time, recording may stop. So it is recommended to check whether the date/time information is correct before use.
2. When the torque display screen is not turned on, this wrench acts as a general tool, and the electric motor can be used to quickly tighten or loosen the screw, but it should be noted that torque should not exceed the maximum torque range of the product (e.g.: If torque measurement range is 22Nm~220Nm, then maximum torque is 220Nm). Torque accuracy may be affected if the torque screen is not turned on, and overloading may affect the torque accuracy. In this case, the tool should be sent to your dealer for recalibration and inspection.
3. Push start button to activate the rotation motor to speed up and save for time tightening fasteners. When the fastener's position is ready, switch to Torque Wrench function for accurate torque/angle operation.

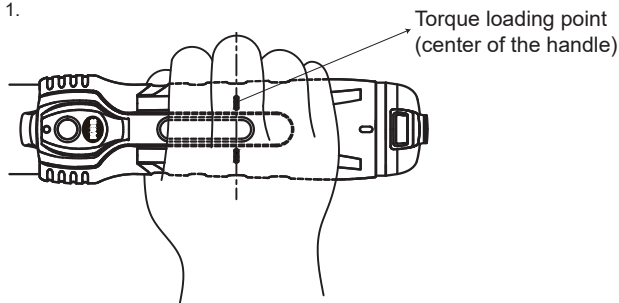


- To attach a socket to the tool, push quick release button to match the protruding square end of the ratchet wrench to the square hole of the socket you selected. Remove the socket by pressing the quick release button on the top face of the drive head.  
(※ It is recommended to use a magnetic insert with a regular socket, or a socket equipped with a magnetic retainer to prevent the socket from falling out and to improve working speed during tightening / loosening of fasteners.)
- Hold the D head and change the ratcheting and driving direction by turning the directional disc on the top face of the ratchet head. Turns the directional disc on the top of the head to tighten and loosen fasteners.
- **The ratchet can be used in both powered and manual modes.** When the lock switch is in the forward position, the ratchet can be used in powered and manual mode. In the rear position, the start button is disabled, and the tool can be used by hand like a regular non-powered socket wrench (manual mode).
- The motor of the electric speed wrench is designed with an over-torque protection device. When the maximum torque of the electric speed wrench reaches about 1 Nm (0.74 ft-lb), the clutch mechanism will be activated to make the wrench vibrate. In some cases, the fastener will hit a sticking point and cause the clutch to trip early. When this happens, change over to use manual and power driving mode at the same time to pass the stuck point, then go back to using only power mode.
- When the clutch mechanism activated and vibrate, user need to switch to manual mode for final tightening fasteners, and the final torque data should be checked on the LCD window for manual tightening. Do not use powered mode for final tightening.
- Digital torque wrench can operate in a temperature of -20°C to 60°C (-4° ~140°F) in power mode.



## Torque Wrench Operation Instructions

1.




- If the lithium battery is not inserted for a long time, recording may stop. So it is recommended to check whether the built-in date/time is correct before use.
- Always hold the torque wrench at the center of the handle when working with tool accessories.
- Apply torque slowly and firmly grasp the handle of the tool. Do not apply torque outside of the loading point as this may affect torque accuracy and this may result in damage to the tool.
- Always release the torque wrench IMMEDIATELY when the warning "Exceeds Maximum Permitted Load" displays on the LCD window with red warning light and a continuous high-frequency buzzer sounds to indicate the tool is overloaded past its maximum value. In order to ensure the accuracy of the tool, it should be recalibrated before it is used again.
- Always position the torque wrench and socket extension on the screw connection at a 90° angle.
- Caution! Specialist technical knowledge and/or suitable training is required for the use and repair of this tool.
- Always remove battery pack before changing or moving accessory. Only use accessories specifically recommended for this tool. Others may be hazardous. To reduce the risk of injury always wear proper eye protection marked to comply with ANSI Z87.1


### ※ Reset zero point:

The wrench is calibrated at the factory. Due to the large difference in the ambient temperature and humidity of the torque wrench environment, there may be some errors. It is recommended to switch the wrench to Gauge Mode-Torque-Follow mode, then use the reset zero function to correct the error value. However, this function cannot replace calibration. Users are still required to comply with ISO 6789-1:2017(E), which dictates that after one year or 5000 times of use, the tool must be sent back to the original factory for calibration in order to ensure accuracy.

Note (!): When using the zero reset function, the wrench should be placed horizontally ( $X < 0.2^\circ$   $Y < 0.2^\circ$ ), and no load should be applied to the wrench to avoid false reset of the zero point. If you accidentally reset the zero point by mistake, execute the zero point reset function again.

## 2.Torque/Angle Signal Description

Mode	Torque Mode and Rot.of Angle Mode			Angle Mode (Angle)
Recording Method	Peak value kept (Peak)	Value following (Follow)	Peak value tracking (Track)	Value following (Follow)
Level 1 of threshold value Blue light on <span style="float: right;">(Note 1)</span>	●	●	●	●
Level 2 of threshold value Blue light on + green light on + low frequency beep <span style="float: right;">(Note 1)</span>	●	●	●	●
Level 3 (within target value range) Steady green light+vibration+ continuous beep <span style="float: right;">(Note 1)</span>	●	●	●	●
Above target value range Red light flashing + continuous high frequency beep	●	●	●	●
Exceeds maximum tool value: Red light continuous red + continuous high frequency beep	●	●	●	●
When the torque range is reached, the angle is calculated Green light flashes 2 times + low frequency beep (only for Rot.Of Angle Mode)	●	●	●	
<p>Note 1: The lamp status is activated by 50% (the default) of the lower tolerance limit of the target value, and the value reaches the set target tolerance range. Example: The target value is 100Nm and tolerance +/-2%. The lower value is 98Nm, and the progress lamp starts when the target value is 50% (49Nm) of the lower limit of 98Nm, and gradually display according to the progress lamp until the target value is 100Nm.</p>				
<p>Recording Method description:</p> <ul style="list-style-type: none"> <li>● Torque peak hold (Peak): After the operation is stopped, the maximum value will continue to be displayed on the screen and will not be automatically reset to zero. If you need to perform other operations, press the  reset the value to zero.</li> <li>● Dynamic value follow (Follow): Records all values during operation. After loosening the wrench, the value will return to zero immediately.</li> <li>● Peak value tracking (Track): Records the maximum value during the operation. After loosening the wrench, the screen stays at the maximum value for 5 seconds, then automatically returns to zero after 5 seconds.</li> </ul>				
<ul style="list-style-type: none"> <li>● Can be used with the App: Customize the % setting of the display.</li> </ul>				

3.Power on: Long press  to turn on the tool (the first time you use it, it will directly enter the setting screen. The default screen for booting is Torque Mode.)

Power off: Long press  to turn off the tool.

