OWNER'S MANUAL

Mini Digital Torque Wrench

BMS Series
BPS Series
DMS Series
DPS Series

Dear Users

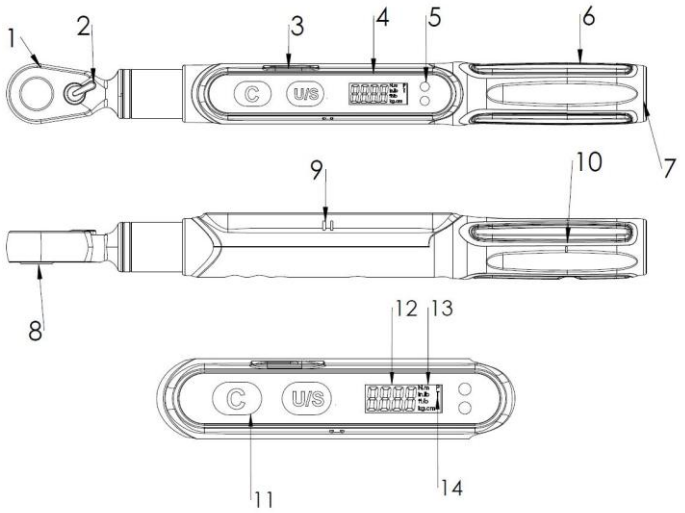
Thank you for using mini digital torque wrench. This manual will help you to use the many features of your new digital torque wrench. **Before operating the torque wrench, please read this manual completely**, and keep it nearby for future reference.

MAIN FEATURES

- Digital torque value readout
- +/-3% accuracy (CW)
- CW and CCW operation
- Peak hold mode
- Engineering units (N-m, ft-lb, in-lb, kg-cm) selectable
- Auto power off after about 5 minutes idle
- Rechargeable batteries are compatible

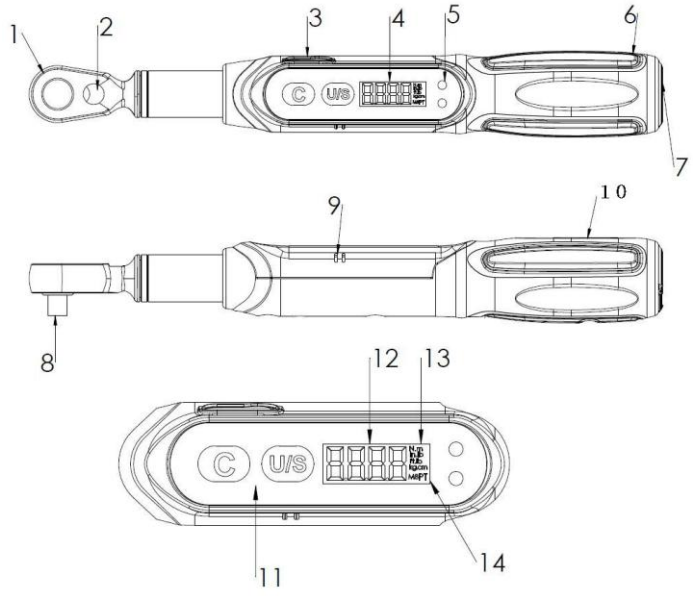
NAMES AND FUNCTIONS OF PARTS

BMS/BPS Series



1. Reversible Ratchet Head
2. Direction Lever
3. Communication Port
4. LCD Readout
5. LED Indicator
6. Anti-slip Handle
7. Battery Cap
8. Bit Holder
9. Buzzer
10. Calibration mark
11. Buttons
12. Torque Value
13. Units
14. Peak Mode

DMS/DPS Series



1. Reversible Ratchet Head
2. Direction Lever
3. Communication Port
4. LCD Readout
5. LED Indicator
6. Anti-slip Handle
7. Battery Cap
8. Ratchet Drive
9. Buzzer
10. Calibration mark
11. Buttons
12. Torque Value
13. Units
14. Peak Mode

SELECTION GUIDE

	①	③	④
MODEL NO:	**BMS2-006** **BMS2-012** **BMS2-020** **BPS2-006** **BPS2-012** **BPS2-020**	**C**	**N**

	②	③	④
MODEL NO:	**DMS2-006** **DMS2-012** **DMS2-020** **DPS2-006** **DPS2-012** **DPS2-020** **DPS2-030** **DPS3-060** **DPS3-085**	**C**	**N**

① :

Model	Bit end fitting (inches)	Max. Torque
BMS2-006	**1/4**	**6 N-m / 4.424 ft-lb / 53.09 in-lb / 61.22 kg-cm**
BPS2-006		
BMS2-012	**1/4**	**12 N-m / 8.85 ft-lb / 106.2 in-lb / 122.4 kg-cm**
BPS2-012		
BMS2-020	**1/4**	**20 N-m / 14.75 ft-lb 177 in-lb / 204.1 kg-cm**
BPS2-020		