#### 4.Quick tour of the menu

Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7	Level 8	Level 9	Level 10
Mode	Torque	Nm.Kgm ft-lb.in-lb kg.cm	Peak Follow Track	Set Target Value	Set Tolerance	Set Preset Yes/No	Set Preset Number	Preset OK	
	Torque+ Angle (Rot. Of Angle)	Nm.Kgm ft-lb.in-lb kg.cm	Peak Follow Track	Set Target Value	Set Target Angle Value	Set Target Angle Value Tolerance	Set Preset Yes/No	Preset Number	Preset OK
	Angle	Set Target Angle Value	Set Target Angle Value Tolerance	Set Preset Yes/No	Preset Number	Preset OK			
	Gauge	Torque Angle	Nm.Kgm ft-lb.in-lb kg.cm	Peak Follow Track					
Units	Nm.Kgm ft-lb.in-lb kg.cm								
Preset	Preset	Use							
		Edit	Torque Rot. Of Angle Angle (pls refer to Mode setting)						
		Delete	Yes/No	Preset Delete					
Menu Lock	Disable	Menu Lock Disable							
	Enable	Set Password	Menu Lock Enable						

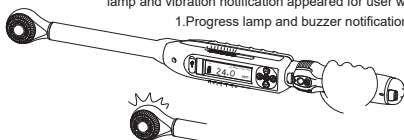
Level 1	Level 2	Level 3	Level 4	Level 5
Cycle Count	Usage Count			
	Next Calibration Date			
Setting	Buzzer	Disable Enable		
	Vibrate	Disable Enable		
	Back light	3 levels		
	Screen off	Minutes		
	Auto OFF	Minutes		
	WiFi	Disable Enable		
Configuration	Info	SN: serial number CAL: calibration date ISD: wrench start date VER: wrench firmware version OVR CNT: wrench usage exceeds the maximum guaranteed torque		
	Language	English Deutsch Francais Español 日本語 繁體中文 簡體中文		
	Date/Time	Year/Month/Date	Hour/Minute/Second	
	Record	up to 5000 records		
	Reset Zero	Yes / No	Horizontal Position	
	Reset Factory Setting	Yes / No	Erase Data	

## 5. Torque Wrench Mode Setting

### 5.1 Torque Mode (Torque)

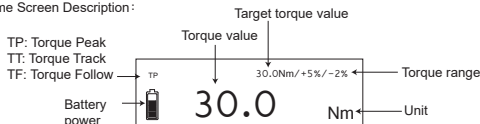
5.1.1 Function description: Torque tightening operation, when the target torque value is approached, progress lamp and vibration notification appeared for user warning.

1. Progress lamp and buzzer notification during torque recording

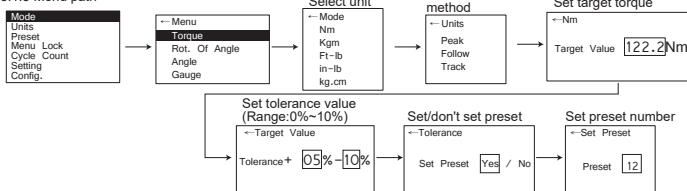


2. Clutch vibration starts when target torque is reached.

5.1.2 Home Screen Description:



5.1.3 Menu path:



5.1.4 Torque mode step description:

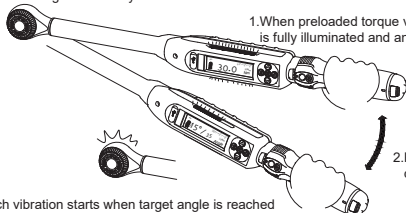
1. Select the mode: single press **[OK]** to enter the menu, then select [Mode] in the menu, after confirmed [Torque] is select, press **[OK]** go to the next step, or press **[Back]** to the previous step.
  2. Select unit: Use **[Up]** **[Down]** to select the unit, after confirmed, press and then press **[OK]** to go to the next step, or press **[Back]** to the previous step.
  3. Select recording method: use **[Up]** **[Down]** to select recording method, and then press **[OK]** to go to the next step, or press **[Back]** to the previous step.
  4. Set target torque: use **[Up]** **[Down]** to set the target torque value, and then press **[OK]** to go to the next step, or press **[Back]** to the previous step.
  5. Set tolerance value: use **[Up]** **[Down]** to set the positive (+) tolerance value, then press **[OK]** to set the negative (-) tolerance value in the same way. Press **[OK]** to confirm and proceed to the next step, or press **[Back]** to the previous step.
  6. Set preset: use **[Up]** **[Down]** to confirm if you want to set preset. Select YES to go to step 7, select NO to directly return to the home screen and follow torque wrench operation instruction for bolting process, or press **[Back]** to the previous step.
  7. Set preset number: use **[Up]** **[Down]** to select a preset number, and press **[OK]** to return to the home screen and follow torque wrench operation instruction for bolting process, or press **[Back]** to the previous step.
- 5.1.5 Quick Setting: When reach target peak value, then press **[Back]** once to set the data as a target value.

### 5.2 Torque + Angle Mode (Rot. Of Angle)

5.2.1 Function description: When the torque reaches the preloaded torque value, angle value recording start.

When the target angle value is approached, progress lamp and vibration notification appeared for user warning.

Remark: Angle mode only records horizontal and vertical direction.



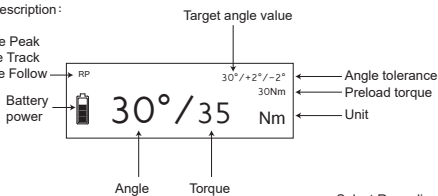
1. When preloaded torque value is reached, the LED light is fully illuminated and angle value recording start.

2. Progress lamp and buzzer notification during angle recording

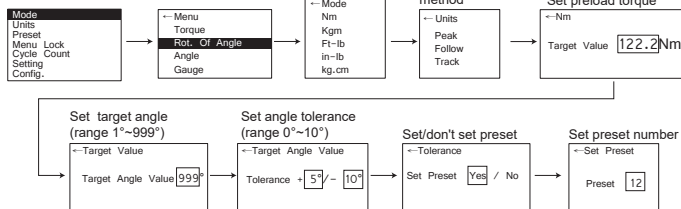
3. Clutch vibration starts when target angle is reached

## 5.2.2 Screen Description :

RP:Rot.of Angle Peak  
RT:Rot.of Angle Track  
RF:Rot.of Angle Follow



## 5.2.3 Menu path :



## 5.2.4 Torque+Angle mode step description:

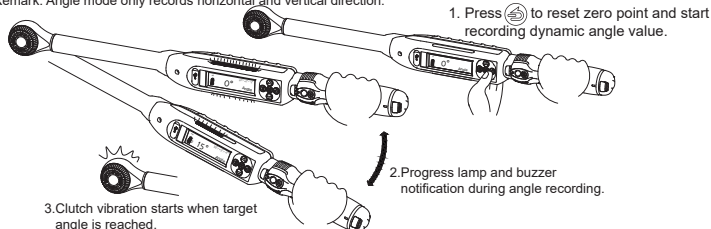
1. Select mode: single press **[OK]** to enter the menu, then select [Mode] in the menu, after confirmed [Rot. Of Angle] is select, press **[OK]** go to the next step, or press **[Back]** to the previous step.
2. Select unit: Use **[Up]** **[Down]** to select the unit, and then press **[OK]** to go to the next step.
3. Select recording method: use **[Up]** **[Down]** to select recording method, and then press **[OK]** to go to the next step, or press **[Back]** to the previous step
4. Set preload torque: use **[Up]** **[Down]** to set the preload torque(Long press for quick value adjusting), press **[OK]** go to the next step, or press **[Back]** to the previous step.
5. Set target angle: use **[Up]** **[Down]** to set the target angle (Long press for quick value adjusting), and then press **[OK]** to go to the next step, or press **[Back]** to the previous step.
6. Set angle tolerance: use **[Up]** **[Down]** to set the positive (+) tolerance value, the press **[OK]** to set the negative (-) tolerance value, then press **[OK]** to set the negative (-) tolerance value in the same way. Press **[OK]** to confirm and proceed to the next step, or press **[Back]** to the previous step.
7. Set preset: use **[Up]** **[Down]** to confirm if you want to set preset, select YES to go to step 8; select NO to directly return to the home screen and follow torque wrench operation instruction for bolting process, or press **[Back]** to the previous step.
8. Set preset number: use **[Up]** **[Down]** to select a preset number, and press **[OK]** to return to the home screen after confirmation and follow torque wrench operation instruction for bolting process, or press **[Back]** to the previous step.

5.2.5 Angle measurement tolerance range : please refer to Page 14 "Angle measurement tolerance range table".

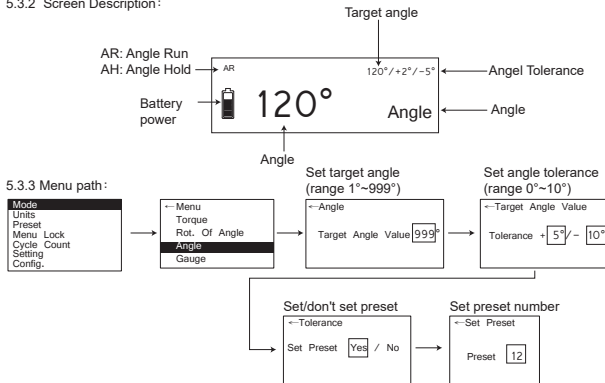
## 5.3 Angle Mode (Angle)

5.3.1 Function description: Press **[Reset]** to reset zero point and recording dynamic angle value, when the target angle value is approached, progress lamp and vibration notification appeared for user warning.

Remark: Angle mode only records horizontal and vertical direction.



### 5.3.2 Screen Description :



### 5.3.4 Description of Angle Mode:

#### Recording Method: Dynamic following (Follow) only.

1. Select mode: Single press to enter the menu, then select [Mode] in the menu, after confirmed [Angle] is select, press go to the next step, or press to the previous step.
2. Set target angle: use to set the target angle (Long press for quick value adjusting), press to go to the next step, or press to the previous step.
3. Set angle tolerance : use to set the positive (+) tolerance value, then press to set the negative(-) tolerance value, then press to set the negative (-) tolerance value in the same way. Press to confirm and proceed to the next step or press to the previous step.
4. Set Preset: use to set whether the data is stored as a quick memory group, select YES to go to step 5; select NO to directly return to the home screen and follow torque wrench operation instruction for bolting process, or press to the previous step.
5. Set preset number: Use to select a preset number, Press to return to the home screen and follow torque wrench operation instruction for bolting process, or press to the previous step.

5.3.5. Angle measurement tolerance range: please refer to Page 14 "Angle measurement tolerance range table".

5.3.6. After completing setting of upper and lower limit target angle values, the operating angle value will be locked automatically when stopped at the lower limit value for 3 seconds or the target angle value is reached. At this time the clutch vibration will start and progress lamp and buzzer notifications will activate.

- During operation, LCD screen displays AR (Angle Run)
- After reaching target angle value, LCD screen displays AH (Angle Hold)

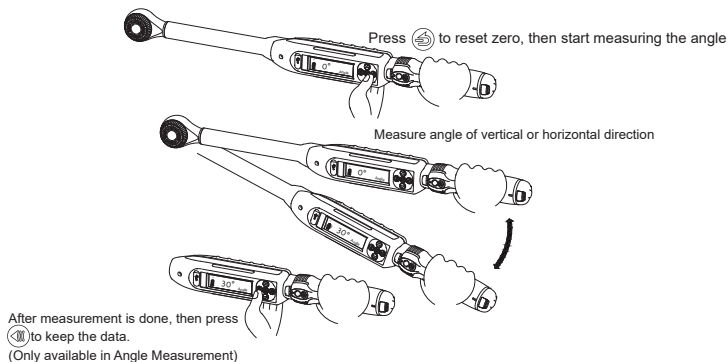
5.3.7 Quick Setting: When reach target peak value, then press once to set the data as a target value.

### 5.4 Gauge

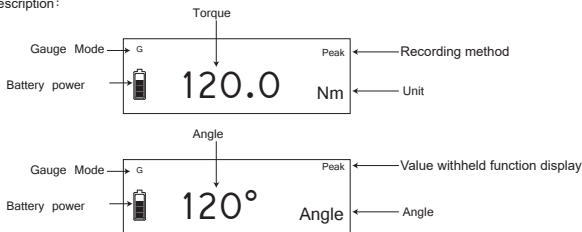
5.4.1 Function description: Measure how much torque or angle needs to be set when the object is tightened, and record the data to be used as a value setting for a specific place or situation.

There is no target value in this mode, and the progress lamp, vibration, and buzzer will not act.

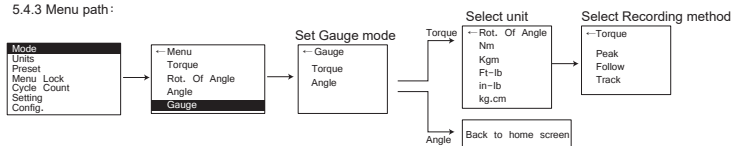
- Torque measurement (Torque): Measure the torque of the object, and directly display the value.
- Angle measurement (Angle): Measure the angle (only in horizontal and vertical direction).



#### 5.4.2 Screen Description :



#### 5.4.3 Menu path :



#### 5.4.4 Step description for measuring:

1. Select mode: Single press [OK] to enter the menu, then select [Mode] in the menu, after confirmed [Gauge] is select, press [OK] go to the next step, or press [Back] to the previous step.

2. Set gauge mode: use [Up] [Down] to set the gauge mode, after confirming, [OK] to go to the next step.

##### 2.1 Gauge - Torque

2.1.1. Set unit: use [Up] [Down] to set the unit, and then press [OK] to go to the next step.

2.1.2. Set value recording method: use [Up] [Down] to set value recording method, press [OK] to finish setting and return to home screen, or press [Back] to the previous step.

- Torque peak hold (Peak): After the operation is stopped, the maximum value will continue to be displayed on the screen and will not be automatically reset to zero. If you need to perform other operations, press the [OK] the value to zero.
- Dynamic value follow (Follow): Records all values during operation. After loosening the wrench, the value will return to zero immediately.
- Peak value tracking (Track): Records the maximum value during the operation. After loosening the wrench, the screen stays at the maximum value for 3 seconds, then automatically returns to zero after.

##### 2.2 Gauge - Angle

2.2.1. Select angle mode: select [Angle], and then press [OK] and return to home screen. Or press [Back] to the previous step.

2.2.2. After measurement is done, press [OK] to save the data. In the top right corner "Peak" will appear meaning value withholding function is active, press [OK] to reset zero and resume measurement.

## 6.Units

6.1 Menu select: Single press  $\odot$  to enter the menu, then use  $\triangle$   $\nabla$  to select [Units] in the menu.

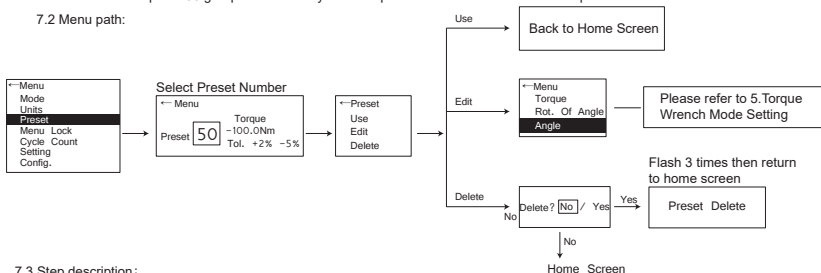
After selection is confirmed, press  $\odot$  to go to the next step, or press  $\leftarrow$  to the previous step.