②：

Model	Squire Drive (inches)	Max. Torque
DMS2-006	1/4	6 N-m / 4.424 ft-lb / 53.09 in-lb / 61.22 kg-cm
DPS2-006		
DMS2-012	1/4	12 N-m / 8.85 ft-lb / 106.2 in-lb / 122.4 kg-cm
DPS2-012		
DMS2-020	1/4	20 N-m / 14.75 ft-lb 177 in-lb / 204.1 kg-cm
DPS2-020		
DPS2-030	1/4	30 N-m / 22.12 ft-lb 265.5 in-lb / 306.1 kg-cm
DPS3-060	3/8	60 N-m / 44.24 ft-lb 530.9 in-lb / 612.2 kg-cm
DPS3-085	3/8	85 N-m / 62.7 ft-lb 752 in-lb / 867 kg-cm

③：

Accuracy	
C	+/-3%-CW / +/-4%-CCW

④：

Communication	
N	No

SPECIFICATIONS

Model No.	Resolution (N-m)	Torque Measuring Range (N-m)	Length (mm)
BMS2-006	**0.001**	**0.03~6**	**207**
BPS2-006			**216**
BMS2-012	**0.01**	**0.3~12**	**207**
BPS2-012			**216**
BMS2-020	**0.01**	**0.3~20**	**207**
BPS2-020			**216**

All Models	
Accuracy *1	CN CW：±3% CCW：±4%
PC Connectivity	No
Operation Mode	Peak hold
Unit Selection	N-m, in-lb, ft-lb, kg-cm
Head Type	Bits
Button	2
Battery *2	AAA x 1
Operating Temperature	-10℃ ~ 60℃
Storage Temperature	-20℃ ~ 70℃
Humidity	Up to 90% non-condensing
Drop Test	1 m
Vibration Test *3	10G
Environmental test *4	Pass
Electromagnetic compatibility test *5	Pass

NOTE: Accuracy is guaranteed from 20% to 100% full scale.

* **:** See note on page 7

SPECIFICATIONS

Model No.	Gear Teeth	Resolution (N-m)	Torque Measuring Range (N-m)	Length (mm)
DMS2-006	**60**	**0.001**	**0.03~6**	**207**
DPS2-006				**216**
DMS2-012	**60**	**0.01**	**0.3~12**	**207**
DPS2-012				**216**
DMS2-020	**60**	**0.01**	**0.3~20**	**207**
DPS2-020				**216**
DPS2-030	**60**	**0.01**	**0.3~30**	**216**
DPS3-060	**48**	**0.01**	**0.3~60**	**239**
DPS3-085	**48**	**0.1**	**3~85**	**239**

All Models	
Accuracy *1	CN CW：±3% CCW：±4%
PC Connectivity	No
Operation Mode	Peak hold
Unit Selection	N-m, in-lb, ft-lb, kg-cm
Head Type	Lever Type Ratchet
Button	2
Battery *2	AAA X 1
Operating Temperature	-10℃~60℃
Storage Temperature	-20℃~70℃
Humidity	Up to 90% non-condensing
Drop Test	1 m
Vibration Test *3	10G
Environmental test *4	Pass
Electromagnetic compatibility test *5	Pass

NOTE: Accuracy is guaranteed from 20% to 100% full scale.

* **:** See note on page 7

Note:

*1: The accuracy of the readout is guaranteed from 20% to 100% of maximum range + /- 1 increment. The torque accuracy is a typical value. Calibration point is on the rubber grip. For keeping the accuracy, calibrate the wrench for a constant period time (1 year).

*2: One AAA battery (Toshiba carbon-zinc battery)

*3: Horizontal and vertical test.

*4: Environmental test:

a. Dry heat
b. Cold
c. Damp heat
d. Change of temperature
e. Impact (shock)
f. Vibration
g. Drop

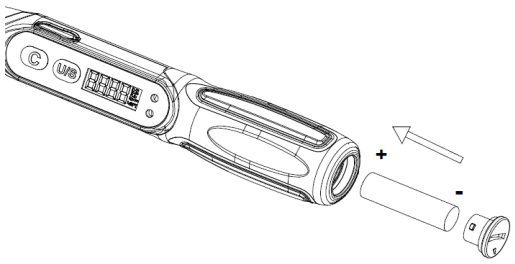
*5: Electromagnetic compatibility test:

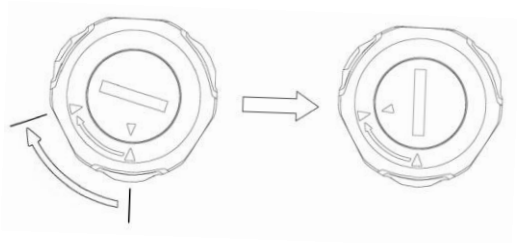
a. Electrostatic discharge immunity (ESD)
b. Radiated susceptibility
c. Radiated emission

BEFORE USING THE WRENCH

BATTERY INSTALLATION

- Remove the battery cap.
- Insert one AAA batteries matching the -/+ polarities of the battery to the battery compartment.
- Put on the battery cap and fasten it tightly according to the following figures.





POWER ON AND RESETTING THE WRENCH

- Press (C) to power on the digital torque wrench.
- Usually press (C) to reset the digital torque wrench before using it.