6.2 Unit Setting: Use  $\triangle$   $\nabla$  to select default unit - Nm, Kg-m, Ft-lb, in-lb, kg.cm, after selection is confirmed, press  $\odot$  to confirm setting and return to home screen, or press  $\leftarrow$  to go to the previous step.

## 7.Setting Presets

7.1 Function description: 50 groups of commonly used torque wrench values can be set for quick use.

7.2 Menu path:



7.3 Step description:

1. Enter menu: single press  $\odot$  to enter the menu, then select [Preset] in the menu, press  $\odot$  to go to the next step, or press  $\leftarrow$  to return to home screen.

2. Set preset number: Use  $\triangle$   $\nabla$  to select a preset number, confirm and proceed to the next step by pressing  $\odot$ .

3. Use/edit/delete preset: Use  $\triangle$   $\nabla$  to select, and then  $\odot$  to proceed to the next step.

3.1 Use Preset: Confirm preset data and return to home screen.

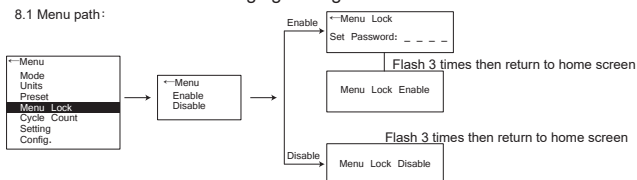
3.2 Edit Preset: Re-edit preset data setting (pls refer to 5.Torque Wrench Mode Setting).

3.3 Delete Preset: Use  $\triangle$   $\nabla$  to select YES/NO for preset delete.

## 8.Menu Lock

Lock the menu to avoid changing settings.

8.1 Menu path:



8.2 Step Description:

1. Enter menu: single press  $\odot$  to enter the menu, then select [Menu Lock] in the menu, press  $\odot$  go to the next step, or press  $\leftarrow$  to return to home screen.

2. To enable/disable menu lock: Use  $\triangle$   $\nabla$  to select a function.

2.1 Enable menu lock: Four-digit password setting: Use  $\triangle$   $\nabla$  to select the number, confirm  $\odot$  to set the next digit, press  $\odot$  after the setting is completed, and the screen will display [Menu Lock Enable] and automatically return to the home screen.

2.2 Disable menu lock: After enter Menu, select disable to cancel menu lock function.



## 9. Cycle count

Automatically record the number of times of use and the date of next calibration.

9.1 Menu path:



9.2 Step description:

1. Enter menu: single press (OK) to enter the menu, then select [Cycle Count] in the menu, and press (Back) to return to home screen.

2. Browse cycle count, or to select function:

2.1 Used No: The counter starts counting the number of operations from about 50 (including the number of factory tests)

When the count reaches 5000, the wrench will automatically display a prompt. [Calibration is required].

An electronic torque wrench should be calibrated regularly.

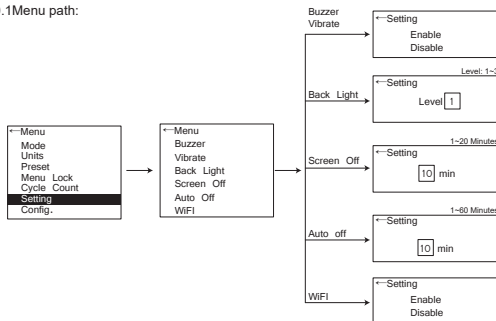
2.2 The next calibration date of the next correction: The wrench will be counted for 1 year after the first use of the wrench.

When the date occurs, the wrench will automatically pop up the prompt [Calibration is required].

## 10. Setting (other function)

Key sound, vibration prompt, back light brightness, screen off time and automatic shutdown

10.1 Menu path:



10.2 Steps and function description:

1. Enter menu: single press (OK) to enter the menu, then select [Setting] in the menu, press (OK) go to the next step, or press to return to home screen.

2. Select setting item: Use (Up) (Down) to select the function to be set, and then (OK) to proceed to the next step.

2.1 Button sound setting(Buzzer): Turn on or off the button sound function, use (Up) (Down) to select, after confirmation, press (OK) to confirmed, press (Back) to return to the previous step.

2.2 Vibration settings(Vibrate): Turn on or off the vibration reminder function, use (Up) (Down) to select, after confirmation, press (OK) to confirmed, press (Back) to return to the previous step.

2.3 Backlight brightness setting(Back Light): Use (Up) (Down) to select the brightness level, the interface will directly respond with each level's brightness, after confirmation, press (OK) to return to the home screen, or press (Back) to return to the previous step.

2.4 Screen off setting(Screen Off): The wrench will automatically go to screen off when it is unused for the set time (1~20 minutes). Screen on the wrench by pressing any button. Use (Up) (Down) to select the time, after confirmed press (OK) press (Back) to return to the previous step.

2.5 Automatic shutdown time setting(Auto Off): The wrench will automatically shut down when it reaches the set time (1~60 minutes). Use to select the time, after confirmed press (OK) , press (Back) to return to the previous step.

2.6 WiFi setting: Turn the WiFi function on or off. Use (Up) (Down) to select, after confirmation, press (OK) to confirm, press (Back) to return to the previous step.



## APP Operation Instructions

Open the wireless settings on your mobile device and download the "Torq Wrench" application.  
Or scan the following QR code.



iPhone 13 (or latest) / Android 10 (or latest) \*Supports wireless communication

※ Signal reception range: 5 meters in obstacle-free areas. Launch the application and press to perform wireless communication pairing.

① Add Product: Use the wireless communication pairing wrench for advanced operations.

② Wrench serial number: Serial number of the wrench in use.

③ Menu: Perform advanced operations and parameter settings for the wrench.

- Mode (Wrench Mode)
- Preset (Memory Set)
- Task Group
- Setting
- Record
- Configuration (Advanced Setting)
- Language

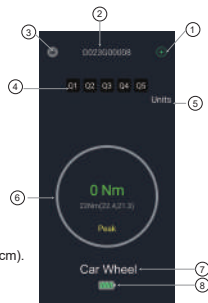
④ Preset Shortcut: You can set and quickly use 5 sets of preset.

⑤ Unit Switching: Allows real-time switching of torque values in 5 different units (Nm, Kgm, Ft-lb, in-lb, kg.cm).

⑥ Wrench Torque/Angle Value: Displays real-time data of torque/angle values for wrench modes.

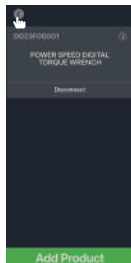
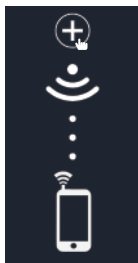
⑦ Notes for Preset Shortcut.

⑧ Wrench Power Indicator: Displays battery power indicator.



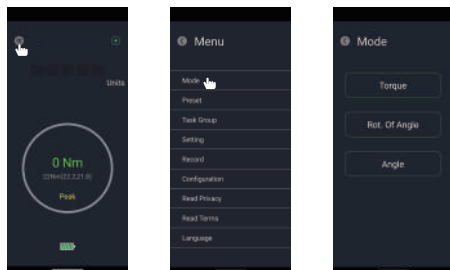
### 1. Adding a New Product

Long press on the tool to open the wrench, then click on the icon of the main screen for wireless communication pairing.  
Click on the serial number to connect. After a successful connection, and click to return to the main screen.



2. Choose the wrench mode by clicking the menu button on the top left corner of the main screen, then selecting [Mode]. There are three available modes:

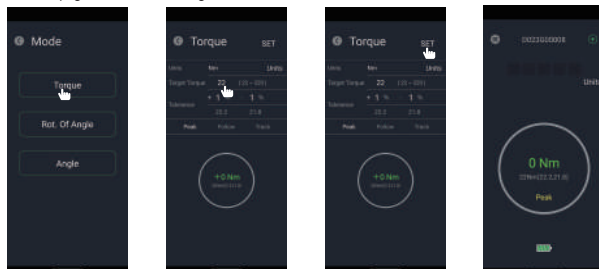
- Torque mode
- Torque + Angle mode (Rot. Of Angle)
- Angle mode



## 2.1 [Mode] > Torque Mode Setting

If you choose to use the [Torque mode] to operate the wrench, please set the torque unit, torque value, torque tolerance, and select recording method: Peak, Follow, Track.

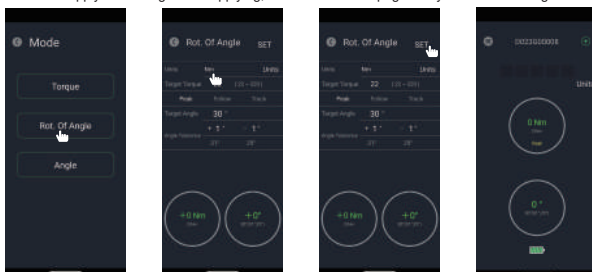
After setting, press the [Set] button on the top right to apply the settings. Once applied, you will return to the homepage and can start using the tool.



## 2.2 [Mode] > Torque + Angle Mode Setting (Rot. of Angle)

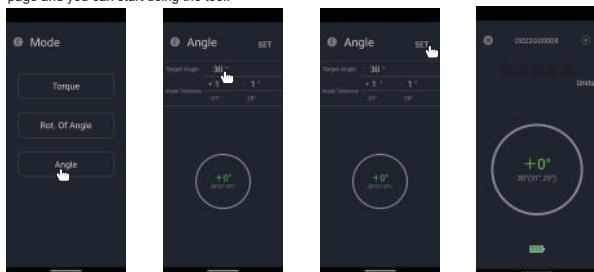
Select the [Rot. of Angle] to operate the wrench. Please set the torque unit, torque target value, and torque value select recording method: Peak, Follow, Track.

Also, set the target angle and target angle tolerance value. After setting, press the [Set] button in the upper right corner to apply the settings. After applying, return to the homepage and you can start using the tool.



### 2.3 [Mode] > Angle Mode Setting

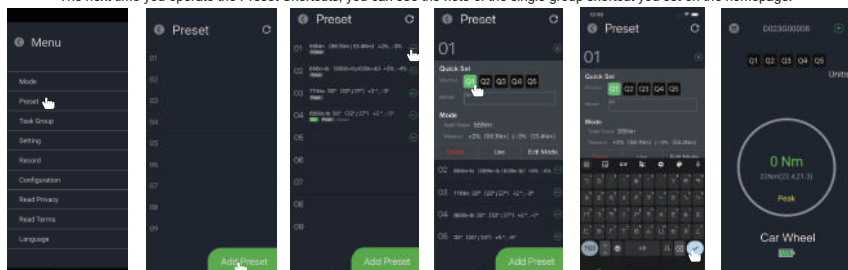
Select [Angle] Mode to operate the wrench. Please set the target angle value and target angle tolerance value in order. After setting, press the [Set] button in the upper right corner to apply the settings. After applying, return to the home page and you can start using the tool.



### 3. Preset

On the menu screen, click on [Preset], then click on [Add Preset] in the lower right corner to set up a default preference list of up to 50 preset groups. To edit preset groups settings, click on the button on the right (...) and set the "Preset Shortcut" and "Wrench Function Mode".

You can set up of 5 Preset Shortcuts of Q1-Q5, and remarks can be entered in the Remark field. Press the Enter key to save the note. The next time you operate the Preset Shortcuts, you can see the note of the single group shortcut you set on the homepage.



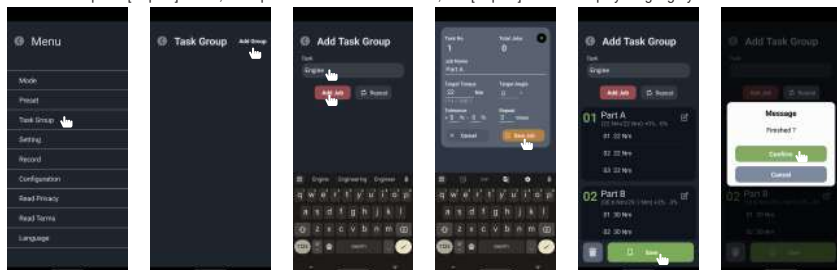
### 4. Task Group



#### 4.1 Adding a new Task Group:

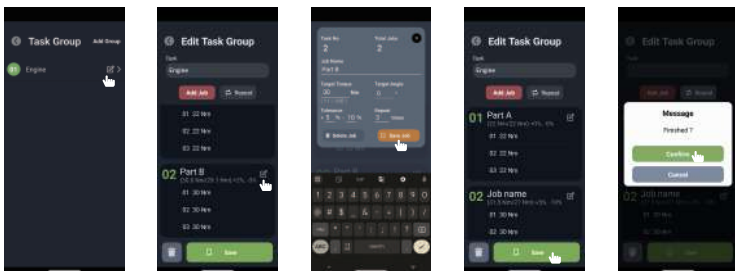
On the menu screen, click on [Task Group], then click [Add Group] on the top right corner to add a new group. Enter the group name in the Task title field. You can set up a group list of up to 99 groups. After setting the group name, press [Add Job] to add a new job item, and set the job name, torque target value, target angle, torque tolerance, and number of operations. When the setting is completed, click [Save Job] in the lower right corner to save the job item. The display will jump directly to the group list screen and display the content of the job. After confirming that everything is correct, press the [Save] button, and click [Confirm] button in the message window to save the group.




※ Each task group is preset to "Repeat" the operation, the [Repeat] button is displayed white. When one task cycle is completed, it will repeat the operation from first job item automatically.

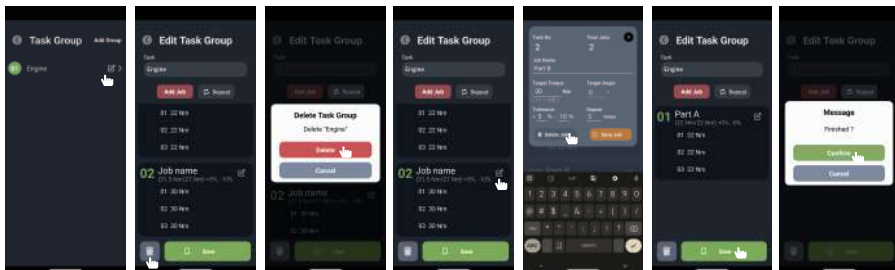
To press [Repeat] button, the repeat function will be turned off, the [Repeat] button is displayed light grey.