ATTENTION:

If an external force is applied to the torque wrench during power-on period, an initial torque offset will be recorded in the memory.

AUTO POWER OFF

- The wrench will auto power off after about 5 minutes idle for power saving. Press (C) to power on the wrench again.

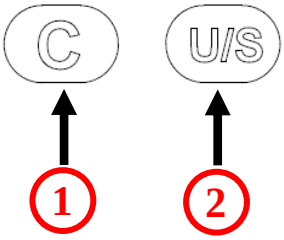
CAUTIONS:

During communication period (**Send** appears), the auto power off function is disabled.

RESETTING THE WRENCH

- If the wrench does not function normally, loosen the battery cap then tighten it to re-start.

SETUP



1 Power On/Clear

2 Unit Selection/Setting

STEP 1: UNIT SELECTION

Pre-setting Unit: N-m

Press U/S

Unit Selection: in-lb

Press U/S

Unit Selection: ft-lb

Press U/S

Unit Selection: kg-cm

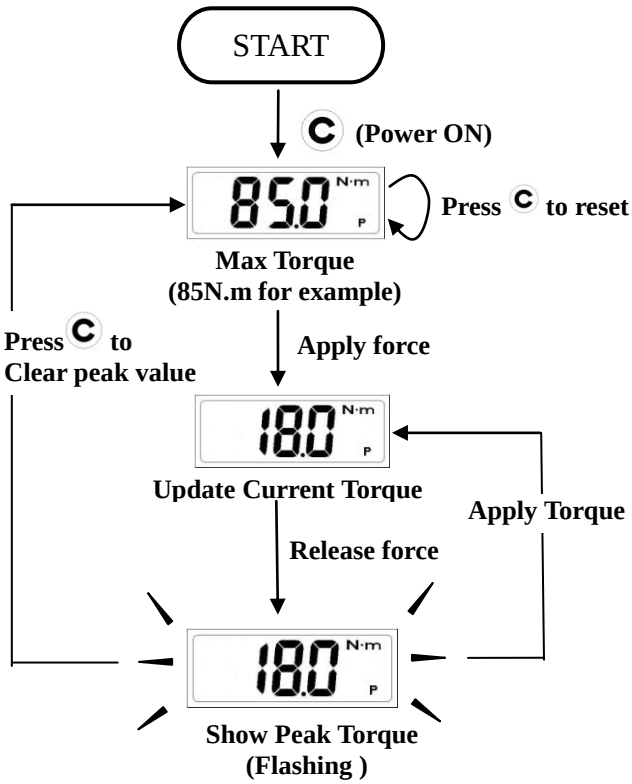
Note:
1. **The "Unit Selection" is in cyclic.**

OPERATION

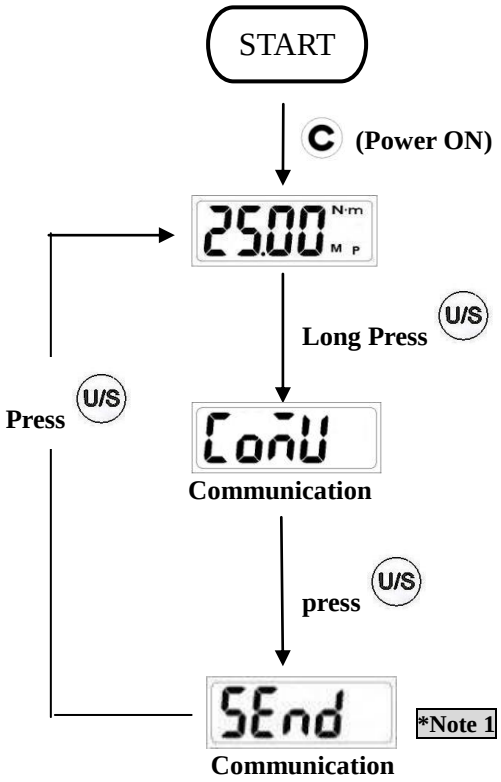
- Press C to power on the wrench and the max torque value will be shown on screen.
- Swing the wrench and the current torque will be updated on screen.

- Release wrench and the peak torque value will be flashed on screen. The peak torque is the maximum torque during the wrench pulling.

- Press C to clear the current peak value or directly swing wrench again to get another peak torque value.
- Usually press C to reset wrench before any new measurement. Notice to keep the wrench horizontal and rest during reset process.



CALIBRATION



Note:

1. **Communication mode is for calibration of torque wrench. Please contact your local dealer for more information.**

MAINTENANCE AND STORAGE

ATTENTION:
One-year periodic recalibration is necessary to maintain accuracy.
Please contact your local dealer for calibrations.

CAUTION:

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

BATTERY MAINTENANCE

1. When the wrench is not used for an extended period of time, remove the battery.
2. Keep a spare battery on hand when going on a long trip or to cold areas.
3. Sweat, oil and water can prevent a battery's terminal from making electrical contact. To avoid this, wipe both terminals before loading a battery.
4. Dispose of batteries in a designated disposal area. Do not throw batteries into a fire.