- 4.2 Modify or edit the contents of a set task group/job item: On the Task Group screen, click the button  on the right side of the group item to be modified. If you want to modify or edit the job item that has been set in the group, click the button  in the upper right corner of the item you want to edit, and click the [Save Job] button in the lower right corner after editing. The display will jump directly to the group list screen, and display the contents of the job. After confirming that everything is correct, press the [Save] button, and click [Confirm] button in the message window to save the group.

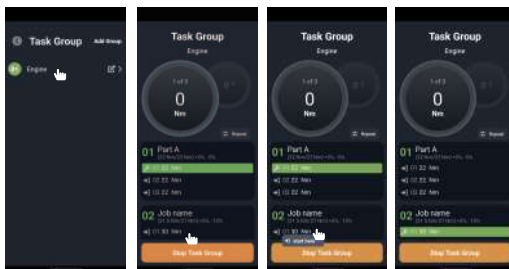


- 4.3 Delete task group/job item: On the Task Group screen, click the button  on the right side of the group item to be deleted, then click on the button  in the lower left corner, and press [Delete] button in the message window to delete the group. To delete any job item in the group, click on the button  in the upper right corner of the item you want to delete, and then click [Delete] on the lower left corner to delete it. The display will jump directly to the group list screen. The deleted job item will no longer be in the group list. After confirming that everything is correct, press the [Save] button, and click [Confirm] button in the message window to save the group.







#### 4.4 Task Group Operation:


On the Task Group screen, click the group that you want to operate. You can select any job item needed to operate in the group by clicking [Start Here].

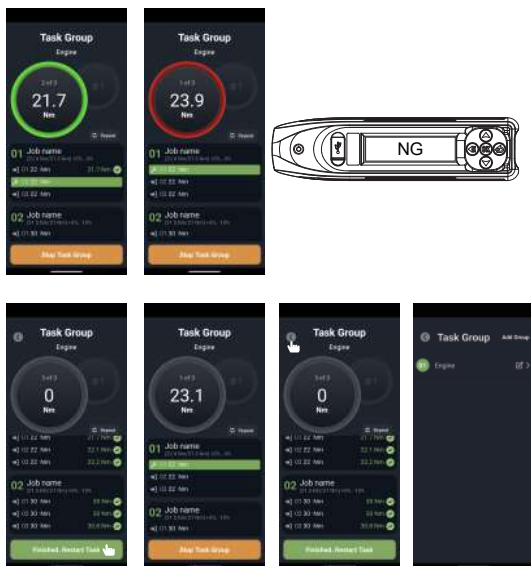


#### 4.5 Operation Status:

**Normal operation:** When the tool has reached the target value, a green warning circle will display with the operating value on the screen. After releasing the tool, you can see the values recorded and  (The tool has reached to the target value) on the job list. Then continue to the next operation.

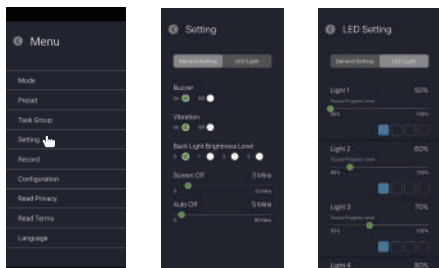
**Exceptional operation:** When the tool has exceeded the target value, the letters "NG" will display on the LCD screen of the tool, and a red warning circle with the operating value will display on the screen of the mobile device. Press the button  on the tool to repeat the operation. Or, press the button  on the tool to end the operation. The value is recorded and the  icon (Tool has overloaded the target value) on the job list can be seen. Then continue to the next operation.

- When turn on the Repeat function (Display white Repeat button), after one task cycle is completed, it will repeat the operation from first job item automatically.
- When turn off the Repeat function (Display light grey Repeat button), need to click the [Finished. Restart Task] button at the bottom to repeat the task.
- Click on the button  on the upper left corner to exit and return to Task Group list.



## 5. Setting

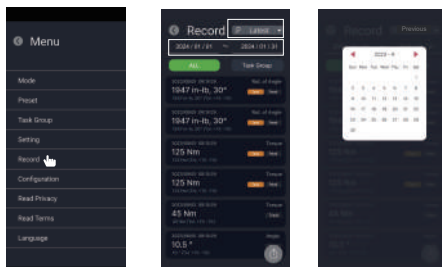
Go to the menu screen and click on [Setting] to access the other function settings. Here, you can set parameters for the wrench's buzzing, vibration, backlight, standby screen off, and automatic shutdown. On the [LED Setting] page, you can set parameters for the wrench's LED notifications during operation.



## 6. Record

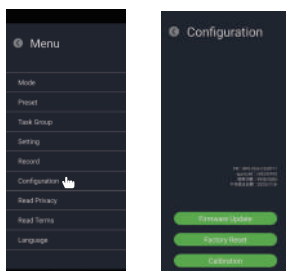
On the menu screen, click the [Record] button to enter the [Record] page.

On this page, you can sort and filter data according to your desired search method (Latest, Previous, Torque mode, Rot. Of Angle mode, Angle mode). If you need to search for historical data using a date range, you can select the time field below to perform a time range search.



## 7. Configuration

**Advanced Settings:** On the menu screen, click on [Configuration] to access advanced settings. Here, you can view the App version, usage count of the wrench, and the next calibration date.

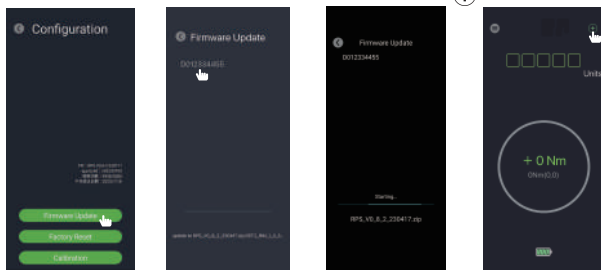




### 7.1 Firmware Update

※ If the tool is low on battery before the update, please charge the battery first.

On the Advanced Settings [Configuration] page, click the [Firmware Update] button to enter the device list. Please click your device serial number to update the firmware. During the update, the tool will automatically restart once. After the restart, please return to the homepage of the App, click the Add Product button (+) in the upper right corner and reconnect the product.



### 7.2 Factory Reset

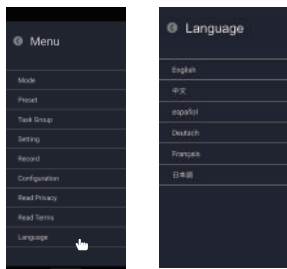
To reset to factory settings, go to the [Configuration] settings page and click on the [Factory Reset] button.



Please note that when you press the [Factory Reset] button to reset to factory settings, all records and completed data and settings will be cleared. Please confirm again whether you are sure you want to perform this action to avoid data loss.

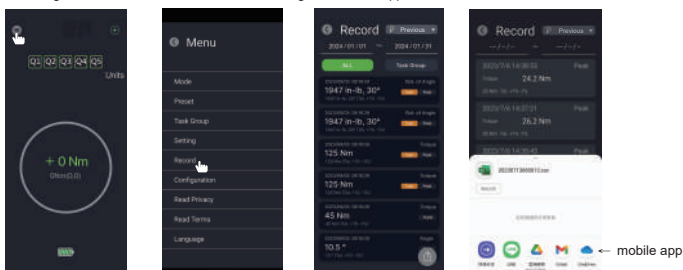
### 8. Language

On the menu screen, click on [Language], then select your preferred language.



## Data Download

On the menu screen, click the [Record] button to enter the Record screen. Click the export icon button in the lower right corner to share the Record data through the mobile app that has been installed.



### Export CSV screen examples:

	A	B	C	D	E	F	G	H	I	J	K	L	M
1	Mode	Time	Units	Recording method	Torque	Torque High	Torque Low	Angle	Angle High	Angle Low	use Unit	use Torque	use Angle
2	Torque	2023/7/6 13:21	Nm	Follow	20	1%	1%				Nm	41.5	0
3	Torque	2023/7/6 13:21	Nm	Follow	20	1%	1%				Nm	42.6	0
4	Torque	2023/7/6 13:21	Nm	Follow	20	1%	1%				Nm	44.1	0
5	Torque	2023/7/6 13:21	Nm	Follow	20	1%	1%				Nm	34.3	0
6	Torque	2023/7/6 13:21	Nm	Follow	20	1%	1%				Nm	35	0
7	Torque	2023/7/6 13:21	Nm	Follow	20	1%	1%				Nm	39	0
8	Torque	2023/7/6 13:21	Nm	Follow	20	1%	1%				Nm	38.3	0
9	Torque	2023/7/6 13:21	Nm	Follow	20	1%	1%				Nm	30.1	0

### [WiFi 2.4G / BT wireless transmission command]

We can provide system commands for the development of software for this function.

## ACCESSORIES

WARNING Use only recommended accessories. Others may be hazardous.

## Adjustment / Calibration

This tool calibration must be based on DIN EN ISO 6789-1. The minimum requirement for the calibration interval of torque wrenches is one year or 5,000 load cycles (whichever comes first). If the tool exceeds the maximum torque value, falls, or experiences impact forces during operation, it must be calibrated before further use to ensure accuracy. If damage occurs due to overload or impact forces, please contact an authorized service center. For detailed information, please refer to the troubleshooting section in the manual.

Please only use torque wrenches that have been regularly calibrated. After long-term use, it is recommended to have the tool recertified or recalibrated by an authorized service center.

Calibration must be performed using appropriate measuring equipment that complies with ISO 6789-2.

Calibration can only be carried out by authorized professionals, accredited calibration laboratories, or manufacturers.

NOTE! Once tool has exceeded 5,000 cycles, the tool will be out of certification.

NOTE! The wrench provides the following information: date of the last calibration and number of operations.

NOTE! Never ignore recalibrating a torque wrench. Improper calibration can lead to damage.

NOTE! Uncalibrated torque tools can cause fastener failure, resulting in serious injury or death.

## Torque and Rotation Angle Certification

This tool was calibrated at the factory with torque measurement instruments.

Every torque wrench is provided with a Declaration of Conformance, and torque parameters comply with ISO 6789-1:2017.

Should you lose the document or if your tool is required to be calibrated, please get in touch with the authorized service center.

## Maintenance

1. Service and repairs are to be done by authorized service center only. Contact your local representative.
2. To reduce the risk of injury, always unplug the charger and remove the battery pack from the charger or tool before performing any maintenance.
3. Never disassemble the tool, battery pack or charger
4. Keep your tool, battery pack and charger in good repair by adopting a regular maintenance program. Inspect your tool for issues such as undue noise, misalignment or binding of moving parts, breakage of parts, or any other condition that may affect the tool operation.
5. If the tool does not start or operate at full power with a fully charged battery pack, clean the contacts on the battery pack. If the tool still does not work properly, return the tool, charger and battery pack, to an authorized service center for repairs.
6. If the digital torque wrench break down despite the great care taking during manufacture and testing, you should have an authorized customer service center for carry out any repairs.
7. To reduce the risk of personal injury and damage, never immerse your tool, battery pack or charger in liquid or allow a liquid to flow inside them.
8. None of the internal mechanical and electronic functional elements require any maintenance.
9. Clean wrench regular by wiping with a dry cloth. Do not use oil, gasoline, paint thinner, water, metal, water chemicals, flammable materials or other corrosive liquid, all of which may damage the tool. DO NOT use solvents, thinners or carburetor cleaners.
10. Ratchet head repair kits can be ordered from an authorized service center.
11. You must indicate the serial number on the power tool's nameplate if you have any question or need order replacement parts.
12. Please fully charge the lithium-ion battery powered power tool before first use.
13. When using the digital torque wrench with Lithium-ion batteries, usage must halt and the batteries charged immediately when battery symbol on the display shows "empty" (low voltage protection). This is in order to prevent damage and ensure product lifespan.
14. When Lithium-ion batteries are left unused for over 3 months, they must be charged before use and charged periodically in order to maintain their lifespan. Do not use an extension cord unless it is absolutely necessary. The use of an improper extension cord could cause the risk of fire, electric shock or electrocution.
15. Maintain charger cord. When unplugging charger, pull plug rather than cord to reduce the risk of damage to the electrical plug and cord. Do not abuse the cord. Never carry charger by its cord. Keep cord from heat, oil, sharp edges or moving parts. Make sure cord will not be stepped on, tripped over or subjected to damage or stress. Do not use charger with damaged cord or plug. If cord is damaged, it must be replaced by the manufacturer or service agent. Damaged cords may create a fire. Unauthorized replacement or repair may cause a hazard.

16. Maintain digital torque wrench and accessories. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the digital torque wrench's operation. If damaged, have the digital torque wrench repaired before use. Many accidents are caused by poorly maintained digital torque wrench.
17. Keep handles and grasping surfaces dry, clean and free from oil and grease. Slippery handles and grasping surfaces do not allow for safe handling and control of the tool in unexpected situations.
18. Before any work on the tools itself (e.g. maintenance, tool change, etc.) as well as during transport and storage remove the battery from the digital torque wrench. There is danger of injury when unintentionally actuating the On/Off switch.
19. For safe and proper working, always keep the tools clean.
20. After use put the torque wrench back in the packing materials in a clean and dry location to protect against corrosion.

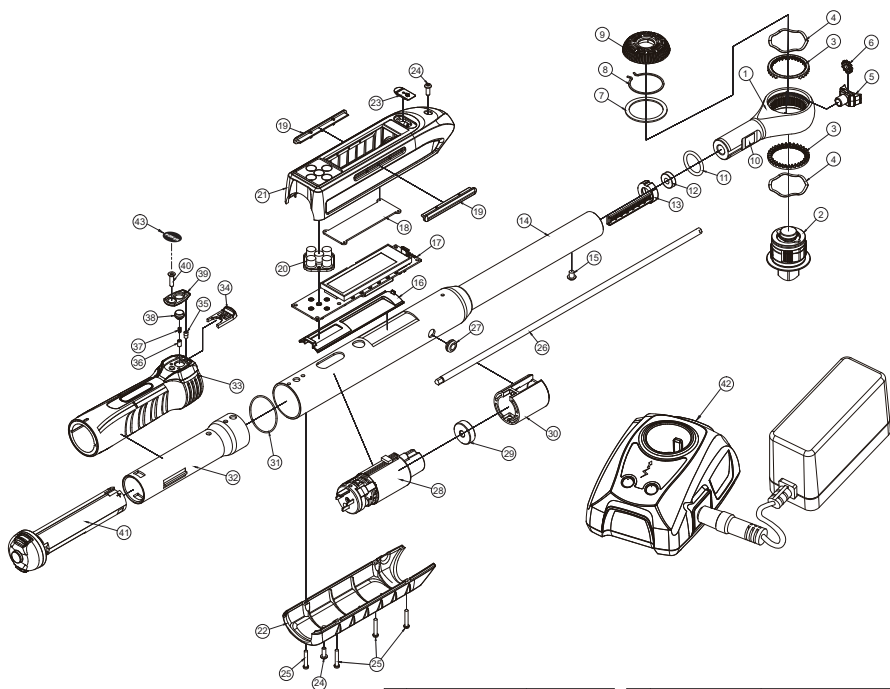
## Troubleshooting

1.

Error Message	Cause	Resolution
Over Temp.	Over Temperature	If the torque tool exceeds the operating temperature, wait for the temperature to return to normal before continuing to use the tool. If the problem continues to occur, contact your dealer.
Over Current	Over Current	The torque tool has current overload protection. First check to see if the ratchet or motor is stuck, and then continue to operate the tool. If the problem continues to occur, contact your dealer.
Low Batt.	Low Battery	If the battery voltage is too low, charge the battery. If the problem persists after charging, replace the battery with a new one. If the screen cannot be activated, long press (⏻) + (⏻) for 10 seconds to reset the system. If this does not resolve the problem, contact your dealer.
⚠ Calibrate Req. ⚠	Calibrate requirement	This tool will require certification: after annual calibration, or 5,000 cycles (whichever case occurs first), or if the tool has been overloaded. An electronic torque wrench should be checked and calibrated regularly. After a long period of use, re-certification or re-calibration by the factory is advisable.
Exceeds Maximum Permitted Load	Over 110% of full scale torque applied	This tool has overloaded its maximum tool value, it should be checked and calibrated.

2. Check for misalignment or binding of moving parts, breakage of parts, and any other condition that may affect the tool's operation. If damaged, have the tool serviced before using. Many accidents are caused by poorly maintained tools.
3. Have your power tool serviced by a qualified repair person using only identical replacement parts. This will ensure that the safety of the power tool is maintained.
4. Never service damaged BATTERY packs. Service of BATTERY packs should only be performed by the manufacturer or authorized service providers.
5. If the charger light continues to flash red & green at the same time on the charger, the battery pack may be excessively hot (40°C/104°F or more) or cold (0°C/32°F or less). Allow the battery pack to cool down, warm up, and then reinsert. If the problem persists, contact a service agent. Once the battery pack is within the acceptable range, normal charging will take place.
6. When the battery is no longer operative, please refer to an authorized after-sales service agent.
7. If the digital torque wrench break down despite the great care taking during manufacture and testing, you should have an authorized customer service center for carry out any repairs.
8. You must indicate the reference number on the power tool's nameplate if you have any question or need order replacement parts.

# Component List



NO.	Item Name	Material
1	Head	Steel Alloy
2	Driver Head	Steel Alloy
3	Toothed Ring	Steel Alloy
4	Wave Washer	Steel Alloy
5	Holder	PA6-GF50
6	Transmission Bar	Steel Alloy
7	Washer	Steel Alloy
8	C-Ring	Steel Alloy
9	Directional Disc	Steel Alloy
10	Strain Gauge	Various
11	O-Ring	EPDM
12	Axle	Steel Alloy
13	Axle Mount	PC+V0
14	Body	Steel Alloy
15	Bolt	Steel Alloy
16	Plate Base	Various
17	Display Panel	Various
18	Screen Protective Sheet	Tritan-PCTG
19	Side Cover	Tritan-PCTG
20	Control Button	SILICON 50
21	Control Cover	PA6+GF33%-V0

NO.	Item Name	Material
22	Control Base	PA6+GF33%-V0
23	USB Cover	SILICON 60
24	Bolt	Steel Alloy
25	Bolt	Steel Alloy
26	Transmission bar	Steel Alloy
27	Protective Ring	PVC
28	Motor	Various
29	Axle	Steel Alloy
30	Motor Mount	PC-ABS
31	O-Ring	NBR
32	Tube	Steel Alloy
33	Handle	PA6+GF30-TAN60NC
34	Lock Switch	PA6+GF30
35	Two-Step Pin	Steel Alloy
36	Solid Pin	Steel Alloy
37	Spring	Steel Alloy
38	Start Button	PA6+GF30
39	Top Plate	Tritan-PCTG
40	Bolt	Steel Alloy
41	Battery Pack	Various
42	Battery Charger	Various
43	"POWER" Poly Sticker	PU+PP

## Noise/Vibration information

The declared vibration total value and the declared noise emission values as above have been measured in accordance with a standard test method EN 62841-2-2:2015 and may be used for comparing one tool with another. The declared vibration total value may also be used in a preliminary assessment of exposure.

### Warning!

The vibration and noise emission during actual use of the power tool can differ from the declared total value depending on the ways in which the tool is used, in particular, what kind of work piece is machined. It is necessary to identify safety measures to protect the operator that are based on an estimation of exposure in the actual conditions of use (taking account of all parts of the operating cycle such as the times when the tool is switched off and when it is running idle in addition to the trigger time). Try to minimize the impact of vibration and noise. Exemplary measures to reduce vibration exposure include wearing gloves while using the tool, limiting working time, and using accessories in good condition.

Power Speed Digital Torque Wrench			
Model Number	WA-E220-3-BW	WA-E135-2-BW	WA-E50-2-BW
Length	530mm	450mm	410mm
Shaft	1/2" Drive (12.5mm)	3/8" Drive (10mm)	3/8" Drive (10mm)
A-weighted sound pressure level	84dB(A)	84dB(A)	84dB(A)
A-weighted sound power level	95dB(A)	95dB(A)	95dB(A)
Hand-arm vibration level	1.263 m/s <sup>2</sup>	1.263 m/s <sup>2</sup>	1.263 m/s <sup>2</sup>

### Noise/Vibration information

**Vibration total values (triaxial vector sum)  
determined according to:  
EN62841**

$a_h$  = vibration emission value  
 $K_h$  = Uncertainty (vibration)

$L_{PA} / K_{PA}$

$L_{WA} / K_{PA}$

$a_h / K_h$

**Typical A-rated sound pressure level:  
Measured values determined according to  
EN62841**

$L_{PA}$  = Sound pressure level  
 $L_{WA}$  = Sound power level  
 $K_{PA}, K_{WA}$  = Uncertainty

83.5 / 3.0 dB(A)

94.6 / 3.0 dB(A)

2.5 / 1.5 m/s<sup>2</sup>

### WARNING:

The vibration emission during actual use of the power tool can differ from the declared total value depending on the ways in which the tool is used.

To prevent personal injury, always wear hearing protection whenever operating power tool.



## Transport

The contained lithium-ion batteries are subject to the Dangerous Goods Legislations requirements. The user can transport the batteries by road without further requirements. When being transported by third parties (e.g.: air transport or forwarding agency), special requirement on packaging and labeling must be observed. For preparation of the item being shipping, consulting an expert for hazardous materials is required.

## Disposal

The tools, rechargeable batteries accessories and packaging should be sorted for environmental friendly recycling. Do not dispose of Power Speed Torque Wrench and rechargeable batteries into household waste! Even discharged battery packs contain some energy. Before disposing, use electrical tape to cover the terminals to prevent the battery pack from shorting, which could cause a fire or explosion. Do not dispose of electrical appliances as unsorted municipal waste, use separate collection facilities. Contact your local government for information regarding the collection systems available. If electrical appliances are disposed of in landfills or dumps, hazardous substances can leak into the groundwater and get into the food chain, damaging your health and well-being. When replacing old appliances with new one, the retailer is legally obligated to take back your old appliance for disposal at least for free of charge.



## After-Sales Service

Please consult authorized after-sales service agent for instruction manual, warranty and non-warranty service on digital torque wrench.



